



A bridge to the future
European policy for vocational education and training 2002-10
National policy report - Poland



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Preface

The “Copenhagen process” was launched as the contribution of Vocational Education and Training (VET) to the challenges identified in the Lisbon-Agenda. In the Copenhagen Declaration, approved on 30 November 2002, the ministers responsible for VET in 31 European countries (EU Member States, candidate countries, EFTA-EEA countries), the European social partners and the European Commission agreed on enhanced European cooperation in VET.

This **Policy Report** forms part of the Cedefop ReferNet 2010 work programme. It provides information on Polish progress in VET towards EU policy goals within the framework of the Copenhagen process and according to the policy priorities defined in the Maastricht Communiqué (2004) and the Helsinki Communiqué (2006). It considers measures taken in the context of the Education and Training 2010 programme since the Copenhagen Declaration.

The Report covers the following policy areas:

- Socio-economic challenges for future VET policy development;
- Economic crisis - VET policy and recovery measures;
- Impact and implications of joint work on European principles and tools;
- Strengthening the links between VET and the labour market;
- Addressing equity, social inclusion and active citizenship;
- Quality, excellence and attractiveness of VET;
- Enhancing creativity and innovation;
- Financing VET;
- Progress in modernising European VET systems in the Copenhagen process and priorities for future cooperation.

The report has been produced by ReferNet Poland as a contribution to Cedefop’s fourth policy report which reviews progress in VET towards the policy goals of the Copenhagen process. Cedefop intends to publish its policy report on the occasion of the Bruges ministerial meeting of 6-7 December, 2010.

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1. SOCIO-ECONOMIC CHALLENGES FOR FUTURE VET POLICY DEVELOPMENT

1.1. Impact of globalisation on VET

Many institutions in Poland are involved in supporting and moderating global education at the national level. These include mainly: the Ministry of Foreign Affairs (MSZ), the Ministry of National Education (MEN), the Ministry of Science and Higher Education (MNiSW), the Ministry of the Environment (MŚ), the Foundation “Education for Democracy”, and the development education task force of the Zagranica Group, a co-ordinating non-governmental organisation.

The Polish economy and society face a number of challenges including globalisation, technological progress, fast development of information society, environmental problems and climate change, baby bust and the ageing population. Globalisation results in a growing contribution of foreign trade, geographic and professional mobility, economic transition, new techniques and technologies (especially information and communication technologies), and changes in the organisation of work as a consequence of technological changes and increasing expectations of employers with regard to the qualifications and competences of employees. As a result, the vocational education and training system is permanently confronted with these requirements, necessitating adjustments of the supply of qualifications and competences to the needs of the labour market, which expects new skills for new jobs.¹ In order to match demand for labour with supply of labour, the Government takes actions including improvement of the system of continuing vocational education by means of:

- developing the infrastructure of services supporting continuing education;
- improving the availability and the quality of continuing education;
- developing sectoral programmes enabling the acquisition and development of vocational qualifications needed on the labour market and implementing regulations facilitating continuing education.²

Many Government papers and national development strategies contain references to the challenges of globalisation. The *National Reform Programme (KPR) 2005-2008* for the implementation of the Lisbon Strategy was adopted by the Government in December 2005. The next National Reform Programme for 2008-2011 was adopted in November 2008; it sets out three priorities: Active Society, Innovative Economy, and Efficient Institutions.³

Another important Government paper supporting economic growth and employment, the *National Strategic Reference Framework (NSRF) 2007-2013*, was drawn up by the Ministry of Regional Development (MRR). The strategic objective of Poland's NSRF is to create conditions for growth of a competitive knowledge and entrepreneurship based economy creating employment and increased social, economic and spatial cohesion.

The NSRF was the reference instrument in the drafting of the *National Development Strategy 2007-2015*, the *Education Development Strategy 2007-2013*, the *Lifelong Learning Strategy by 2010*, and the Operational Programmes:

¹ Kształcenie zawodowe i ustawiczne. Założenia projektowanych zmian. Informator. (**Vocational and Continuing Education. Assumptions for Planned Changes. A Handbook**). MEN, Warsaw 2010.

² Krajowa Strategia Zatrudnienia na lata 2007-2013 (**National Employment Strategy 2007-2013**). Ministerstwo Gospodarki i Pracy (**Ministry of the Economy and Labour**). Document approved by the Council of Ministers on 6 September 2005.

³ Dokument Implementacyjny Krajowego Programu Reform na lata 2008-2011 na rzecz realizacji Strategii Lizbońskiej. (**Implementing Document of the National Reform Programme 2008-2011 for the implementation of the Lisbon Strategy**). Ministerstwo Gospodarki (**Ministry of the Economy**). Document approved by the Council of Ministers on May 2009.

- the Human Resources Development Sectoral Operational Programme 2004-2006 (HRD SOP);
- the Human Capital Operational Programme 2007-2013 (HR OP).

In the *Human Capital Operational Programme*, vocational education and training is included in nine priorities implemented at the central and regional level. At the central level, VET is mainly included under:

- Priority II: Development of human resources and adaptation potential of enterprises and improving the health condition of working persons;
- Priority III: High quality of the education system;
- Priority IV: Tertiary education and science;

and at the regional level in Priority IX: Development of education and competences in the regions.

The *Human Capital Operational Programme* is consistent with other programmes, in particular the *Innovative Economy Operational Programme* and the *Development of Eastern Poland Operational Programme*. At the regional level, the objectives of the programme are pursued through the implementation of 16 Regional Operational Programmes. Table 1 presents the priorities of the vocational education and training policy together with their rationale and policy measures. It can be noted that all the priorities match the key effects of globalisation.

Table 1. Priorities of vocational education and training in Poland

No .	Policy priority	Main rationale	Political approach
1	Increase the level of education in society	The proportion of population with secondary and higher education is too low.	Increase the participation of youth and adults in vocational education and training, in particular persons with low formal qualifications. Steadily increase the level of education of Poles in connection with growing educational aspirations.
2	Ensuring high quality of vocational education and training at all levels	Curricula are not adjusted to changing needs of a knowledge-based economy, utilisation of ICT is low in vocational education and training.	Modernise the core curricula and detailed curricula of vocational education, offer assistance in financing of teaching infrastructure of education and training institutions, including computerisation of schools. Reinforce the system of assessment of the quality of vocational education and training and higher schools.
3	Modernisation of the teacher education and training system	School and university teacher qualifications are too low, the standards of teacher education and training are low. Poor knowledge of languages and use of IT.	Improve the effectiveness of the system of teacher education, training and employment. Support the accreditation system of teacher training institutions. Change teacher training standards, training subjects, traineeships, curricula content and required skills. Obligation of teachers to teach two subjects in higher vocational education
4	Adjustment of the vocational education and training system to labour market needs including dissemination of remote	Improvement of education and qualifications of employees and labour market entrants.	Re-establish the links between schools and the economy in practical vocational education. Introduce modular vocational education and training curricula and vocational qualification standards. Promote pedagogic innovations including remote education.

	education systems		
5	Develop lifelong learning	Curricula offered by vocational schools and higher schools adjusted to needs of the economy are not accessible and comprehensive enough. No mechanism of updating and developing vocational qualifications at the workplace.	Develop tools (programmes) supporting education oriented attitudes of citizens. Develop a transparent system of vocational qualifications. Introduce effective co-financing mechanisms of continuing education with public and private funds. Promote e-learning.
6	Develop and implement a National Qualifications Framework	Qualifications and competences acquired in formal, non-formal and informal education should be recognised in Poland and internationally.	Improve the transparency and comparability of qualifications and competences by developing an integrated National Qualifications Framework comprising sectoral qualifications frameworks, including qualifications frameworks in higher education, general education, vocational education, continuing education and the labour market. Facilitate mobility (educational, vocational, geographic).
7	Improve the system of forecasting demand for labour	The network of vocational schools and faculties should be planned rationally, which requires the implementation and development of systems collecting information on the current situation of the labour market.	Develop links between the labour market and vocational education. Develop a national labour market monitoring system. Improve the work of employment services and develop existing databases.
8	Development of a vocational counselling system	Low awareness of authorities responsible for creating independent positions of vocational counsellors in schools. No link between vocational counselling for the labour market and vocational counselling in schools.	Develop a coherent system of counselling in schools and in their environment. Train vocational counsellors, develop a vocational information system. Improve the work of employment services and vocational counsellors.
9	Development of a system of cooperation of educational institutions and higher schools with employers.	No close link of educational institutions and higher schools with employers and the labour market.	Identify social partners and enter into formal agreements to improve the quality of vocational education (in particular, practical education) and improve technical infrastructure with the assistance of enterprises.
10	System support aimed at increasing the number of graduates of faculties of key importance to a knowledge-based economy.	Shortage of highly qualified technical employees in the knowledge-based economy.	Develop preferences for higher schools and students of sciences.

The Government paper *Indicative Strategy of IT Development of Poland 2007-2013* with a projection by 2020 takes into consideration the EU initiative i2020, which puts a key emphasis on information and communication technologies in the implementation of the Lisbon Strategy, among others related to widespread use of mobile telephony of the third and fourth generation, digital television and radio, and multichannel broadband internet access. The level of development of Poland and its position in the European Union will increasingly depend on access to information and the importance attached to use of knowledge.

The Strategy lists four areas of action necessary to develop information technology infrastructure in Poland and to raise the standard of electronic services which are below the European average. Three of these areas include education and training directly or indirectly:

- creation and development of Polish digital resources in the internet - these should also include on-line education resources, in particular designed for continuing education of citizens, including many resources open to e-learning needs;
- development of national information and communication technology infrastructure, in particular provision of broadband internet access, electronic services and available content;
- development of skills necessary for active and creative participation in information society services, in particular adaptation of the education system to the needs of a knowledge-based economy.

The main sources of funding of the implementation of the Strategy are the state budget and the European Union structural funds available in Poland under the Operational Programmes 2007-2013. The responsibility for co-ordination and supervision of the implementation of the objectives of the Strategy is assigned to the Information Society Department of the Ministry of the Interior and Administration.

The effects of globalisation are covered by the Innovative Economy Operational Programme 2007-2013. The main objective of the Programme is to develop the Polish economy on the basis of innovative enterprises. This objective is pursued by means of the following specific objectives:

- Growing the innovativeness of enterprises;
- Growing the competitiveness of Polish science;
- Growing the role of science in economic growth;
- Growing the international market share of innovative products of the Polish economy;
- Creating lasting and better jobs;
- Growing the use of information and communication technologies in the economy.

One of the instruments designed to strengthen the link between science and the economy is the National Programme Foresight Poland 2020 created in December 2006 by initiative of the Minister of Science and Higher Education. The main objective of the Programme was to determine the direction of scientific research and development which in the long term will accelerate social and economic development and enable rational application of the output of research in the economy. The Programme has resulted in transfer of knowledge to education by modernising vocational education curricula at the basic, secondary and higher level and in continuing education.

At the national level, the national policy of vocational education is co-ordinated and implemented by the minister responsible for education (Minister of National Education, MEN) and the Minister responsible for higher education (Minister of Science and Higher Education, MNiSW). The Ministry of Labour and Social Policy (MPiPS) supports the vocational training system, in particular for the unemployed and persons at the risk of unemployment.

Preparatory work and social consultations are currently underway in Poland with regard to the directions of planned changes in vocational and continuing education proposed by

MEN.⁴ The proposed organisational and substantive changes to the vocational education system arise from the needs of the Polish economy and labour market, the related national and regional development strategies, and Poland's obligations as a European Union Member State. The obligations are related in particular to the updated Lisbon Strategy and the related initiatives and documents: the Lifelong Learning Strategy, the European and National Qualifications Frameworks, the European Credit System for Vocational Education and Training (ECVET), the European Quality Assurance Reference Framework (EQARF), the EUROPASS supplement, and validation of non-formal and informal learning. These initiatives also help to solve problems posed by globalisation. In particular, the vocational education curriculum reform is seen as a major chance of solving problems of globalisation. One of the recommendations is to include the eight key competences for lifelong learning (Recommendation of the European Parliament and of the Council 10.11.2005 COM(2005)548).

At the level of higher education, despite a growing number of students, the quality of higher education in Poland and in particular its structure do not correspond to the needs of a modern economy. The educational advancement of the Polish society takes place mainly by growing availability of the cheapest courses in terms of the unit education cost. The higher school funding system is tied to scientific degrees of the faculty and hardly ever matches the structure of higher education to the needs of the labour market. Candidates' choices of the school are constrained by enrolment limits imposed by schools. Poland has a very high share of graduates of economics and social sciences in the total number of graduates. The share of students of sciences, technical and IT faculties is low. Only 14% of students choose technical, industrial or construction faculties, and only 6.5% choose sciences. There is a shortage of engineers and technicians while these professional groups are the key to implementation and integration of new technologies. In this regard, the reduced scope and quality of science classes at the primary and post-upper secondary level affects the level of higher education.⁵

In summary, the Polish higher education system, which supports on-going adaptation to technological changes through the quantity of available education, lags far behind developed countries in terms of quality. This is true both of the quality and structure of education. In addition, graduates of vocational schools have a high share among post-upper secondary school students, which is a drawback in the context of current technological progress. Another drawback is that the share of higher school graduates in vocational education is low. Vocational higher schools established ten years ago have been enrolling a decreasing number of students. The system of quality assessment of such schools is defective.

Notwithstanding their mission, different from that of academic schools because of a stronger focus on educating qualified employees for the local labour market, such schools are assessed on the basis of the same criteria as universities.

At the level of labour market policy, continuing education and training of the unemployed and job seekers are regulated mainly by the *Promotion of Employment and Labour Market Institutions Act*,⁶ which is implemented by MPIPS. Assistance in employee training is provided to employers by training institutions. Grants are available for specific courses, types of studies, etc. In view of technological change, the low educational activity of adult Poles, especially elderly citizens and the unemployed, is of much concern. Continuing education is not developed well enough in Poland to prevent fast depreciation of skills and

⁴ Kształcenie zawodowe i ustawiczne. Założenia projektowanych zmian. Informator. (**Vocational and Continuing Education. Assumptions for Planned Changes. A Handbook**). MEN, Warsaw 2010. Link: <http://www.konferencje.men.gov.pl/images/pdf/Konferencje/4.pdf>

⁵ Raport: Zmiany technologiczne na polskim rynku pracy (**Report: Technological change on the Polish labour market**) (M. Bukowski, J. Zawistowska, Eds.). Departament Analiz Ekonomicznych i Prognoz. Ministerstwo Pracy i Polityki Społecznej (**Economic Analysis and Forecasts Department, Ministry of the Labour and Social Policy**).

⁶ Ustawa z dnia 20 kwietnia 2004 r. o promocji zatrudnienia i instytucjach rynku pracy (**Promotion of Employment and Labour Market Institutions Act of 20 April 2004**) (Dz.U.08.69.415).

ongoing exclusion of those with the lowest education. Education mainly benefits employees, in particular those with secondary and higher education, which additionally deepens rather than offsets the implications of technological process which disfavour those with less education. Public funding could be used more effectively if instead of being provided to training institutions it was channelled directly to trained employees (e.g., by means of individual training accounts introduced in other countries).

The most urgent actions are those which relate to the development and practical implementation of the National Lifelong Learning Strategy. According to KPR 2008-2011, the preparation of the National Lifelong Learning Strategy is currently a responsibility of six government institutions: the Office of the Prime Minister (KPRM), the Ministry of National Education (MEN), the Ministry of the Economy (MG), the Ministry of Science and Higher Education (MNiSW), the Ministry of Labour and Social Policy (MPiPS), and the Ministry of Regional Development (MRR). Representatives of these institutions at the level of Undersecretary of State meet regularly under the leadership of Minister Michał Boni, Chairman of the Standing Committee of the Council of Ministers. The Ministers are currently consulting the key elements of the diagnosis, the strategic objectives and their performance indicators, the main directions of interventions, and the strategy implementation system. According to plan, Poland's National Lifelong Learning Strategy was to be prepared by the end of 2009 but was not completed.

Example 1 **National Report on Global Education in Poland**

The *National Report on Global Education in Poland*⁷ was drawn up on the basis of a review carried out in the autumn of 2009 by GENE Global Education Network Europe, a European network of representatives of Ministries and national agencies responsible for the development of the global education policy.

The national partners of the review in Poland are the Ministry of National Education and the Ministry of Foreign Affairs. Consultations with GENE experts also involved representatives of the Ministry of Science and Higher Education, the Ministry of the Environment, the University of Warsaw, the Academy of Special Education, the Education Development Centre (ORE), and non-governmental organisations. The National Report on Global Education in Poland is part of the European Global Education Peer Review initiated at the Global Education Congress in Maastricht in 2002 and organised by GENE1.

The Report reviews the state of play of global education in Poland and presents the conditions necessary to improve and increase the scope of global education. The Report outlines the main observations and recommendations for future actions. The key objectives of the Global Education Peer Review of Poland, as outlined in the agreed Terms of Reference were:

- To highlight examples of good practice of Global Education.
- To assess the state of Global Education and Awareness-Raising in terms of provision, structures, strategies and results.
- To provide an international comparative perspective on the strengths and areas of potential strategic development of Global Education.
- To make recommendations for the further improvement of Global Education in Poland.

The Ministry of Foreign Affairs and the Ministry of National Education are particularly active in the field of global education and cooperate closely in areas such as the development education funding scheme which they provide to non-governmental organisations, universities, local administration bodies. In 2009, the Ministry of Science and Higher Education cooperated with MSZ and MEN on the development education funding scheme addressed to academia and local administration bodies.

⁷ Link: http://www.men.gov.pl/images/stories/gene/edukacja_globalna_w_polsce_raportgene.pdf

Ministries should be encouraged to play a stronger role in supporting global education where opportunities exist. For example, the Ministry of Science and Higher Education is in a particularly good position to play a stronger role in supporting global education through third level education and in teacher training colleges. The opportunities for greater cooperation and coordination with the Ministry of the Environment are also strong especially concerning the related area of education for sustainable development.

The Peer Review recognises that with the reform of the national core curriculum a significant opportunity is afforded to those working to move the Polish education system towards access of all to quality global education. The review also notes an impressive model of global education integration within mainstream in-service teacher training, including the proposal to pilot an e-learning model for teachers, and opportunities within the third level sector.

Example 2

Global education and education for sustainable development - consultations of the Ministry of National Education with non-governmental organisations

The first consultation meeting with non-governmental organisations took place on 14 February 2008 at the Ministry of National Education. The topic of the meeting was the involvement of non-governmental organisations and MEN in global education and education for sustainable development. The meeting initiated a series of regular consultation meetings of MEN with non-governmental organisations concerning actions addressing children and youth including civic education, voluntary work, youth information, equal chances, international co-operation.

Non-governmental organisations presented a range of proposals concerning the role of MEN in contributing to the development of global education, including:

- Appoint a MEN employee as development education co-ordinator to participate in meetings of the Development Education Task Force of the Zagranica Group;
- Create good training opportunities (further vocational education) for teachers in order to eliminate stereotypes in teaching and to put an emphasis on responsible and reliable knowledge about the world;
- Prepare a training package for teachers in co-operation with non-governmental organisations or commission the task to a selected educational organisation or institution; the package would be financed and approved by MEN;
- Initiate work on the introduction of a multiple-subject track in schools - global education; MEN to participate in developing a strategy of introducing development education in schools;
- MEN (and its institutions) to participate in the assessment of educational materials developed by NGOs, i.e., "certification" of educational and teaching materials;
- Ensure that students of education are introduced to development education and teaching methodologies in the course of their studies;
- Finance the acquisition of global education literature and films by school libraries, translate, sub-title or dub documentary films currently not available to young people because of the language barrier;
- MEN to participate in organising actions like the Global Education Week;
- Organise a global education school olympics;
- Support informal education organisations in schools, draw up a list of organisations to lend them credibility in schools;
- Provide financial support to organisations offering education in schools (grants, competitions); competitions for schools with NGOs as project partners;
- Co-ordinate development education activities of MEN and MSZ including joint participation in the task force.

The non-governmental organisations mainly expect the Ministry of National Education to engage in partnership and cooperation in the implementation of global education and sustainable development education projects.

1.2. Impact of technological progress on VET

Technological progress and new methods of work organisation result in changes in demand for qualifications. As the Polish market is becoming more flexible in terms of qualifications, the individual learning process does not stop after the last year of school education but continues for a lifetime. As a result, it becomes possible to change, broaden and raise qualifications acquired in formal, non-formal and informal education. In addition, it has become possible to acquire qualifications in modules in the school and out-of-school system, also depending on the needs and expectations of a specific employer. The modular structure of a flexible offering of education services is given preference by the Ministry of National Education (MEN) and the Ministry of Labour and Social Policy (MPIPS). In addition, changes in vocational qualifications resulting from new technologies challenge permanent assignment of an employee to a work post and replace a hierarchy model of relations and responsibilities with a network model. The notion of "occupation" is being replaced by a set of qualifications related to a given task or function of an employee. In Poland, these changes are addressed by the National Vocational Qualification Standards System developed by the Ministry of Labour and Social Policy and the National Qualifications Framework developed by the Ministry of National Education.

Enterprises, in particular those operating on the global market, frequently use their own individual systems of acquisition and development of employee vocational qualifications. This endows the notion of occupation with a new meaning. According to the Polish approach, it is defined as a set of qualifications corresponding to sets of vocational tasks. Qualification and vocational mobility is a fact of life. We tend to attach less importance to the acquired occupation, which is more and more considered a starting point of continuing vocational development. Greater importance is attached to universal elements, key competences and soft skills, which are most effective in the constantly changing environment of new technologies. Demand for specialists and technicians is on an increase. Equipped with analytic, cognitive and behavioural skills, they are fit for better use of modern techniques and technologies. However, even those job positions which require high qualifications tend to increasingly favour multiple high qualifications combined with specialist qualifications.

The impact of new technologies has a direct effect on the vocational education and training offer.

In formal education in the school system up to the upper secondary level, the point of departure are the core curricula of general and vocational education (a responsibility of MEN).

The new core curriculum of general education was developed as part of Human Capital Operational Programme (HC OP) and was formally approved in a Regulation of the Minister of National Education of 23 December 2008. It is gradually being implemented in schools as of September 2009. The preparation process of the core curriculum took into account the conditions created by the broadly understood lifelong learning strategy.

A similar objective was pursued in the preparation of the new core curriculum of vocational education, which should flexibly respond to technological change. Currently work is underway to prepare new core curricula of vocational education in an HC OP project *Improving the core curricula as the key to modernisation of vocational education* (2008-2013). The main objectives of the project are:

- To verify the core curricula of vocational education from the perspective of their match with the requirements of a knowledge-based economy.

- To improve the quality of vocational education by modernising the core curricula of vocational education.

In Poland, the core and detailed curricula are built on the basis of a classification of occupations for vocational education. The currently binding classification of occupations for vocational education comprises 208 occupations.⁸ The classification is co-ordinated by MEN while other ministries may request the addition of specific occupations depending on the needs of the economy and the labour market. Table 1 presents the contribution of the relevant ministries to the addition of new occupations to the system of vocational education.

Table 1. Number of occupations in education by ministry

No.	Minister responsible for the education	Occupations at technician level	Occupations at basic vocational level	Shares competences - occupations at technician level	Shares competences - occupations at basic vocational level	Total
1.	Minister of the Economy (MG)	29	47	-	-	76
2.	Minister of Infrastructure (MI)/(MRiRW)	20	16	1	-	37
3.	Minister of Agriculture and Rural Development (MRiRW)/(MI)/(MŚ)/(MSiT)	12	10	5	1	28
4.	Minister of Culture and National Heritage (MKiDN)	20	4	-	-	24
5.	Minister of Health (MZ)	13	2	-	-	15
6.	Minister of the Environment (MŚ)/(MRiRW)/	8	3	1	-	12
7.	Minister of Sport and Tourism (MSiT)/(MRiRW)	3	1	3	1	8
8.	Minister of the Interior and Administration (MSWiA)	6	-	-	-	6
9.	Minister of Labour and Social Policy (MPiPS)	3	2	-	-	5
10.	Minister of Finance (MF)	2	-	-	-	2
11.	Minister of Science and Higher Education (MNiSW)	1	-	-	-	1
Total		117	85	10	2	208
		202		12/2=6		

⁸ Rozporządzenie Ministra Edukacji Narodowej z dnia 26 czerwca 2007 roku w sprawie klasyfikacji zawodów szkolnictwa zawodowego (**Regulation of the Minister of National Education of 26 June 2007 concerning the classification of occupations for vocational education**).

The addition of new occupations to the classification results mainly from technological progress and changes in the work environment as well as demand on the part of employers in many sectors, for example the proposed addition of the new occupations of Energy Industry Technician and Gas Industry Technician. Many proposals of education in new occupations are assigned the status of pedagogic experiment (approved by the Minister of National Education in communication with other Ministers) or pedagogic innovation (approved by the relevant School Superintendent). Pursuant to the Regulation of the Minister of National Education and Sport of 9 April 2002 concerning the conditions of innovative and experimental activities of public schools and institutions (Official Journal of 15 May 2002), as of the school year 2007/2008 the Minister of National Education approved pedagogic experiments in occupations not included in the classification of occupations for vocational education: Detective Services Technician, Ceramics Ornamentalist, Maritime Tourism Technician, Seamstress. Experiments include actions aimed at improved effectiveness of school education, which modify the conditions, the organisation of educational activities, or the scope of education. Experiments are carried out under the supervision of a research institution.

In the case of vocational training, the main reference is the *Classification of Occupations and Specialties for the needs of the labour market* maintained by MPiPS. The Classification is periodically updated in order to adjust it to changes on the labour market (both Polish and European). The most recent amendment took place on 1 June 2007. The 2007 Classification includes 1,770 occupations and specialties. Another amendment of the Classification is in the legislative process and will expand the Classification to 2,350 occupations and specialties.⁹

The drafting of the new Polish Classification of Occupations and Specialties addressed the following needs:

- emergence of new occupations and specialties reflecting changes on the labour market following the implementation of new technologies of a knowledge-based economy;
- removal of occupations and specialties no longer practised on the labour market;
- addition of occupations of the current classifications of occupations for vocational education added to the classification after 2007;
- addition of new regulated occupations (415 occupations comprised in the Ministry of Science and Higher Education document “Regulated Occupations and Activities in the Republic of Poland - Description of Qualification Requirements”).

Poland has an imperfect system of forecasting labour market needs because the economy is dominated by small and medium-sized enterprises which are usually unable to clearly define their needs in a time horizon longer than 6 months. The education system’s expectation of detailed forecasts cannot be fulfilled as no one is in a position to produce such forecasts. This is not possible due to the high dynamics of economic developments and the interests of enterprises (premature publication of reports on new investments or planned closure of production could affect the company’s market position). The key to improving the level of harmonisation of education and the labour market is a close cooperation with enterprises and collaboration of interested parties aimed at reducing the degree of uncertainty on the labour market.

The *Promotion of Employment and Labour Market Institutions Act* provides for a range of instruments facilitating the acquisition and upgrade of qualifications by the unemployed and employees at the risk of losing their jobs as well as specific categories of job seekers. Training of the unemployed and other beneficiaries is organised by labour offices and funded with public money. Training is delegated by labour offices to training institutions pursuant to the public procurement procedure. Each candidate for training may use the

⁹ Projekt klasyfikacji zawodów i specjalności dla potrzeb rynku pracy. (**Draft Classification of Occupations and Specialties for the Labour Market**). MPiPS, Warsaw 29.01.2010.

assistance of a vocational counsellor to select the faculty of training and must undergo free-of-charge medical examinations if required by the specificity of the training. A labour office may finance training of the unemployed and other beneficiaries with a duration of up to 12 months and training of people without vocational qualifications up to 24 months. Persons referred to training by a labour office are also entitled to a range of financial benefits, including training supplements, scholarships, reimbursement of the cost of travel and examinations.¹⁰

The outcome of comprehensive research on Polish society has for several years been published as Social Diagnosis.¹¹ The survey contains a range of data and conclusions on education and training as well as information and communication technologies, and more recently also includes a chapter on the conditions and implications of use of information and communication technologies in society. The 2009 Diagnosis explicitly emphasises that the Polish society is modernising as more than half of all Poles at the age of 16+ use the internet (50.9% in March 2009), twice as many as in 2003. This is a positive symptom of Poles adjusting to the requirements of the globalising economy and it creates potential conditions for the use of the e-learning offer.

Monitoring of training offers suggests that the enterprise sector is increasingly interested in promotion and implementation of remote employee training. Central Statistical Office (GUS) surveys on the use of information and communication technologies (ICT) by Polish enterprises and households indicates a need of stimulating professional development of employees of service and production companies by expanding the training offer comprising remote training methods in order to allow for more flexibility in creating vocational competences development plans while reducing the total cost of training. In order to effectively implement e-learning methods for the needs of the economy, it is necessary to develop system solutions available both to users and providers of e-learning services. It is also necessary to support methodologies of teaching and learning processes and to standardise new competence profiles for organisers and specialists of e-learning services.

Table 2 presents a list of the top 30 technologies of the future impacting different sectors of the Polish economy which will require new qualifications (knowledge, skills and competences). In this context, it is very important to carry out systematic forecast surveys of demand for new qualifications.

Table. 2. Thirty Emerging Technologies and Their Sectorial Impact

No.	Technology	Sector of impact
1.	Genetic engineering	Agriculture, Manufacturing (pharmaceuticals), Services (health), Forestry, Mining
2.	Advanced chips/gallium arsenide	Manufacturing (electronic and scientific equipment), Communication, Defense
3.	Artificial intelligence	Services, Manufacturing
4.	Cell/tissue culture	Services (health), Manufacturing
5.	Microcomputers	Services, Manufacturing, Defense
6.	CAD/CAM/CAP/CAE	Manufacturing, Services, Communication
7.	Robotics	Manufacturing, Mining
8.	Composite materials	Manufacturing (automobile, aircraft)
9.	Remote sensing	Forestry, Agriculture, Mining, Services, Defense
10.	Imaging	Manufacturing (electronics), Services, Mining, Communication

¹⁰ Ustawa z dnia 20 kwietnia 2004 r. o promocji zatrudnienia i instytucjach rynku pracy (**Promotion of Employment and Labour Market Institutions Act of 20 April 2004**) (Dz. U. from 2004, No. 99, item 1001, as amended).

¹¹ http://www.diagnoza.com/pliki/raporty/Diagnoza_raport_2009.pdf - link to the report „Diagnoza Społeczna 2009” (**Social Diagnosis 2009**)

11.	Fibre optics	Communication, Manufacturing (electronics)
12.	Monoclonal antibodies	Agriculture, Manufacturing (pharmaceuticals), Services (health)
13.	Computer software	Manufacturing, Services, Communication, Defense
14.	Advanced polymers	Manufacturing
15.	Lasers	Manufacturing (electronics, transportation, medical instruments)
16.	Synthetic fuels	Manufacturing (refining), Energy, Services (transportation)
17.	Coal technologies	Mining, Manufacturing
18.	Food irradiation	Manufacturing (food, chemicals), Agriculture
19.	Telecommunication	Communication, Services, Construction
20.	Surface chemistry / plasma technologies	Manufacturing, Energy, Agriculture, Services
21.	Biomass	Manufacturing (chemicals), Agriculture, Energy, Forestry
22.	Hydrogen energy technologies	Manufacturing, Utilities, Energy
23.	Separation and membrane technologies	Manufacturing (food, chemicals)
24.	Fermentation	Manufacturing (food), Agriculture
25.	Structural ceramics	Manufacturing (metal, transportation)
26.	Optoelectronic/storage systems	Communication, Manufacturing (electronics)
27.	Construction technologies	Construction, Mining
28.	Speech recognition	Manufacturing, Services
29.	Photovoltaics	Manufacturing (electronics), Communication
30.	New alloys	Mining, Manufacturing (transportation)

Source: Kotler P., Jatusripitak S., Maesincee S.: "Marketing narodów" (*The Marketing of Nations*). Wydawnictwo Profesjonalnej Szkoły Biznesu, Kraków 1999, pp. 33-34

Example 1: Lifelong learning distance education implementation and dissemination system model

New ICT-based technologies which support the vocational education and training system are covered by the Ministry of National Education system project implemented as part of ESF HC OP (Priority III: High quality of the education system, Measure 3.4: Openness of the education system in the context of lifelong learning, Sub-measure 3.4.2: Dissemination of lifelong learning) entitled "Lifelong learning distance education implementation and dissemination system model". The project is implemented by the National Centre for Supporting Vocational and Continuing Education (KOWEZIU) in 2009-2014.¹²

The main objective of the project is to ensure effective distance learning by developing a system solution model. The specific objectives include:

- To promote and disseminate a distance education model in educational institutions.
- To ensure a high quality of distance education services by developing course design and implementation standards.
- To activate practical implementation of distance education by educational institutions.
- To improve the competences of the staff of educational institutions in the implementation and use of distance education.

The direct beneficiaries include employees and teachers of educational institutions while the indirect beneficiaries are students, teachers, employees of managing authorities of institutions, employees of authorities supervising institutions, the Ministry of National Education.

The substantive tasks of the project include:

- 1) To develop a diagnosis of the state of play of distance education in Poland and selected European Union countries and to diagnose the education needs of teachers and users in

¹² Project description: www.koweziu.edu.pl

distance education. The diagnosis to be developed in the task will be used to identify actions to be taken in implementation and dissemination of distance education in vocational and continuing educational institutions in Poland.

- 2) To develop a model of implementation and dissemination of distance education in Poland. In this task, an expert group will be appointed to develop a model of implementation and dissemination of distance education in Poland. The model will include the following elements: model assumptions, the position of distance education among forms of continuing education, the methodologies and standards of preparing and conducting distance classes, technical infrastructure, distance education quality assurance system, rules of accreditation of distance education, financial aspects of the implementation and operation of the model, legal aspects of the implementation of the model. The model developed by the experts will be verified in 16 three-day workshops and 16 one-day regional conferences. One workshop and one conference will be held in each region. The final version of the model will be published as the "Model of implementation and dissemination of distance education in Poland". In addition, the task will include organisation of a national conference to present and disseminate the developed model.
- 3) To develop a web portal dedicated to institutions implementing distance education, including a repository of knowledge for the implementation and dissemination of distance education. The portal will comprise three main elements: teaching resources repository, educational platform, and website. The portal will be designed to support and disseminate distance education. The repository will store teaching materials to be used by institutions implementing distance education; the platform will be used to improve the distance education competences of teachers. In the course of the project, training will be provided over the platform to 500 teachers of continuing and vocational educational institutions.
- 4) To develop multimedia e-learning courses for selected modules and courses for distance education teachers and users. The task will include the preparation of 75 multimedia e-learning courses for selected modules. The courses will be addressed to vocational school students and participants of training provided by continuing and vocational educational institutions. In addition, the task will include the development of 25 multimedia e-learning courses for teachers and other users of distance education. The topics of the courses will be determined on the basis of a diagnosis of educational needs of teachers and students of continuing and vocational educational institutions.
- 5) Training of distance learning teachers. The task will be implemented by providing training to two user groups. The first distance education training block will be addressed to around 500 teachers. Enrolment for training will be open to persons with experience in distance education in educational institutions and graduates of distance learning post-graduate courses. The second block of training will be addressed to promoters supporting distance training; they will cascade the expertise acquired in the course through direct consultations to representatives of institutions interested in implementation of the distance education model.

1.3. Impact of demographic change and international migration on VET

New challenges to the vocational education and training system result from the current and expected demographic situation of Poland.

According to the latest demographic forecast of the Central Statistical Office (GUS), the population of Poland will decrease steadily to only 35.6 million in 2030 as opposed to an earlier forecast of 40 million.

According to the demographic forecast of the Demographic Science Committee of the Polish Academy of Sciences, the population of Poland will continue to decrease. The number of births is expected to fall by 100 thousand in the next 30 years. The expected

number of births will be around 230 thousand in 2030. The population of Poland will decrease by around 1 million by 2020. The average life expectancy will increase. As a result, the population at the age of 60+ will increase to one-fourth of the total population of Poland, as compared to ca. 15% now. In 20 years' time, the population at the age of 60+ may rise to 40% of the total population. This means that the population in retirement age will double in the next 25 years while the number of children may fall by half.

As a result of the baby bust, each year more students will be graduating than joining schools. The trend is borne out by statistics published in the Abridged Statistical Yearbook of Poland 2009. For example, Table 3 presents the number of students (in thousands) by type of school in three (of the last four) years as compared to the school year 2000/2001.

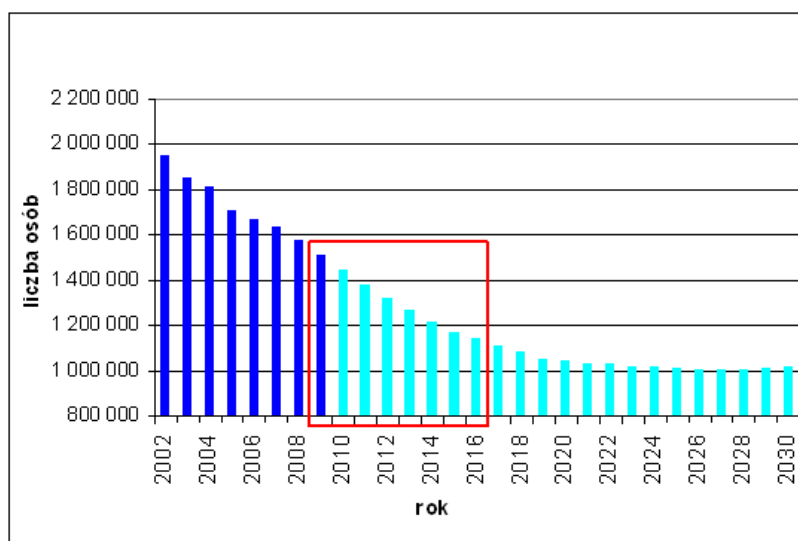
Table 3. Number of students by type of school in 2000-2009.

Type of school	2000/2001	2005/2006	2007/2008	2008/2009
Primary	3220.6	2602.0	2375.2	2294.4
Lower secondary	1189.9	1596.8	1453.2	1381.4
Upper secondary	924.2	735.7	713.3	686.4
Vocational secondary	-	202.2	110.5	72.5
Technical secondary	964.3	520.2	542.0	549.9
Basic vocational	542.0	231.5	235.6	239.1

Source: Abridged Statistical Yearbook of Poland 2009

The table suggests that the number of students of primary and lower and upper secondary schools is decreasing. Contrary to widespread opinions, after a sharp decrease in the early years of this century, the number of students of basic vocational and technical secondary schools has been growing slowly but steadily since 2005. The number of students shown in the table confirms the trend (technical secondary schools: 520.2 thousand students in the year 2005/06, 549.9 thousand students in the year 2008/09; basic vocational schools: 231.5 thousand students in the year 2005/06, 239.1 thousand students in the year 2008/09). The process gains even more importance considering that the number of students of upper secondary schools decreased significantly over that period (from 735.7 thousand to 686.4 thousand students respectively).

According to statistics of the Central Statistical Office (GUS), the population at the age of 16-18 years was around 1.5 million in 2009, i.e., 190 thousand (ca. 12%) less than in 2005. This population will fall to ca. 1 million in 2030, i.e., 700 thousand (ca. 33%) less than in 2009.



Source: GUS, 2009.

An analysis of the period 2009-2016 suggests that the young population will decrease by around 350 thousand in 2016 compared to 2009. Assuming a standard number of 26 students per class (assumption applied by the managing authorities), around 13,460 classes will be vacant. Assuming that the average school has 25 classes, around 540 schools will be vacant in 2016, resulting in the closing of 1.5 schools per poviats on average (Poland has 308 poviats [districts] and 65 city poviats).

The decreasing number of school classes results in a lower number of teaching classes, which means a decreasing number of teachers necessary to provide education.

The baby bust is also a problem of higher education. Many higher schools may go bankrupt. The Ministry of Science and Higher Education has opened a tender for an expert opinion to research the number of higher schools at the risk of bankruptcy. Bankruptcy is taken into consideration in the assumptions of the higher education system reform. Higher schools may face financial problems already next year when students of the first year of the baby bust generation enrol in high schools. This means that the number of students will decrease gradually. Non-public higher schools funded with tuition fees are at the greatest risk of bankruptcy, in particular higher schools with less than 1,000 students (40% of all schools). According to experts, this is not the only reason for financial problems of higher schools. Another problem results from the suspension of obligatory military service: some young people will no longer need to become students to avoid serving in the army.

In summary, the baby bust which has affected the Polish school system over the past years may not necessarily be unfavourable for education. This would be the case only if one considered the school as a working place of teachers rather than an institution which fulfils important social needs. A lower number of primary and lower secondary school students creates a great opportunity of rationalising the network of schools, improving the quality of their infrastructure (buildings, equipment, modernisation of teaching aids) and expanding their functions serving the local community (extramural activities, openness to the needs of the local community). Post-lower secondary education will get a chance of determining the number and the type of schools per poviats (district) or voivodship (region) adequate to the aspirations and interests of lower secondary school graduates and the needs of the economy and the developing knowledge society. In particular, it should be possible and even necessary to reinforce modern forms of vocational education based on new, attractive modular education solutions.

The development and the new functions of schools of all types should aim at building an open offer of vocational education and training addressing the needs of adults and elderly citizens.

The accession of Poland to the European Union opened the labour markets of some EU-15 Member States to Poles; access to labour markets of all the EU-15 Member States is expected to be fully liberalised by 2011. This has resulted in a relatively strong outflow of workforce expected to last for at least a decade. Under these circumstances, migration may produce both short-term (temporary) and long-term economic effects.¹³ In terms of the costs and benefits or economic migration of Poles, the profile of migrations and the number of returns will play a key role. Migrations of Poles tend to be temporary or seasonal, in line with overall migration trends in Europe and globally. It is expected that the number of returns will increase with economic convergence of the new Member States and the EU-15; at the same time, the number of new economic migrants will decrease. The faster ageing of the population of the new Member States compared to the EU-15 will also counteract migration. Meanwhile, Poland and the other new Member States will become more attractive to potential migrants from neighbouring and developing countries. The biggest group of migrant have been employees of the private sector (38 percent).

Companies have had and will have problems finding employees with necessary qualifications. One of the reasons is the gap between the vocational education and training system and labour market needs; another reason is economic migration. The main destination countries of economic migrants include Germany (30.4 percent) and the United Kingdom (26 percent); Germany and the United States have become less popular compared to migrations in 2007 while the United Kingdom, Italy, France, the Netherlands and several non-EU countries (mainly Norway) attract more migrants. The scale of migrations is not clearly identified. Estimations vary considerably and range from 300 thousand to 1.8 million migrants. According to the *Impact Analysis of Economic Migration on the Polish Economy* drawn up by the Analysis and Forecasts Department of the Ministry of the Economy in February 2007, around 800-900 thousand Polish nationals per year take up different forms of legal employment in the countries of the European Economic Area. The outflow of labour has augmented the problem of a shortage of workforce and may in the future slow down economic growth.

In view of the existing gap on the Polish labour market and the disinterest of local employees in jobs of low prestige and pay, mainly in trade, agriculture, construction and household services, an opportunity has emerged for foreign workers, mainly from the east. The scale of employment of foreigners is small and enjoys social acceptance. Over 10 thousand work permits were issued in 2006 and over 5 thousand in the first half of 2007. The main national groups were Ukrainians, the Vietnamese and Belarusians. The social impact of migration will be largely positive. Migrants in other countries will acquire new vocational competences and get the opportunity to invest the earned capital in Poland. As a result, the key issue to the Government is to implement a resettlement policy for migrants based on new incentives.¹⁴

In order to match the qualifications of potential employees to the specific requirements of offered job positions, it is necessary to adequately diagnose the requirements of specific employers. The National Employment Strategy 2007-2013¹⁵ provides for the following key activities:

¹³ Wpływ emigracji zarobkowej na gospodarkę Polski. (**Impact of Economic Migration on the Polish Economy**) Ministerstwo Gospodarki. Departament Analiz i Prognoz. (**Analysis and Forecasts Department, Ministry of the Economy**), Warsaw, February 2007.

¹⁴ 4 lata członkostwa Polski w UE. Bilans korzyści i kosztów społeczno-gospodarczych związanych z członkostwem w Unii Europejskiej. (**Four years of Poland's membership in the EU. Analysis of socio-economic costs and benefits of EU membership**). Urząd Komitetu Integracji Europejskiej. Departament Analiz i Strategii, (**Office of the Committee for European Integration, Analysis and Strategies Department**), Warsaw, 2008.

¹⁵ Krajowa Strategia Zatrudnienia na lata 2007-2013 (**National Employment Strategy 2007-2013**). Document approved by the Council of Ministers on 6 September 2005.

1. To diagnose demand for qualifications on the labour market. Forecasts of demand for qualifications at the national, regional and local will be developed including the application of tools to research surplus or deficit occupations.
2. To develop, improve and disseminate national standards of vocational qualifications based on identified requirements of employers as the basis of vocational education and training standards. As a target, vocational qualification standards should be a tool of diversification of education paths. They should also ensure transparency of acquired qualifications and facilitate vocational mobility.
3. To stimulate activities of training institutions aimed at improving the quality of the educational offer. The quality of education services will be assessed and institutions with a high ratio of post-training employability will be promoted and supported (grants, accreditations, dissemination of best practice).

Conditions will be created to improve vocational mobility. The increasing volatility and complexity of work processes will force people to change the occupation or specialty many times. As a result, a well accessible and attractive system of changing qualifications must be developed in 2007-2013. A key role will be played by initiatives of professional associations, public employment services, employers and employees organisations.

Example 1: Increasing the number of graduates of faculties of key importance to a knowledge-based economy

ESF HC OP Priority IV: Higher education and science, Measure 4.1: Enhancing the educational capacity of a higher educational institution and increasing the number of graduates of faculties of key importance to a knowledge-based economy, Sub-measure 4.1.2: Increasing the number of graduates of faculties of key importance to a knowledge-based economy is open to competition projects aimed at:

- enhancement of the educational capacity of a higher education institution by enabling expansion and enrichment of the educational offer;
- ensuring effective management of the higher education system and adjusting the structure of supply of graduates to the needs of the economy.

Types of implemented projects:

Provision of commissioned education by enhancing the attractiveness of education in technical faculties, mathematics, natural sciences by implementing projects including:

- development of scholarship programmes for students of the above mentioned commissioned faculties;
- development and implementation of make-up curricula addressed to first-year students of the commissioned faculties, including improvement of competences necessary to continue studying at the faculties;
- implementation of new or amended curricula (including curricula developed in Sub-measure 4.1.3);
- other forms of education defined by the institution to enhance the attractiveness of education at the commissioned faculties.

The target faculties include: automation and robotics, biotechnology, construction, chemistry, energy, physics/technical physics, information science, material engineering, environmental engineering, mathematics, mechanics and mechanical engineering, mechatronics, environmental protection, design.

1.4. Impact of greening of economy on VET

The *Education for Sustainable Development Strategy* adopted by the Ministry of the Environment in 2008¹⁶ provides an important incentive to greening of the economy. The main objective of the Strategy is to incorporate the key issues of sustainable development into formal education as well as informal and non-formal education systems. These issues include among others: human rights, fighting poverty, health, cultural diversity, peace, ethics, democracy, social justice, security, the economy, environmental protection, management of natural resources.

On the basis of this policy and strategy, the vocational education and training system may develop its own offer of education services.

Environmental education in the formal education system is provided in pre-primary schools, primary schools, lower secondary schools, upper secondary schools, technical secondary schools, vocational secondary schools, basic vocational schools, post-matriculation and post-upper secondary schools, and higher schools. Kindergartens are an important formative space including environmental education. The objective of environmental education in the kindergarten is mainly to unlock the will, habits and abilities of watching the natural environment. This instils in kids sensitivity to beauty, disapproval of destruction of nature, and respect for other creatures. This indirectly impacts the lifestyle and the environmental awareness of parents.

The 1992 Education System Act provides that the "education system ensures in particular dissemination of environmental knowledge among children and youth and development of the adequate attitude to environmental protection issues." The core curricula of many subject in primary, secondary and vocational schools currently include issues directly related to environmental protection.

The curricula of natural and social sciences as well as specialty vocational subjects in post-primary schools of all types, including basic vocational schools, technical secondary schools, vocational secondary schools and upper secondary schools, comprise environmental protection issues. There is a growing number of customised environmental education curricula. It must be stressed that environmental protection and safety are an integral part of the educational offer of vocational schools, presented in separate subjects or modules of education. There are also separate occupations in secondary schools which are directly or indirectly related to environmental protection, e.g., Environmental Protection Technician, Environmental Engineering and Land Improvement Technician, Landscape Architecture Technician, Occupational Health and Safety Technician, Forestry Technician, Gardening Technician.

However, it is very important that teachers are equipped with the adequate aids: attractive textbooks, brochures, leaflets, video films, laboratory and field test kits.

Environmental education at the tertiary level includes vocational education to train environmental experts, education introducing environmental issues to future university graduates, and post-graduate courses which usually last two semesters and provide further environmental education. Higher schools also offer PhD environmental courses, support the movement of student science clubs, organise congresses, conferences, seminars, symposia and other environmental education activities. They also participate in international programmes (including TEMPUS, PHARE, JICA, Know-How Fund).

¹⁶ Strategia Edukacji dla Zrównoważonego Rozwoju (**Education for Sustainable Development [ESD] Strategy**). Europejska Komisja Gospodarcza ONZ. Ministerstwo Środowiska, (**UN Economic Commission for Europe, Ministry of the Environment**), Warsaw, 2008.

Many higher schools offer environmental faculties, include environmental education in their curricula, and accommodate the educational needs of the local community and cooperate with it. Environmental issues are mainly covered by Environmental Science faculties. These educate experts in programming, organising and performing environmental audits at the local, regional and national level, and train environmental researchers. Graduates find jobs in national and landscape parks or work as environmental auditors in companies and enterprises.

Environmental Engineering is another popular faculty. It is a technical science which covers engineering techniques necessary to preserve the natural balance of the environment, its self-regenerating and self-cleaning capacity, and to restore balance after environmental damage. This is a very current topic and experts easily find jobs.

The interest of adults in education provided in non-obligatory systems has been growing in the past years. Open universities, post-graduate courses, training and other forms of dissemination of knowledge have a growing role and introduce environmental education also at this level.

In informal education, regional environmental protection services participate in organising training, seminars and courses for different user groups and prepare and distribute information about the environmental state of play. Such reports are available to all interested parties (schools, libraries, local governments, elective local bodies, higher schools, enterprises, environmental education centres, landscape parks, the mass media). They sponsor environmental competitions and participate in the organisation of environmental olympics. In addition, the media have a strong impact on the environmental awareness of the general public. The key role is played by fact journalism and popular science documentaries shown on television.

Enterprises are organisers and hosts of a range of environmental protection seminars, conferences and courses. Environmental issues are included in vocational training.

Example 1: Website on climate change and renewable energy sources

Human civilisation is the key agent of climate change. In order to contain the damage, our national economic strategies have to take into consideration extreme weather conditions as soon as possible. We should strive to understand the reasons for the fast rise of world temperatures. Poland is probably the only Central European country without a National Climate Programme.

A repository of knowledge on climate change and renewable energy sources is available on the website www.biomasa.org. The website was created in December 2004 as part of the GEF project *Integrated approach to the use of wood waste in the generation of heat in Poland*. The project was implemented between August 2002 and December 2006 by the Foundation "Partnership for the Environment" on behalf of the Ministry of the Environment. The project was funded by GEF, the Global Environment Facility managed by the United Nations Development Programme (UNDP) in Poland. The website www.biomasa.org was the official project website and provided information about possible use of different types of biomass, available technologies, practical applications, and current news from the biomass market in Poland and globally.

In October 2005, an education section was added to the website as part of a project funded by the National Fund for Environmental Protection and Water Management (NFOŚiGW). The education section was devoted to climate change and the use of renewable energy sources; it was mainly addressed to students and teachers of at lower and post-lower secondary levels. As the website was very popular with users, even though

the GEF project ended, it continues to be operated by the company Iso-Tech owned by the Foundation "Partnership for the Environment". A new version of the website was launched in May 2007. The new version combined the www.biomasa.org website with the education section www.biomasa.org/edukacja. New topics include climate change and the use of renewable energy sources. The layout of the website was upgraded.

The website presents a lot of practical information and materials (class scenarios, presentations) for teachers and students devoted to climate change and the use of renewable energy sources. The website features a catalogue of companies whose products or activities help to reduce greenhouse gas emissions. Company presentations are published free of charge.

1.5. Other challenges for VET

Poland is an EU leader in dissemination of formal education in its most traditional version, i.e., mandatory and upper secondary education as well as higher education in longer cycles. However, the situation is different with regard to the **link between education and training and the labour market as well as adult education**.

The supply of training services on the market is not well identified, which results in problems in **monitoring the quality of offered courses and ensuring effective spending of training budgets**.

The **implementation of a modular training technology** as part of VET generates an increase of training costs because conditions similar to the work environment must be ensured. In addition, there are organisational problems with the implementation of new curricula (e.g., recruitment of teachers), and more teachers need to be trained.

Integration of general and vocational education including key competences should be programmed to support the development of skills and attitudes necessary for broad-profile vocational qualifications as an asset in looking for a job on the Polish and European labour market.

The quality of vocational education is tested by means of **external examinations confirming vocational qualifications**. These will be modernised on the basis of the existing examination system among others to make them comprehensive and practical, to adjust them to the requirements of confirmation and recognition of qualifications acquired in non-formal and informal education, to harmonise requirements, procedures and criteria in a more extensive network of accredited institutions participating in the process (including the participation of employers and professional organisations), to develop an IT database of examination tests, and to ensure the operation of the vocational examination system all year round (currently there are only two sessions, in summer and in winter). A major innovation will be allowed by the possibility of confirmation of partial qualifications (general vocational qualifications, basic occupational qualifications, specialty qualifications) in the course of the education process, which should motivate students to take examinations and accumulate achievements in the lifelong learning process.

The issue of **education, further education and training** of teachers of vocational education is at the centre of attention, especially that the proposed system changes cannot succeed without teachers. In fact, the number of teachers of vocational education is decreasing steadily year by year (the number of teachers has decreased by 7.22% in the past two years). A weakness of the current training system of teachers of vocational subjects lies in the absence of substantive support for teachers of vocational subjects in many sectors. Teachers not only provide education in vocational schools; they also organise and conduct the practical education process in specialty, school and craft workshops or in enterprises. The fast development of industries and services requires a process of adjustment of the substantive competences of teachers to the requirements of a knowledge-based economy. Changes in this field will be aimed at developing a regional

system of substantive support for teachers of vocational subjects (voivodship and poviat teacher development centres). The solution will rely on certified experts, i.e., sector specialists, consultants, and methodological advisors, as well as the development of generally accessible IT resources. In the school year 2008/09, the ratio of vocational education consultants employed by regional teacher training centres to teachers of vocational subjects was 1 to 1,129 (56 consultants to 63,223 teachers).

Vocational education is an area of education directly linked to the labour market. Therefore, the **influence of employers on the vocational education process** should be integrated into the planning, organisation, implementation and evaluation of the process in order to reduce the gap between education and the labour market to the absolute minimum. In this context, it is necessary to integrate school and out-of-school education systems, to reinforce relations and cooperation between schools and enterprises by means of providing practical education and traineeship opportunities, to invest in teachers-practitioners and gifted students, to equip schools and institutions with technical teaching infrastructure aids, to promote best practice, and to identify incentive mechanisms in order to produce a systemic effect.

Theme 2. Economic crisis - VET policy and recovery measures

In response to the global economic crisis, in December 2008 the European Council adopted a European economic development programme which paid special attention to structural reforms. In order to create conducive conditions for economic recovery in Poland, it was decided that the most important priority was to define the goals and measures to be adopted both in the short and long term perspective. In November 2008, the Government launched the Stability and Development Plan which comprises a whole gamut of activities aimed to ensure the stability of the Polish currency and public finances linked to the entrepreneurship potential of the Polish economy so that a positive economic growth (GDP increase by 1.7% in 2009) could be maintained. Despite the worldwide economic crisis, the good labour market situation manifested the robust condition of the economy and human capital; this could be called the phenomenon of the Polish labour market in the crisis. In 2009, Poland was a country with a low unemployment increase, and young people entering the labour market quickly adapted to the requirements posed by the labour market and the economy.

With a view to accelerating economic growth processes, the Government laid down the following goals in the Stability and Development Plan:

- to avoid development threats that could be posed by an increase of public debt and finance sector deficit beyond manageable levels for the economy and the state, as this would restrict the opportunities for creating new competitive advantages for the Polish economy on the one hand, and on the other it would thwart Poland's preparatory efforts leading to the adoption of the euro. Therefore the Government defined several tasks with the aim of consolidating public finances as the foundation for Poland's development in the future;
- to lay the foundations for creating new competitive advantages for Poland and its economy, which is essential for the country's long-term development. This should include developing the intellectual capital (education, science and innovation, knowledge based economy) and increasing the creativity potential.

2.1. The Development and Financial Consolidation Plan 2010 - 2011 (proposal submitted by the Chancellery of the Chairman of the Council of Ministers)

Development Priority no. 4, Measure 4.1. *Development of intellectual capital, education, science and innovation* indicates a number of economic recovery submeasures in the sphere of vocational education and training. Submeasure 4.1.3. *Improving the system of career promotion and teacher salaries* aims to restore the motivational nature of the career promotion and remuneration system for teachers. The Development and Financial Consolidation Plan (hereinafter the Development Plan) envisages a variety of tools to be used for achieving the adopted goals: increasing teacher salaries by 7% starting from September 2010, and continued salary increases while taking into account the budgetary circumstances, to ultimately reach an average 50% increase in 2007-2012, which will be coupled with a continued reduction of disparities between the salaries of trainee teachers and chartered teachers; changes in the teacher's working time aimed to increase the effectiveness of work with pupils (as part of this, more of the school's working time will be spent on individualised educational activities, mostly with children and youth having special educational needs, e.g. gifted and talented children, children with disabilities and chronic diseases, children with behaviour disorders and threatened by social maladjustment, children from foreign education systems, children from economically and culturally neglected areas and communities). As regards the career promotion system, the Government proposes to opt for one of two concepts which should aim to increase the effectiveness of school's work, improve individualised educational activities, promote the status of the teaching profession, increase salaries and open up new possibilities for

awarding eminent teachers. *The first concept concerning the career promotion system* involves decreasing the bureaucratisation of the current system by replacing the existing procedures for awarding the title of chartered teacher by an internal school procedure that takes into account the opinions of the school community. In addition to that, the Government proposes to add a new career path to the system which would involve temporarily entrusting the teacher, regardless of his or her career promotion level, specific tasks related to the operation of the school. In this way, medium-level school management staff would be formed, composed of teachers-leaders who will both initiate and coordinate the implementation of good professional practices or innovative projects. *The second concept* is more innovative. The Government would like to look at the teachers' promotion system as a transparent and viable system ensuring development in the teaching profession as a profession of public trust, strengthening the social prestige of teachers, and addressed to young teachers, but also to more experienced teachers who will be given an option whether to remain in the old system or to enter the new system, which will include new principles for hiring and remunerating staff. Submeasure 4.1.3 envisages the use of EU funds to implement activities related to the preparation and implementation of changes in the system of hiring, remunerating and promoting teachers. This submeasure is targeted at the entire teaching community. The Government anticipates positive results of the submeasure's implementation, among them the following: increased teacher salaries by 50% on average in 2007-2012, with a special emphasis on new teachers, whose salaries may increase by as much as 80% - this is aimed to encourage the best candidates to enter the teaching profession, raise the standards of teaching in schools through dissemination of good practices and strengthen the motivation of teachers to improve their professional qualifications. The planned increase in the public sector expenditure on teacher salaries for 2010 and 2011 is shown in Table 1:

Tab. 1. Estimated costs of salary increases for teachers in 2010 and 2011.

Increase of base salary:	2010	2011
As of 1 January	0%	0%
As of 1 September	7%	7%
Estimated financial cost (in PLN):		
Local government units	1 616 667 162	1 979 373 131
Public schools	56 594 895	141 639 578
Kindergartens	189 078 365	304 889 590
Total	1 862 340 422	2 425 902 299

The Ministry of National Education is the body responsible for the implementation of this submeasure. Submeasure 4.1.4. *Increasing the effectiveness of VET* is intended to increase the flexibility and effectiveness of vocational and continuing education and training in the context of labour market expectations. The Development Plan envisages different tools for the implementation of this task: improving the transparency of the qualifications systems through the adoption of a new classification of VET occupations that takes account of the division of occupations into qualifications, increasing the flexibility and effectiveness of the vocational examinations system through the opening of the system to outcomes of formal, non-formal and informal learning and strengthening the practical aspects of the exam; involving employers in the examination process through the establishment of a network of exam centres emulating real workplace conditions; creating possibilities for adults to supplement their education in general secondary schools for adult learners, while ensuring possibilities for improving vocational qualifications in various forms of training; including VET schools into a system of vocational courses for adult learners, in particular

with regard to retraining and acquisition of vocational skills in concert with employers' needs; establishment of sectoral vocational and continuing centres which would be based on the existing continuing education centres, practical training centres as well as vocational schools for youth and adult learners; ensuring access of lower secondary school pupils to educational and vocational counselling to help them make informed choices about further education and career paths; amending the legislation pertaining to education to incorporate the new VET classification of occupations, system for validating vocational qualifications and organisation of non-school forms of training provided by vocational schools. This submeasure is targeted at local governments, headmasters and teachers of public and non-public schools offering vocational education as well as employers.

Tab. 2. Implications for the public finances sector (in million PLN)

Activity	2010			2011-2013		
	SFP	incl. SB	inc. EU	SFP	incl. SB	inc. EU
Development and dissemination of proposed changes in the VET system	- 0.07	-0.07	0	0	0	0
Improvement of VET core curricula to ensure compliance with the requirements of knowledge based economy (ESF project)	-3.5	-0.5	-3.0	- 11.9	-1.8	-10.1
Development of a vocational counselling model and an on-line system of educational and career information (ESF project)	-2.5	-0.4	-2.1	-4.2	-0.6	-3.6
Model of implementation and popularisation of e-learning in LLL (ESF project)	-3.6	-0.5	-3.1	- 16.0	-2.4	-13.6
System of support for schools and educational establishments implementing modular VET curricula (ESF project)	-3.9	-0.6	-3.3	-4.9	-0.7	-4.2
Modernisation of the vocational exams system (ESF project)	-5.0	-0.8	-4.3	- 32.0	-4.8	-27.2
Vocational school as a "positive choice" school (ESF project)	-4.0	-0.6	-3.4	- 14.0	-2.1	-11.9
TOTAL	- 22.5	-3.4	-19.1	- 83.1	-12.5	-70.6

The Government expects that once the changes have been implemented, the new VET system will be partly financed from the state budget as part of the educational subsidy, and partly by the learners themselves (mostly adult learners, with possibilities for co-financing by employers or labour offices). The body responsible for the success of this submeasure is the Ministry of National Education.

Even though the economic downturn did not affect employees in Poland as severely as in Western European countries, the Government plans to launch activities aimed to facilitate labour market entry for young people. In Measure 4.3., the Labour Market, 4.3.1 *Facilitating labour market entry to school leavers - The "Better Start" programme* is intended to make an effective labour entry easier for young unemployed and job seekers. To this end, the Government plans to increase, up to PLN 300 million in 2010, expenditure on activation measures addressed to young people, financed from the Labour Fund (*Fundusz Pracy*) reserve and managed by the minister for labour. In addition to that, the Government plans to prepare district labour offices to develop the so-called Individual Action Plans which will comprise: a diagnosis of the preferences and potential of young people, potential barriers which hinder taking up employment; activities that may be

undertaken by labour offices as part of the programme, which are customised to individual client needs and local labour market requirements; assistance in choosing the employers and in establishing contact with the selected employers. In case there are no adequate vacancies, activation measures will include in particular: co-financing of the cost of postgraduate studies; training (i.e. award of a training loan, covering partial costs of exams, licences, scholarships, etc.). These activities will be accompanied by such forms of support as: vocational placements; preparatory vocational training for adults; reimbursing the costs (in part or in full) of furnishing work stations or intervention works or award of funds to start up business activity, including costs of legal aid, consultations and advisory services. The Government intends to launch special projects as part of the "Better Start" programme. This particular arrangement will involve the possibility to combine the statutory services and labour market instruments with solutions adapted to the individual needs of the programme participants and to offer several forms of vocational insertion to all programme participants, while simultaneously using various non-standard solutions. This submeasure is expected to raise labour market activity levels of young people. The responsibility for this measure and its implementation rests with the Ministry of Labour and Social Policy.

2.2. Act on the alleviation of the consequences of the economic crisis for employees and employers of 1 July 2009 (Dz. U. of 7 August 2009)

In the face of the global economic downturn, similarly to other countries Poland implemented actions for economic recovery. The Act on the alleviation of the consequences of the economic crisis for employees and employers of 1 July 2009 (hereinafter the Act) introduced new principles for the co-financing of training courses and postgraduate programmes as well as grants for employees. However, the Act is solely targeted at people who conduct business activity. At the request of an entrepreneur suffering temporary financial difficulties who has set up a training fund, the head of the district government [starost] may offer Labour Fund co-financing, in a contractual form, for the following:

- costs of training for employees referred to training for a period up to 6 months;
- costs of postgraduate studies for employees for a period up to 12 months,

provided that such training or postgraduate studies are justified by the employer's present or future needs. The co-financing threshold per one person is up to 80% of the costs, however not more than 300% of the official average salary (whose amount is determined on the basis of statistics for the previous quarter, published by the President of the Central Statistical Office (GUS) pursuant to the Act on pensions and disability pensions from the Social Security Fund of 17 December 1998 (Dz. U. No. 39 of 2004 item 353)). The Act stipulates penalties for terminating such training or studies. In such an event caused through the employee's fault, the entrepreneur suffering temporary financial difficulties shall reimburse the costs of training or studies. Such an entrepreneur, when referring employees to training or postgraduate studies, shall conclude a contract specifying the rights and obligations of the parties. Those employees who have terminated training through their fault or with whom the employment relationship has been terminated pursuant to the Labour Code, shall reimburse the costs of training to their employers. During such training or studies, employees have the right to a grant financed from the Labour Fund and disbursed by the employer pursuant to the provisions of the Labour Code concerning remuneration of employees. The Starost shall fund social security contributions from such grants due for the employee from the employer under the social security legislation.

By the deadline set in the contract, the entrepreneur must submit to the Starost a list of employees referred to training or postgraduate studies, specifying the details when waiting time arrangements will be applicable. Funding the costs of training, postgraduate studies

and grants along with social security contributions shall be effected from the Labour Fund until 31 December 2011.

2.3. National Action Plan for Employment 2009-2011

The National Action Plan for Employment (hereinafter the National Action Plan) was developed to address the dynamics of labour market changes with regard to economic and social processes nationally and globally. The Plan's priorities and directions of action were subordinated to the implementation of employment and labour market initiatives laid down in the Government's key policy documents. Priorities, actions and tasks are structural in nature and aim to improve the operation of the economy at large, the labour market in particular. They serve to restrict the negative consequences of the crisis and reduce the period when the adverse effects of the downturn can be felt. In the present situation, there arose a need for additional and urgent measures which shall directly help counteract and restrict the negative consequences of the global economy crisis. These tasks aim to support employment in a period of economic downturn and supplement the so-called anti-crisis Government package prepared in response to the decisions of the Trilateral Committee for Socio-economic Matters. Specific activities are mostly focused on maintaining existing jobs and creating new ones. To address the deteriorating economic situation, enterprises may want to lower costs through lay-offs. However, such a solution has adverse effects. On the one hand, redundancies increase the social costs of the downturn, and on the other they restrain the development potential of the Polish economy. Enterprises which are forced to shed staff will not be willing to incur costs of hiring new personnel once the symptoms of recovery can be felt. In consequence, the high level of employment recorded in later 2008 may be reduced drastically, and the process of its reaching high levels again may prove lengthy.

In view of this situation, activities were initiated with the aim of curbing the scale of redundancies through preventing lay-offs wherever possible and by encouraging entrepreneurs to create new jobs. Initiatives to support employment in the period of downturn are envisaged e.g. by the following programmes: "Activities undertaken by the Ministry of Economy for stability and development", as part of the "Package of anti-crisis measures" adopted in an autonomous dialogue of social partners in the Trilateral Committee for Socio-economic Matters. In addition, support in counteracting unemployment increase and creating new jobs is provided as part of the Human Capital Operational Programme (HC OP) funded by the European Social Fund. The key anti-crisis measures planned in the Human Capital Operational Programme include inter alia:

- financing specialised training or postgraduate programmes for highly qualified employees laid off from enterprises affected by the financial crisis, such as service sector specialists, mainly in the financial branch;
- disbursement of funds for starting business activity for employees covered by monitored redundancy programmes.

The Ministry of Regional Development has also prepared a draft package of measures to streamline the disbursement of funds under the HC OP and to adjust the offered support to the changing economic situation. These measures include for example creating a "fast track for project selection" to prepare the project selection procedures for quick responses needed in crisis situations, and increasing the access of entrepreneurs and their employees to training opportunities. The following tasks are also envisaged as supplementary Government measures to address the difficult labour market situation:

- *Subsidies to maintaining jobs as an alternative to collective redundancies* - this support is addressed to enterprises which have found themselves in a difficult situation owing to macroeconomic factors. Enterprises affected by reduced demand will be able to lower the costs of maintaining staff by reducing the working time (to 50% maximum) or referring employees to the so-called waiting time leave. In this period, employers will receive money from the Guaranteed Employee Benefits Fund for the payment of benefits partly offsetting their lost earnings (up to the equivalent of the minimum

wage). In addition, the employer may also refer such employees to training financed from the training fund and the Labour Fund, which entitles the trainee to a training grant;

- *Changes in the training fund as an instrument of labour market policy* - the task envisages changing the legislation regulating the use of the training fund by employers. Initially, this instrument enabled employers to obtain financial support from the Labour Fund for running specialised training programmes for employees threatened with redundancy. The changes have introduced simplified procedures for setting up such a fund, expanded the range of its uses and increased co-financing thresholds from the Labour Fund. Other planned changes intend to further increase the cap for the co-financing of training and allow enterprises in a difficult situation to adapt the employees' working time to the production needs by referring them to training during which they will receive a grant from the Labour Fund. Employees participating in such training will receive grants to compensate for lost earnings due to reduced working hours or waiting time. Such an arrangement will make it possible to halt the reduction of employment whilst reducing the employer's costs and securing the employees' material situation. Participation in training should have a positive impact on labour productivity, employability and adaptability of staff. For the practical implementation of new measures, PLN 500,000,000 from the Labour Fund in 2009-2010 have been allocated; this amount should co-finance training for some 80,000 employees;
- *Counteracting unemployment by promoting enterprise and self-employment* - this measure envisages offering comprehensive supports for those who intend to start business activity, e.g. in the form of a company, partnership, cooperative or social cooperative. Such support will include advisory services (on an individual and group basis) as well as training programmes intended to provide trainees with knowledge and skills needed to run a business; awarding PLN 40,000 for start-ups; interim support, involving assistance and advisory business services for a period of 6 or up to 12, as well as financial support up to the equivalent of the minimum monthly wage. In addition to that, some activities are expected to promote entrepreneurship and self-employment and disseminate good practices in this area. This task is being implemented by the Ministry of Regional Development as part of Priority VI HC OP *The labour market open for all*, Measure 6.2 *Promotion of entrepreneurship and self-employment*. The budget allocated for this task in 2009 was PLN 181,545,000, including PLN 154,313,000 from the European Social Fund and PLN 27,232,000 from the state budget. It is estimated that in 2009-2011 about 18,000 new jobs will be created throughout the country.
- *Conducting business activity in the period of economic downturn* - this task envisages educational activities aimed to better prepare the SME sector to perform in the conditions of an economic downturn. As part of this exercise, in 2009 the Polish Agency for Enterprise Development (PAED) organised a series of open seminars on the following topics: Alternative sources of financing for enterprises; Restructuring of bank debts by employers; Hedging business transactions; Management of currency risk in enterprises and use of derivatives; Corporate management in difficult times (management/finances/human resources); Human resources management in a crisis; Bankruptcy and rehabilitation law; Starting export activity by SMEs (<http://www.parp.gov.pl/index/index/946>). In addition, as part of the PAED Academy, two new e-learning programmes will be launched on the educational website: Managing a business in a crisis; Hedging business transactions - use of derivatives, unconventional sources of financing, evaluation and verification of potential clients (<http://www.akademiaparp.gov.pl/szkolenia-internetowe.html>). It is anticipated that in 2009 some 450 participants made use of open seminars, and 2700 employees from 500 companies completed training as part of the PAED Academy. In effect, entrepreneurs had an opportunity to gain broad access to knowledge and concrete solutions e.g. relating to human resources management which may help them solve problems in the conditions of deteriorating performance. The allocation for 2009 was

PLN 6,189,000, including PLN 5,190,100 from the ESF, PLN 975,900 from the state budget and PLN 23,000 from the European Commission's grant awarded as part of the "Enterprises Europe Network" project.

- *Flexible forms of employment for people with disabilities* - making employment more flexible is desirable in view of a growing uncertainty concerning the economic situation. Flexible forms of employments enable entrepreneurs to quickly respond to the current conditions. They are also frequently good for employees as they allow them to remove obstacles related to difficulties with taking up traditional employment. One form which is particularly useful in the process of vocational insertion of people with disabilities is teleworking. This allows them to take up employment and reduce the burden of commuting to work. It also lowers the employers' office costs and at the same time allows for hiring qualified staff. The promotion of this form of employment is recommended especially in the current economic situation when the employers are forced to seek cost reductions and are less willing to hire people in a particularly difficult labour market situation. This task is being implemented by the National Disabled Persons Rehabilitation Fund as part of the programme "Teleworking and other flexible forms of employment for people with disabilities". It includes financing of training, vocational counselling as well as information and promotional activities disseminating knowledge about this form of employment; co-financing of computer hardware and software, office equipment as well as installation of broadband Internet connections. The budget allocation for this task in 2009 was PLN 5,000,000 from the Rehabilitation Fund.

The above tasks represent ad hoc initiatives aimed to stabilise employment and bring recovery to the labour market, which are supplementary in character to the measures undertaken by the Government in connection with the current economic situation.

Tab. 1 Specification of expenditures on the implementation of the above tasks in 2009 in thousand PLN

Task	Total	Funds:						
		National				foreign		
		total	FP	PFRON	state budget	total	EFS	other
TOTAL	442734	283208		5000	28208	159526	159503	23
1	Task implemented as part of own budget for current issues (it is not possible to assess the financial consequences at the present moment)							
2	250000	250000	250000 ¹⁷					
3	181545	27232			27232	154313	154313	
4	6189	976			976	5213	5190	23 ¹⁸
5	5000	5000		5000				

The National Action Plan covers the process of preparing drafts of new and existing arrangements - their implementation, evaluation and development. The Plan's activities related to anti-crisis measures include:

- *Priority 1 Increasing Activity, Task - Building a nation-wide continuing education system and a system of incentives for lifelong learning* comprises Submeasure *Vocational training for people employed in agriculture and silviculture as part of the Programme for the Development of Rural Areas*. The aim of the submeasure is to improve the vocational qualifications of farmers, forest owners and those interested in starting farming activity. Specific activities include: support to projects involving organisation of vocational training for the above categories of trainees in the form of courses, workshops and study visits. Institutions selected by a pool of experts in a competitive procedure will be beneficiaries of the training. The maximum possible

¹⁷ Labour Fund expenditure planned for implementation of new arrangements.

¹⁸ A European Commission grant as part of the „Enterprises Europe Network” project.

level of assistance is 100% of eligible costs. Support offered under this measure does not overlap with ESF assistance. EFS projects may include e.g. retraining of farmers to prepare them to start a job or business activity outside agriculture, while projects under the Development Programme for Rural Areas are solely earmarked for vocational development in the field of farming or forestry activity. In 2009, 110 training programmes with some 4400 trainees were organised. The task is being implemented by the Ministry of Agriculture and Rural Areas.

- *Priority 1 Increasing Activity, Task - Building a nation-wide continuing education system and a system of incentives for lifelong learning.* This task covered the submeasure *Increasing the share of higher education in continuing education* which is aimed to increase participation of adult learners in continuing education at higher education institutions. It offers financial support to courses extending the academic offer, addressed to people from outside the academic community, e.g. organisation (by a particular higher education institution with the use of its own staff) of specialised courses and training, the scope of which reflects the needs of the labour market and knowledge-based economy. Acquisition of new qualifications and competences enhances employability as well as potential salary levels, especially for holders of specialised or deficit qualifications. The aim of the submeasure is to better prepare university graduates and people already in jobs to cope better in the realities of contemporary economy. It is being implemented by the Ministry of Science and Higher Education.
- *Priority 1 Increasing Activity, Task - Building a nation-wide continuing education system and a system of incentives for lifelong learning* comprises Submeasure *Activation of people aged 50+ - Measures for promotion of employment, alleviation of consequences of unemployment and vocational insertion of older people - "The 45/50+ Programme"*. The aim of this submeasure is to restore employability and ability to maintain employment by unemployed people aged 45+, with a special emphasis on the unemployed aged 50+. The planned activities include the implementation of projects targeted at this particular group of addressees aged 45/50+, designed on the basis of basic labour market services supported by employment promotion instruments. In particular, these activities will focus on generic and vocational training, including job seeking skills; training courses combined with on the job vocational preparation programmes; training combined with awarding grants for starting business activity or setting up a social cooperative; training combined with creating new jobs by employers; granting loans for financing the costs of training in order to start employment or another type of paid work requiring specific qualifications; reimbursement of the costs of hiring unemployed staff for employers. In addition to that, projects may include supporting the unemployed with specialist assistance provided by vocational counsellors. The results of the submeasure include: vocational insertion of some 2,000 unemployed aged 45/50+; effectiveness of employment resulting from the Programme at a level of at least 50%; changing the labour market attitudes among the Programme participants owing to: enhanced skills; increased awareness and willingness to seek work on their own and acquire new qualifications. This task is being implemented by the Department of Labour Market of the Ministry of Labour and Social Policy;
- *Priority 1 Increasing Activity, Task - Building a nation-wide continuing education system and a system of incentives for lifelong learning* comprises Submeasure: *Comprehensive support to people out of work in regional labour markets*. The aim of this submeasure is to raise the levels of economic activity and employability among the unemployed and people economically inactive, particularly those aged 50+, women and those who want to reconcile career and family duties, young people starting careers, people living in distant areas, people socially excluded or threatened with exclusion, and people with disabilities. The planned activities include: identification of the needs of unemployed people, also through a wider-scale use of Individual Action Plans;

identification of training needs and further training opportunities in the region; organisation of workshops and training programmes in active job seeking techniques and acquisition of key competences; provision of counselling and guidance; implementation of vocational insertion programmes including: job brokerage, vocational counselling, vocational placements and internships, training programmes to upgrade or supplement qualifications; retraining programmes; subsidising employment.

Theme 3. Impact and implications of joint work on European principles and tools

The European Qualifications Framework (EQF), the European Credit System for Vocational Education (ECVET), the validation process and Europass are all important tools in the Polish educational policy as they aim to increase the transparency of vocational qualifications on the European market. Each of these tools is different in character, has different applications and impacts, but all of them serve a single purpose - to promote model practices, enhance recognition of vocational qualifications in individual countries and internationally, and increase knowledge about the components of studies, qualifications, higher education institutions and education systems. They are intended to improve the transparency of systems and the mobility of qualified individuals. The interrelationships between the transparency mechanisms and national qualifications frameworks are complex. All of them are intended as direct or indirect supports to students and qualification holders as well as all other stakeholders such as employers, advisors in the field of qualifications evaluation, university teachers, public officials and other persons. The national qualification networks will, in a novel way, strengthen the existing transparency instruments by simplifying information that they are intended to convey. The value of the Certificate Supplement and the Diploma Supplement will increase as they will define the status of qualifications on the basis of detailed national framework structures and the European framework structure of qualifications. Their value will also increase if they refer to learning outcomes, levels and descriptors of qualifications which are understood and known at home and abroad. In this context, the part of the Diploma Supplement describing the country's educational system is particularly important, and already attracting a lot of interest from students. That part of the Supplement should describe the national or another relevant system using the framework qualifications structure.

In the national policy, activities relating to the development of the National Qualifications Framework and the implementation of EQF and ECVET have been undertaken as part of the implementation of projects in the Human Capital Operational Programme (HC OP) 2007-2013.

3.1. Impact of joint work on European principles and tools on national LLL policies and practices and VET developments

The National Qualifications Framework

Policy development since 2002

Poland proposed a tentative model of the Polish Qualifications Network in late 2009. It is intended to reference national levels of qualifications to those in other countries, with EQF as the interface. In this model, the earlier Polish achievements were incorporated, viz.: development and introduction of a new core curriculum for general education (2008); development of national vocational qualifications standards (2006-2007); preparing the assumptions for the National Qualifications Framework for higher education (2006-2008).

The draft of the Polish Qualifications Framework proposed by the Team of Experts took account of the following circumstances:

- The overall assumptions and the principles of the Qualifications Framework development laid down in official EU documents;
- Arrangements, conclusions and recommendations proposed by an expert international advisory group, set up in the EU to provide an ongoing monitoring and guidance on the implementation of the European and national qualifications frameworks in the Member States;
- Conclusions from the presentations and discussions of experts at international conferences and meetings and from papers dealing with these issues, in particular

concerning lessons learnt from the work on national qualifications frameworks by different countries;

- Objectives of the Polish Qualifications Framework adopted by the Team of Experts of the Ministry of National Education.

In the course of its work, the Team of Experts formulated the following objectives for the PQF: facilitating and fostering the transition from the current system of education (based on teaching mandatory curriculum content) ultimately to a system based on learning outcomes; creating a system which caters to the needs of a lifelong learning strategy that will allow for the validation of non-formal and informal learning outcomes and awarding formal qualifications (diplomas, certificates) on this basis; making the education system flexible - creating practical possibilities for responding reasonably quickly to the new needs of the society, also labour market needs; ensuring a better integration between all the three educational sectors in Poland (general, higher, vocational); creating conditions for recognition in Poland of qualifications acquired in other countries, particularly in the EU Member States; meeting the obligations assumed by Poland under the arrangements concerning this area, agreed within the EU.

The key challenges related to the development of the Polish Qualifications Framework were the following:

- Insufficient linkages between qualifications structures across sectors and lack of experiences in developing a coherent, supra-sectoral structure of qualifications;
- A well-established tradition for describing qualifications and relationships between them in terms of the process and context, and not in terms of learning outcomes;
- Domination of formal education and the resultant tradition of identifying qualifications with completion of formal education and training programmes;
- Reducing the quality assurance forms in relation to qualifications to those focusing on the observation of processes and contexts of learning, and to a lesser extent - on the outcomes of learning;
- Insufficient appreciation of on-the-job learning as a source of competences and qualifications (in the past, this was due to a low economic level and a low level of independent, self-organised citizen communities);
- Unsatisfactory progress in developing a coherent validation system (recognition, assessment and validation of non-formal and informal learning outcomes).

The scale of these challenges obstructed referencing the national qualifications levels to such levels in other countries through EQF. An additional adverse factor was little experience in international projects dealing with comparisons of the qualifications systems, in particular Poland's absence from the OECD review on national qualifications systems which preceded work on EQF. An important factor in this regard was the lack of experiences in developing the validation system for identification, assessment and recognition of competences acquired outside the formal education and training system - no such work has been initiated so far. At the same time, the approach to qualifications as learning outcomes regardless of the place, time or mode of learning belongs to the fundamental assumptions of EQF.

One favourable factor is that education in Poland is strongly centralised, with no regional divisions concerning acquisition of qualifications. A preliminary model of the qualifications framework is presented below (see: Examples of policy measures).

The Working Group set up by the Minister of Science and Higher Education in October 2006 conducted work on the National Qualifications Structure (NQS) for higher education. The aim of these efforts was to obtain: comprehensive information on competences attained by graduates as part of individual learning paths; information on possibilities for continuing the education process with a view to lifelong learning policies; comparability of learning outcomes (both nationally and internationally), of learning standards based on learning

outcomes, and an expanded diversity of programmes of study with a view to better preparing graduates for labour market requirements.

The National Reform Plan for 2008-2011, in its Priority "Active Society", in Measure 1 "Development of education in a knowledge-based society and economy" stipulates the development and implementation of a lifelong learning strategy along with the attendant legislation and institutional instruments. The tasks related to the Strategy will include the development and implementation of the National Qualifications Framework; promoting lifelong learning (be it formal, non-formal and informal), strengthening the partnership of entities responsible for the organisation of formal, non-formal and informal education and supporting informal learning.

Examples of policy measures

Human Capital Operational Programme - High Quality of the Educational System (Priority III)

Legislative basis - Council Regulation (WE) No. 1083/2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No. 1260/1999, the Act on the principles of development policy management of 6 December 2006 (*Dz. U.* No. 227 item 1658 as amended) and Regulation (EC) No. 1081/2006 of the European Parliament and of the Council of 5 July 2006 on the European Social Fund and repealing Regulation (EC) No. 1784/1999.

Objectives - development and implementation of the National Qualifications Framework and the National Qualifications System as well as dissemination of lifelong learning. The programme encompasses all learning levels and economic sectors and is currently managed by the Ministry of National Education. The entire programme has been planned for the years 2007-2013.

The programme is implemented at the central level. The managing authority is the Minister of Regional Development - Department for European Social Fund Management, and the intermediate body - the minister competent for education (the Ministry's Department of Structural Funds).

In 2008-2010, the Ministry of National Education implemented a systemic project entitled "Stocktaking of competences and qualifications for the Polish labour market and the development of the National Qualifications Framework model" as part of Submeasure 3.4.1. Priority III of the Human Capital Operational Programme.

The preliminary National Qualifications Framework was developed with the assistance from a Team of Experts (and their subpanels for: general, vocational and higher education; glossary; validation and empirical research). The Team of Experts carried out the following tasks with the aim of developing a model of the National Qualifications Framework:

- Meetings of the Team of Experts to discuss the main project issues;
- Starting supranational cooperation (Croatia) and international cooperation (Austria, Scotland), participation in the EQU Advisory Group of the European Commission; participation in conferences and study visits; participation of foreign partners in the meetings of the Team of Experts;
- Dissemination of information about the idea of qualifications framework: addresses at national and international forums, press articles;
- Preparing a plan of empirical studies concerning identification of competences and qualifications;
- Preparing the so-called "small report" summarising the substantive work of the Team of Experts;
- Information and promotional activities, e.g. preparing promotional materials, organisation of regional conferences and an international seminar to promote the ideas of EQF and NQF;

- Carrying out empirical studies (in the form of case studies) by the Institute for Educational Research relating to different labour market segments and validation procedures used in selected economy sectors;
- Preparing the final report outlining the draft NQF and a scenario for its implementation, constructed by the experts.

The proposed model of the Polish Qualifications Framework has adopted the assumption that, ultimately, the Polish system of qualifications shall distinguish between “full” qualifications (i.e. ascribed to a given level) and “partial” qualifications. Obtaining a full qualification will enable the holder to seek a (full) qualification at a higher level. A “partial” qualification at a given level shall not entitle the holder to seek a full qualification at a higher level, but may denote a partial fulfilment of the requirements established for a given full qualification, which can be ascribed to the same level as the acquired partial qualification, or to a higher or lower level. Every single full qualification shall have a predefined minimum “size” (volume, quantity, range of learning outcomes making up such a qualification), including a minimum “size” of learning outcomes at the level which is at least equal to the level of the qualification in question. If the learner attains the learning outcomes with a “size” required for a given level, including all the learning outcomes stipulated in the set of requirements for a given occupation, he or she will obtain a full qualification for a given level with the specification of the occupation. On the other hand, if the learner obtains acquires the learning outcomes of a “size” which is required for a given level but fails to fulfil the requirement standards for an occupation, then he or she will be awarded a full qualification for a given level without specifying the occupation. The Polish Qualifications Framework is intended as a tool whereby qualifications acquired in Poland will be referenced to the European Qualifications Framework and, through it, to qualifications acquired in other EU countries. On the other hand, PQF will make it possible for referencing various kinds of qualifications at home, thereby merging into one integrated and transparent whole the system of qualifications which are attainable in Poland.

The Team of Experts proposed the following major descriptive categories for the National Qualifications Framework:

- Levels of qualifications - seven such levels are proposed, with each level characterised by a specific description using level descriptors;
- Descriptors defining the levels of the European Qualifications Framework, which are to provide the context - a background for the Polish level descriptors (relating to learning outcomes);
- Incorporating the EQF descriptors in the Polish Qualifications Framework to help users better understand the idea of the Qualification Framework;
- Descriptors of learning outcomes for individual levels and covering all sectors of education - general, vocational and tertiary, and universal in character;
- Descriptors of learning outcomes for individual levels covering general education - could be used in a different sector, but are not universal in character;
- Descriptors of learning outcomes for individual levels covering VET - could be used in a different sector, but are not universal in character;
- Descriptors of learning outcomes relating to qualifications acquired in general education, corresponding to qualifications at Levels 1-4. Currently, they are present in core curricula for general education;
- Descriptors of learning outcomes relating to vocational qualifications (full and partial), corresponding to qualifications at Levels 1-7;
- Descriptions of general learning outcomes relating to qualifications acquired in higher education, corresponding to qualifications at Levels 5-7.

The bodies involved in the development of the National Qualifications Framework and their adaptation to EQF were the following:

- Ministry of National Education;

- Ministry of Science and Higher Education and other economy-related ministries;
- Central Examination Board and Regional Examination Boards;
- schools and educational establishments and authorities in charge;
- school administration;
- employers and employer organisations;
- chambers of crafts and other crafts organisations;
- higher education institutions and R&D centres;
- VET providers.

Due to the completion of works in January 2010, the project has not been evaluated yet. An important project aspect explored by the Ministry of National Education were references to the experiences of other EU countries which are more advanced in the process of EQF implementation (Croatia, Scotland, Austria).

3.1.2. European Credit System for Vocational Education and Training - ECVET

Policy development since 2002

Work on ECVET is delayed. In 2007, the Ministry of National Education encouraged all stakeholders to take an active part in the social consultation process by sending in remarks, comments and opinions on the introduction of ECVET in Poland. Social consultations on the European Commission's proposal concerning ECVET were carried out simultaneously in all EU Member States participating in the Copenhagen Process, the aim of which was to strengthen mutual cooperation between EU countries in the field of VET. The Commission also invited social partners at the international, national and sectoral levels because ECVET is intended to facilitate acquisition, transfer and recognition of qualifications understood as learning outcomes validated in a given country (regardless of the circumstances of the learning process). The primary goal of ECVET is to support the idea of lifelong learning, enhancing transparency and comparability of qualifications, supporting geographical, educational and career mobility and enhance mutual trust and cooperation between EU countries. ECVET is intended as an entirely voluntary system; therefore countries which resolve to implement this system may define on their own both the manner and the scope of implementation pursuant to their own internal regulations. In Poland, as in most countries, ECVET consultations involved specific activities related to the dissemination of information about the system and organisation of debates and discussions on the Commission's proposal; a large number of ministries, institutions, organisations and other bodies as well as individuals were engaged in this process.

Examples of policy measures

ECVET consultations

Social consultations on ECVET - European Credit System for Vocational Education and Training - were organised (in the period from November 2006 to 31 March 2007) by the Ministry of National Education - Vocational and Continuing Education Department. They led to the commencement of specific activities related to the dissemination of information about the system, exchanges of views on the proposals submitted by the European Commission, with ministries, institutions, organisations and other authorities involved in the process, and mobilised large numbers of people to participate.

The introduction of ECVET refers to VET at pre-tertiary levels, in all the sectors.

In the majority of cases ECVET was regarded by the respondents as an innovative idea which could bring many benefits to the society. In the respondents' opinion, ECVET should effectively help enhance the mobility of individuals as well as recognition and validation of their competences. ECVET is also perceived as a tool facilitating cooperation between VET practitioners not only at the European, but also at the national level. This seems easier in the case of evaluation or certification of qualifications than in other countries as the Polish system of education is strongly centralised. There are no divisions between regions and

thereby no differences in the evaluation of similar qualifications from one region to another.

The Ministry engaged all the stakeholders in the consultation process, particularly social and economic actors at the national level, organisations representing social partners, higher education network, VET providers, research institutes and VET experts.

Conclusions concerning potential improvements of the ECVET system obtained in the course of the consultation process are based on observations, comments, queries and proposals which should be taken into account while developing the system further. In particular, they are deal with the following issues:

- clarification and interpretation of certain terms (such as "units", "validation", "competent authorities", "120 ECVET credit points");
- elucidation of the system's main tenets (presentation of specific ECVET applications for learners and training providers, outlining possibilities of ECVET application in validation of non-formal and informal learning);
- defining the role of ECVET credit points in the system and methods for allocating credit points to units;
- describing the linkages between ECVET and ECTS, and between ECVET and EQF.

Upon completion of the social consultations process, the experts working on the assumptions for the system were provided with the following recommendations:

- a joint glossary explaining concepts and ideas should be prepared; a methodology for creating ECVET units, evaluation, transfer, validation of learning outcomes and allocation of ECVET credit points should be developed;
- the pilot system should be implemented for a sufficiently long period and should be monitored at the European level;
- the process of preparing the launch of the system should be consistently supervised and assisted, particularly with regard to the preparation of manuals, typical procedures and sample documents.

The ECVET success indicators envisage:

- supporting lifelong learning initiatives;
- enhancing transparency and comparability of qualifications and competences - via a shared approach to the description of qualifications and references to EQF and linking to the Europass Certificate Supplement;
- facilitating mobility (educational, career and geographical) - ECVET proposes an approach whereby the learning outcomes of an individual are taken into account while confirming qualifications in the country of origin.

Currently, ECVET has no application in Poland due to lack of relevant regulations on its implementation.

3.2. Promoting geographical mobility of learners / apprentices and teachers / trainers in VET

Policy development since 2002

The Education Development Strategy for 2007-2013 stipulates actions preparing for mobility in an international educational space and in an international labour market through:

- opening the Polish system of education to pupils, students, school and academic teachers from abroad, including the development of curricula in foreign languages and preparing relevant accommodation;
- exchange programmes for pupils, students and continuing education learners;
- placements abroad for school and academic teachers;
- developing an international system for recognition of vocational qualifications, periods of study, certificates and diplomas.

In Poland, mobility in VET is primarily promoted by Europass Mobility, the Comenius programme, study visits and the Erasmus programme. Measures supported by geographical mobility initiatives include inter alia:

- exchanges of pupils and teaching staff;
- mobility in schools for pupils and placements in schools or enterprises for teachers;
- participation in training for teachers and other teaching staff;
- study and preparatory visits as part of mobility, partnerships, projects or networks (also contact seminars);
- placements for teachers and future teachers.

In 2006, the Ministry of Labour and Social Policy acted as a coordinator of activities pursued by the central Polish administration as part of the European Year of Workers' Mobility. In cooperation with the Ministry of Education and Science and the Office for Foreigners, an action plan for the Mobility Year was prepared. It involved such initiatives as: organisation of an international conference to evaluate interim arrangements in the access to the Polish labour market in their first year of operation, and other projects to increase awareness of benefits and costs involved in spatial and vocational mobility: information campaigns, competitions, promotion of voluntary activity among young people. Further to that, in September 2006 an European labour fair was organised, parallel to similar events organised in several dozen cities across Europe.

Examples of policy measures

The Human Capital Operational Programme 2007-2010

The Human Capital Operational Programme 2007-2010 in its project 1.42 - Measures addressed to migrants to and from Poland related to training, counselling, information and promotion campaign (implementation period: Q1 2008 - Q2 2010) set the following objectives: creating a professional information tool - a communication platform by revamping the existing Internet website; dissemination of information about coming back to Poland and the situation in the country; establishing a reliable source of information for emigrants and promoting the image of Poland as an attractive place to live. The developments taking place recently in the domestic labour market, coupled with the dynamics of socio-demographic changes had a distinct bearing on economic migrations of Poles. Those who emigrated for economic reasons and are considering return to Poland have reduced access to information to make informed decisions. So far, they could only use incomplete or dispersed sources of information, frequently outdated. Therefore it was necessary to prepare reliable information about the current legislation, job opportunities, etc. The main objective of the project is to optimise information about living and work conditions in Poland and establishing an effective channel of information for Poles staying abroad for economic reasons. The project's outputs include: the website www.powroty.gov.pl, which provides comprehensive and reliable information for those who are planning to return and promotes an attractive image of the Polish labour market, leaflets (materials for re-emigrants); establishment of a system for compiling and verifying information that emigrants need to make rational decisions concerning their return; dissemination of information about the situation in Poland; and increasing interest in migration among the users of the Internet website. To date, the existing portal www.powroty.gov.pl has been updated and revamped, and a publication entitled: "Powrotnik. Nawigacja dla powracających" [Return guide. Navigation for those about to return] has been published. Also, information campaigns have been carried out in Polish opinion-making magazines and in magazines published by the Polish community in the UK and Ireland, and on Internet websites.

Mobility projects as part of the Socrates - Erasmus programme

In case of university students, there has been an increase in international mobility as part of the Socrates-Erasmus programme, both with regard to the number of participating

higher education institutions and the number of students. This observable increase was possible not only due to a widespread interest of students in the possibility to take some of their courses in partner universities abroad, but also due to a better understanding of the mechanisms for recognition of education and training and an improved quality of services offered to both outgoing and incoming students. This can also be viewed as a result of decisions taken by Polish universities which came to appreciate the significance of an internalised learning process and the role played in this by the mobility of students and academic teachers. Special emphasis was placed on initiatives which could lead to increasing the number of incoming students, e.g.: organising new courses in popular EU languages (mostly English) or improving the performance of International Offices at universities in order to offer better services to foreign students. Although the situation is improving constantly, there is a marked lack of equilibrium in international student exchange.

The Erasmus programme was initiated in 1998. In the 2007/2008 academic year, 256 Polish universities had the Erasmus University Charter which made them eligible to take part in the programme. By 2008, over 67,000 Polish students went for scholarships abroad, and over 18,000 foreign students came to Poland. Over 11,000 Polish academic teachers took part in mobility actions abroad.

Teacher in-service training as part of the Comenius and Grundtvig programmes

The aim of Comenius is to improve and increase the mobility of teachers, other educational staff and pupils, through such activities as:

- exchange projects for teachers and pupils;
- mobility in schools for pupils and placements in schools or enterprises for the teaching staff;
- participation in training programmes for teachers and other educational staff;
- study and preparatory visits as part of activities connected with mobility, partnership, projects or networks (also contact seminars);
- placements for teachers and future teachers.

In 2002-2006, 2096 people 2792 took part in continuing professional development programmes. The success indicators are shown in Table 1, which illustrates the progress in the form of the number of projects implemented in the years 2002-2006. In 2009 alone, 96 applications were approved. The prevalent professional groups of beneficiaries include teachers from post-lower secondary schools, lower secondary schools and primary schools. The beneficiaries chose their courses from the Comenius catalogue published on the European Commission's website and from the free market offer. The free market courses were usually language or methodology courses addressed mainly to teachers teaching bilingual subjects. The most frequent course choices were language and language and methodological courses.

Table 1. Teacher in-service courses - number of approved projects by regions, comparison 2002 vs. 2006

Region in Poland (voivodship)	2002	2006
Dolnośląskie	21	60
Kujawsko-Pomorskie	20	20
Łódzkie	4	28
Lubelskie	9	31
Lubuskie	1	9
Małopolskie	9	43
Mazowieckie	45	95
Opolskie	27	16
Podkarpackie	14	28

Podlaskie	5	26
Pomorskie	19	36
Śląskie	51	115
Świętokrzyskie	3	26
Warmińsko-Mazurskie	13	29
Wielkopolskie	15	38
Zachodniopomorskie	12	18
TOTAL	268	619

Source: <http://www.socrates.org.pl/socrates2/index1.php?dzial=5&node=76&doc=1000225>

The programme attracts a lot of interest. A constantly growing number of teachers are using this opportunity to go abroad and enhance their professional skills.

Teachers can also participate in training abroad as part of the Grundtvig programme, "Training abroad for adult education staff". In 2007-2008, a total of 153 teachers went abroad, of whom 115 were women and 38 were men. This reflects the feminisation of the teaching profession in Poland. The types of the beneficiaries' organisations are shown in Table 2:

Table 2. Training abroad for adult education staff by organisation type

Type of organisation	2007	2008
Adult education provider	31	7
University or higher education institution	7	4
General secondary schools	0	2
Vocational / technical secondary school	3	0
Local community organisation	11	1
Cultural institution	0	0
Penitentiary institution	1	1
Parent associations	0	0
Non-profit / Non-governmental organisation	5	27
Private company	9	14
Public organisation	4	9
Other	5	12
Total	76	77

Source: http://grundtvig.org.pl/s/p/artykuly/15/15/podsumowanie_LLPGRU_2007_08_31Dec09.pdf

The course topics were chosen by the beneficiaries.

Table 3. Training abroad for adult education staff by course area

Course areas	2007	2008
Art and culture	1	2
Guidance / counselling	3	0
ICT	1	3
Intercultural issues	5	9
Language teaching skills	10	13
Management issues	27	5
Methodology / didactics	13	4
Active citizenship	-	3
Special needs	-	5
Core skills	-	2
Adult core skills	-	5
Family learning	-	3
Fighting racism and xenophobia	-	2
Gender issues / equal opportunities	-	6
Intergenerational learning / older age learning	-	2

/ senior learners		
Second chance education	-	2
Strategies for financing adult education	-	3
Other	15	9
Total	75	77

Source: http://grundtvig.org.pl/s/p/artykuly/15/15/podsumowanie_LL-GRU_2007_08_31Dec09.pdf

“Youth in Action” exchange programme

The “Youth in Action” programme provides co-financing to bilateral, trilateral and multilateral meetings of youth from the participating countries, that is the EU Member States plus Turkey, Norway, Iceland and Liechtenstein. Exchanges are also possible with groups from the so-called Partner Countries (e.g. Ukraine, Belarus, Russia, the Balkan countries) as part of a new Action - Youth in the World.

Diagram 1. Youth in Action exchanges - 2008 projects by voivodship.

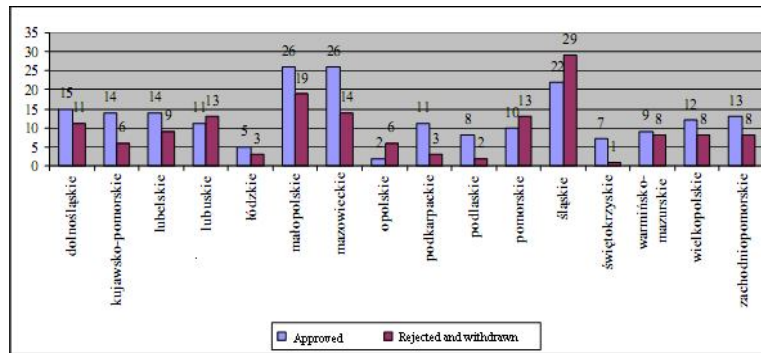
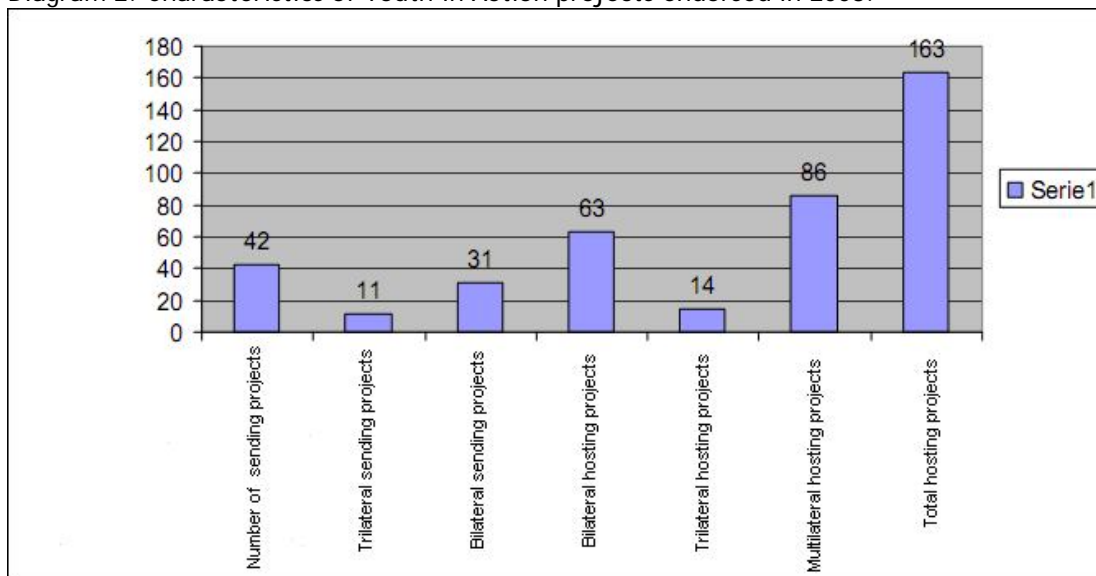


Diagram 2. Characteristics of Youth in Action projects endorsed in 2008.



Europass Mobility

This document is international in character and promotes the mobility of pupils and teachers. Europass Mobility can be issued to all those with a mobility experience after 1 January 2005 regardless of their age, level of education or professional status, organised as

part of Community initiatives such as Leonardo da Vinci or Socrates but also as part of other initiatives, including bilateral agreements between organisations from various European countries. This means that a school or any other institution which has signed a bilateral agreement for training or exchange of students or staff (e.g. a commercial company which delegates employees to its branch, headquarters or a sister organisation in another European country) may apply to the National Europass Centre for Europass Mobility documents for the participants of such a mobility experience.

Employers consider Europass Mobility as a useful tool to describe vocational training and experience abroad. It is, however, mostly a supplementary and not obligatory document, and its dissemination is not driven by any plans to attract new people to the labour market. It is anticipated that the Europass documents will be gradually popularised. Their extent could also be changed - for example, the supplement showing vocational qualifications will probably be extended by qualifications acquired in a crafts establishment.

Europass Mobility is becoming increasingly popular in the Polish labour market. However there exist obstacles to its wider use, such as:

- poor knowledge of foreign languages among people who want to go abroad and work there;
- difficulties in identification of qualifications (this mainly applies to highly qualified people due to the lack of the National Qualifications Framework that would serve as a reference for the European Qualifications Framework);
- difficulties in access to labour market services (insufficient preparation of employment services, insufficient promotion of vocational guidance and counselling).

Table 4. Number of Europass Mobility forms issued by the National Europass Centre in 2007-2009

	2007	2008	2009
January	.*	394	338
February	.*	285	228
March	.*	286	292
April	179	181	228
May	279	192	218
June	224	164	214
July	196	145	132
August	160	115	132
September	196	201	179
October	235	157	201
November	245	159	184
December	181	183	187
Total	1895	2462	2533

* no data

Source:

http://europass.cedefop.europa.eu/Statistics/4_Annual_activity_by_country_and_language/2009/Europass_Statistic_Reports_Year_Locale_2009_pl_PL.PDF

The statistics indicate that the number of downloads of Europass Mobility documents increases from year to year. This is a proof of a growing interest in mobility projects abroad.

4. STRENGTHENING THE LINKS BETWEEN VET AND THE LABOUR MARKET

4.1. Identifying and anticipating skill needs

Policy changes related to identification and forecasting of skills needs

Poland does not have any well-established tradition in forecasting qualification requirements for the needs of the economy and the labour market. This is partly due to the post-War political and economic situation, characterised by a centrally planned economy and lack of free market. Following the systemic change initiated in 1989 as well as privatisation and liberalisation of the economy, there appeared a need to provide both the society and large and its institutions with information about needs relating to personnel and qualifications needs.

In Poland, labour market needs are looked at from the perspective of occupations rather than professional or vocational qualifications. For this reason, the vast majority of forecasts list occupations based on the official Classification of Occupations and Specialties (*Klasyfikacja Zawodów i Specjalności*) maintained by the Ministry of Labour and Social Policy or propose names for new occupations which have good future prospects. This does not mean that there is a shortage of information about qualifications requirements; they are contained in the so-called descriptions of occupations, prepared for all the occupations listed in the Classification of Occupations and Specialties and for "occupations of the future". Such descriptions provide a profile of the work performed in a given occupation, a specification of occupational tasks and a list of associated skills. The Classification is reviewed and amended every 2-3 years. The 2007 version lists 1770 occupations and specialties, and the 2010 version is planned to list another 600 new occupations and specialties found on the Polish labour market.

The document entitled "State Informatisation Plan for 2007-2010" proposes to develop a **System for Forecasting Labour Demand and Supply (SPPP in Polish)**.¹⁹ The project comes as a follow-up to the earlier work conducted by the Interdepartmental Team for Labour Demand Forecasting, operating as part of the now disbanded Regional Centre for Strategic Studies. Work on SPPP is still in the general preparatory phase.

It should be emphasised that under the Promotion of Employment and Labour Market Institutions Act of 20 April 2004, labour market analyses, including the monitoring of deficit and surplus occupations, belong to the tasks of the voivodship (regional) and powiat (district) governments. The tasks of local government units also include diagnosing labour market needs relating to continuing education and training of the unemployed and job seekers, identification and implementation of tools to help align VET directions to labour market needs.

Methods of early diagnosing and forecasting skills needs and mismatches

For forecasting occupations and qualifications, which is needed for a rational planning of VET schools and directions, there must exist a **system for compiling information about the current labour market situation**. The Ministry of Labour and Social Policy carries out an ongoing monitoring of job vacancies and the number of unemployed by occupations and specialties, based on the data collected by the system of Public Employment Services. Currently, Public Employment Services provide **monitoring of deficit and surplus occupations**. In addition to that, in 2008 work was finalised on the **National System for Labour Market Monitoring (KSMRP in Polish)**, also referred to as the "**data warehouse**", along with the software for data collection. As part of the project, software was prepared for the following functionalities: Central Base for Job Vacancies (CBOP in Polish), Data

¹⁹ Regulation of the Council of Ministers of 28 March 2007 on the State Informatisation Plan for 2007-2010 (Dz. U. No. 61 item 415 of 6 April 2007).

Exchange Subsystem and Public Employment Services Portal. CBOP has mechanisms whereby job vacancies are automatically matched with CVs of job seekers. The system compiles data from 354 poviats and 16 voivodship labour offices and transfers them online to the KSMRP data warehouse and to CBOP. Information is transferred using the Data Exchange Subsystem whose central hub is installed with the Ministry of Labour and Social Policy and the local hubs - with labour offices. A dedicated portal makes it possible to search the vacancies database in Poland and abroad because CBOP has been connected to EURES. The portal also allows for uploading job vacancies and CVs which are added to CBOP.

So far, public statistics services do not carry out any comprehensive studies on the educational activity of citizens, which considerably hampers any evaluation of continuing education.

Strengths and weaknesses of changes

The current system of information about labour market needs is characterised by a plethora of data: about unemployment, employees and salaries - collected by labour offices reporting to the Ministry of Labour and Social Policy, by statistical offices (data of enterprises), and data from the resources of the Ministry of Finance, Social Insurance Institution (ZUS) and the Agricultural Social Insurance Fund (KRUS).

The advantages of this system include: independent information sources - which ensures reliability of data, their systematic collection, transparency of collecting and processing, as well as unified terminology and definitions. The PULS IT system operating in Poviats Labour Offices provides an additional functionality in the form of collecting detailed individual data on employees and job seekers.

However, this is not a system focused on forecasting vocational skills but on the ad hoc diagnosing of the demand for employees in specific occupations. Its weakness is that too few labour market data directly relate to qualifications and skills associated with them. There is too little information about mobility of employees (spatial and career). It is not possible to effectively analyse employment in small enterprises and local labour markets. There are no data on qualifications and employment of people working in agriculture. There is hardly any information about self-employed outside agriculture, nor coordination of educational data with labour market data, which restrains forecasting of labour market supply and demand. The entire system of collecting labour market data lacks coordination.

Example 1. The National Foresight Programme Poland 2020

In 2006, by a decision of the Minister of Science and Higher Education, the National Foresight Programme Poland 2020 was started. Its objectives included:

- defining a vision of Poland's development until 2020;
- aligning the principles of Poland's scientific policy with the EU requirements;
- formulating scientific and innovative policies for a knowledge-based economy.

The adopted research methods were the following: Delphi analysis, PEST analysis (analysis of political, economic, social and technological factors) and cross-impact analysis. The work of several thousand experts produced development scenarios for different "research areas", which provided the basis for preparing "Poland's development scenarios up to 2020".

According to the experts, the greatest positive impact on socio-economic development will be made by the following factors:²⁰

²⁰ *Wyniki Narodowego Programu Foresight Polska 2020* [Results of the national foresight programme Poland 2020]. Warsaw 2009, <http://www.foresight.polska2020.pl>

- the quality of intellectual capital and the level of innovation in Poland will increase due to changes in the educational system;
- opportunities and a need for an active involvement of individuals in the society (also on the labour market) will increase due to increased accessibility of high-quality educational services, adapted to different lifetime phases, varying needs and levels of knowledge/skills;
- Poland's technological gap will decrease owing to improved education in technical and natural sciences and an enhanced internationalisation of Polish science.

Although the issues of identifying and forecasting of strictly vocational skills were not distinguished in the quoted example, the National Foresight Programme Poland 2020 is currently the only nation-wide programme dealing with such issues as e.g. forecasting intellectual capital. Emphasis on human capital is probably due to the widespread belief in Poland that the so-called key competences which can be flexibly used in many sectors of career activity determine the labour market success of individuals. The overall character of the National Foresight Programme Poland 2020 and its development scenarios allowed for such a generalisation, which however was not favourable from the point of view of the goals of VET.

4.2. Integrating skills needs of the labour market into VET provision

Policy components intended to incorporate the results of identifying and forecasting skills into VET and vocational guidance

The qualification requirements posed by the labour market and employers are traditionally included in the VET system through the involvement of employers' representatives in preparing programme documents for vocational schools (core curricula, detailed curricula and examination requirement standards), and recently during the work on the vocational qualifications standards. Many changes in this regard may be brought about by the institution of the National Qualifications System, which is expected in the coming years.

The setting up of a **National Qualifications System** was envisaged in the "Human Capital Operational Programme 2007-2013". The document defined the National Qualifications System as a supra-sectoral and comprehensive package of arrangements and legal, institutional, procedural and programme mechanisms to support and facilitate the acquisition, transfer, comparison, recognition, validation and certification of generic and vocational qualifications at the national and European levels. Unfortunately, in the present documents there are no references so far concerning the need to incorporate elements of forecasting vocational qualifications and competences into the National Qualifications System, and this situation should be changed. The establishment of the National Qualifications System will be accompanied by the formulation of the **National Qualifications Framework** linked to the **European Qualifications Framework**. Poland started work on the National Qualifications Framework in 2008, as part of the Ministry of National Education systemic project implemented as part of the Human Capital Operational Programme, entitled "Stocktaking of competences and qualifications for the Polish labour market and the development of the National Qualifications Framework model". In effect, in 2009, a draft of the Polish Qualifications Framework was finalised; it will be developed and consulted at the next stage of the process, planned for 2010-2011. Some elements of diagnosing skills (but not forecasting) were included in the stocktaking programme.²¹ Even though the stocktaking exercise is expected to enable the verification

²¹ Sitek M., Sztandar-Sztanderska U., Woźniak I.: Założenia badań empirycznych służących analizie systemu kwalifikacji w Polsce [Assumptions of empirical research for analysis of the qualifications system in Poland], in: Od Europejskich do Krajowych Ram Kwalifikacji [From European to national qualifications framework], ed. by E. Chmielecka, Fundacja „Fundusz Współpracy”, Warsaw 2009.

of the theoretical model of the Polish Qualifications Framework, adding some forecast components could show the potential direction in which the draft model of the Polish Qualifications Framework and the entire Polish education system will evolve.

Some elements of incorporating labour market needs in the VET system may be noticed in the arrangements concerning external vocational exams. They are based on the **examination requirement standards**. The proposals of such standards are developed by the Central Examination Board (CKE) in consultation with the ministers concerned, higher education institutions, R&D institutions, employer and employee organisations. Similarly, while designing core curricula for individual occupations, the Ministry of National Education requires that representatives of the world of work be included into the teams of authors. Due to cooperation with employer and employee organisations, the formal VET system is quicker to respond to changes in technologies employed in contemporary work. Adding the skills forecasting component would help close the distance between education and work even further.

In the systemic project of the Human Capital Operational Programme implemented by the National Centre for Supporting Vocational and Continuing Education (KOWEŻIU in Polish), entitled "Improving core curricula as the key to VET modernisation" and planned for the years 2008-2013, there is a task associated with identification of new skills and their incorporation into the teaching content, viz.: "Analysis of qualifications and competences expected by employers from vocational school leavers". In 2009, a preliminary research of issues was done and the assumptions for the final research were defined.²²

Strengths and weaknesses of activities

Poland is trying to fulfil the principal goals of the Lisbon Strategy and the Copenhagen Process by undertaking actions aimed to transform the centralised VET system into a flexible system that combines labour market needs with educational services. However, skills forecasting and incorporating such forecasts into VET does not attract much interest.

The number and range of implemented projects leads to coordination problems both regarding time and effects. This could be addressed by the "Lifelong Learning Strategy" (which is to be finalised in 2010) and the consolidation of project management by setting up a Steering Committee for Lisbon Strategy Implementation. It is to be hoped that the future Steering Committee will perceive that the implemented projects are not based on qualification requirement forecasts.

Example 1. National vocational qualifications standards

In Poland, the legal basis for the formulation of national vocational qualifications standards is provided in the Promotion of Employment and Labour Market Institutions Act of 20 April 2004. The Act stipulates (Art. 4) that the minister for labour is inter alia responsible for coordinating the development of vocational qualifications standards for occupations listed in the Classification of occupations and specialties, and for maintaining databases on qualifications standards. Under the current legislation, vocational qualifications standards are not obligatory. The finalised standards function as documents recommended by the Ministry of Labour and Social Policy and may be used by individuals and institutions concerned for various purposes, e.g. preparing examination requirement standards in VET, core curricula for occupations, VET curricula, adaptation of job offers to the qualifications of job seekers, evaluating the "qualifications gap" of job seekers and the unemployed, preparing programmes of vocational placements as part of vocational training, etc.

²² Sienkiewicz Ł., Gruza M.: Badanie kwalifikacji i kompetencji oczekiwanych przez pracodawców od absolwentów kształcenia zawodowego [Analysing qualifications and competences expected by employers from VET school leavers]. GHK Consulting Ltd., Warsaw 2009.

In Poland, vocational qualifications are developed in conjunction with the requirements of the economy and the labour market primarily as part of designing vocational qualifications standards. In the 1998-2007 period, 253 national vocational qualifications standards were developed as part of projects financed from various sources (ETF, Phare, ESF). They are available at: <http://www.standardyzskolenia.praca.gov.pl>).

4.3. Involving labour market actors in VET

Policy changes aimed to increase the involvement of labour market actors in the development and management of VET

In Poland, due to the decades of political and economic centralism, there are no traditions of partner cooperation in the implementation of labour market policies. This, however, is changing. The annual development of the **National Action Plan for Employment (KPDZ** in Polish) can serve as an example of building partnership for the labour market.²³

The National Action Plan for Employment is a part of the National Development Strategy 2007-2015 and the Strategic Governance Plan, and is informed by other documents, e.g. the National Reform Programme for 2008-2011 for the Implementation of the Lisbon Strategy and the National Programme "Social Security and Social Integration for 2008-2010".

The National Action Plan for Employment has adopted partnership as its basic operating principle. On the one hand, this principle involves cooperation of various ministries in preparing a draft KPDZ, and on the other - it envisages consultations and opinions from social partners for improving the draft Plan.

The drafts are prepared by interdepartmental teams composed of representatives of ministries and central institutions. The task of the Team is to prepare the draft of the Plan, formulate overall proposals concerning labour market policies and select tasks for implementation. The Team makes its decisions by consensus. Following that, the draft Plan is approved by the management of the Ministry of Labour and Social Policy and submitted to the Supreme Council for Employment for its approval. The draft is also passed for consultation to social partners: civic organisations and employer organisations (including crafts). The project is also consulted with voivodship labour offices and the Council of Heads of Poviats Labour Offices. The KPDZ offers a diagnosis of the initial situation and defines the so-called strategic framework for action, which is characterised by the use of the flexicurity principle, i.e. an integrated strategy for a simultaneous increase of both the flexibility and security of the labour market, composed of four parts: flexible and predictable contract provisions (for employers and employees), comprehensive lifelong learning strategies (which ensure a lasting adaptability and employability of employees, mostly from disadvantaged groups), effective active labour market measures and a modern social security system. Similarly to other EU countries, Poland is obliged to implement the concept of flexicurity. A visit from the EU Mission for Flexicurity on 23 June 2008 named insufficient cooperation of the Polish Government with social partners as one of the weaknesses of implementing flexicurity in Poland.

The cooperation of representatives of employers and employees in preparing and approving the **National Vocational Qualifications Standards** has been rather smooth. The main beneficiaries of the projects as part of which the vocational qualifications standards were prepared represented the world of the economy and labour market on the one hand,

²³ Currently, the National Action Plan for Employment for 2009-2011 is in force. Ministry of Labour and Social Policy, Warsaw 2009.

and on the other - the world of education: the VET system as well as non-school vocational training providers. In particular, these were:

- professional associations, national employer and trade union organisations;
- public employment services: voivodship (regional) and powiat (district) labour offices, including career information and planning centres;
- job agencies;
- school-based and non-school-based VET institutions: various types of higher education institutions, vocational schools, continuing education centres, practical training centres, further training centres, etc.;
- Voluntary Labour Corps (OHP);
- other organisational units: ministries and other central offices and their agencies, in particular the Central Examination Board (CKE) and Regional Examination Boards (OKEs), commissions in charge of vocational exams in the crafts sector and institutions in charge of regulated professions.

The relationships between labour market requirements and VET are also analysed by the Supreme Council for Employment as well as by voivodship and powiat employment councils.²⁴ For instance, the competences of Powiat and Voivodship Employment Councils include submission of applications and issuing opinions on matters relating to profiles of VET and employment in a given powiat or voivodship. The Supreme Council for Employment issues opinions on parliamentary bills concerning promotion of employment, alleviating negative consequences of employment and vocational insertion.

The Ministry of National Education tries to initiate a platform for cooperation between vocational schools, employer organisations and other social partners, mainly with a view to improving the quality of practical training. In 2004, the Ministry commissioned KOWEZiU to conduct a survey showing how agreements signed with employer organisations are put into practice. An analysis of the results indicates that the execution of these agreements is not always easy. For some schools, they remain mostly written declarations of employers. From the school perspective, the lack of any pedagogical supervision during placements in enterprises remains a problem, which is not covered by any legislation.²⁵

Strengths and weaknesses of changes

The documents and strategies adopted by the Government show an acceptance for providing VET, and practical training in particular, in liaison with employers. However, there are no effective instruments to encourage employers to cooperate with vocational schools and continuing education centres. Employers should have a tangible impact on the vocational training process at the stage of its planning and organisation because this is where any potential mismatches between VET and job needs appear for the first time.

Any strengthening of cooperation between schools and the world of work calls for an integration of the school and out-of-school system to allow for offering practical training and vocational placements in enterprises. To date, the question of training for teachers and trainers of vocational subjects and trainers has not been solved. There are no funds to motivate specialists from the world of work to work in schools and continuing education centres and to take part in preparing curricula or in vocational exams.

²⁴ Regulation of the Minister of Economy and Labour of 6 October 2004 on employment councils (Dz. U. No. 224 of 2004 item 2281).

²⁵ Kobyliński J., Podłowska J.: Realizacja porozumień na rzecz poprawy jakości kształcenia zawodowego w roku szkolnym 2003/2004 [Implementation of agreements for improving VET quality in the 2003/2004 school year]. Published on the website: <http://www.koweziu.edu.pl/edukator/print.php?sid=48>.

A positive yet isolated example is the mechanism whereby employers receive co-funding for practical training of young workers; it comes from the labour fund, under Art. 70b of the Education System Act and depends on the form and length of training.

Example 1. Development of human resources for modern economy

The Polish Agency for Enterprise Development (PARP in Polish) was the Implementing Institution for Measure 2.3 **“Development of human resources for modern economy”** of the Human Resources Development Sectoral Operational Programme (HRD SOP), intended as an instrument for improving the qualifications of employees and investing in the knowledge and skills of both employees and managers. The implementation of this Measure called for close cooperation between training providers and enterprises, and for preparing a training offer that would be attractive for enterprises and their employees. The Managing Institution for this Measure, implemented nation-wide, was the Ministry of Economy.

The Measure allowed employees access to a broad offer of training services, placements and postgraduate studies. Activities that could receive co-financing were: costs of organising courses, postgraduate programmes and placements in research institutions, in the form of financial support for training providers selected in a competition.

The training offered under the Measure required only a small financial contribution from the entrepreneur. The level of co-financing depended on the size of the enterprise, type of training and employees referred to training.

4.4. Promoting workplace learning

Policy changes aimed to promote workplace learning and development of partnership between education and the world of work

In Poland, two ministries in particular are responsible for the development of human resources (including VET at the workplace): the Ministry of Education and the Ministry of Labour and Social Policy. The Polish Agency for Enterprise Development is also involved in this process; it directs its support mainly to SMEs, also taking into account their training needs. Due to a lack of the national “Lifelong learning strategy”, the question of workplace learning is dispersed in many different government documents, e.g.: “The strategy for the development of continuing education until 2010” and “The state youth strategy for 2003-2012”. The current perspective is outlined in: “The National plan of reforms for 2008-2011 for implementation of the Lisbon Strategy” and “The strategy for the development of education for 2007-2013”; whereas the “Lifelong learning strategy” is in the pipeline. The assumptions adopted in these documents imply activities in three basic areas of support: enterprises, development of infrastructure and human resources development. All of this is tied together by the concept of flexicurity, that is striving for a sustainable development of the labour market which takes into account social and educational needs of the public.

The main instrument for the implementation of the above plans and strategies was the Human Resources Development Sectoral Operational Programme (HRD SOP), implemented as part of the European Social Fund. Its main goal was to build an open, knowledge-based society through ensuring conditions for the development of human resources by education, training and work. Some projects delivered with the support from PARR (e.g. Measure 2.3 HRD-SOP “Development of human resources for modern economy”) were intended to promote the concept of the “learning organisation”, which was only sporadically used in economic and educational practices in Poland. A learning organisation/enterprise is defined in Poland as one which has implemented quality system based on the ISO 9000

series, TQM and other principles; which offers further and vocational training for its staff (including online-based) on a regular basis, and which has implemented systems for managing the knowledge and competences of its staff. These criteria are met by relatively a small number of organisations. However, no detailed statistics are kept for this sphere.

Currently, in keeping with the “National Strategic Reference Framework” (NSRO in Polish)²⁶, the entire ESF intervention in Poland in the years 2007-2013 was included in the Human Capital Operational Programme, the aim of which is to enable a full use of the human resources potential by increased employment and adaptability of enterprises and their employees, improving the society’s level of education, reducing areas of social exclusion and supporting the development of the state’s administrative structures. Priority II, “Development of human resources and adaptation potential of enterprises and improving the health condition of working persons” and Priority VIII, “Regional human resources of the economy” are particularly noteworthy. As part of Priority II, support is provided to supra-regional and nation-wide training projects (including postgraduate studies) and advisory services for employees, employers and social partners to enhance the adaptability of employees and enterprises. These projects are earmarked for companies, groups of companies or their branches across the country, for which making applications in individual voivodships would be cumbersome. The Priority envisages increased availability and tailoring training to employers’ needs also through the use of e-learning and blended learning. Employers think highly of e-learning due to its flexibility, particularly opportunities for learning at home, without having to absorb employees at work. Special emphasis was placed on employees aged 50+. Complementary instruments are being implemented under Priority VIII as they apply to employees of enterprises which are not supra-regional in character (are located in one region).

Under Art. 94 of the **Labour Code**, employers are obliged inter alia to facilitate improving vocational qualifications to their employees. This refers to education in schools for adults and higher education institutions as well as training, further training, as well as out-of-school training - based on referral from the employer (or without it).

The principles and conditions for improving vocational qualifications and general education of employees in formal and non-formal contexts are laid down in the Regulation of the Minister of National Education and Minister of Labour and Social Policy of 12 October 1993 (Dz. U. No. 103, item 472; amended: No. 24 of 1996 item 110).

However, there are no regulations in Poland which would force using such schemes in enterprises as training in the workplace, retention rate projects or training schemes. Very few enterprises do career planning for their employees, although the employers’ awareness is certainly increasing. This is proved for example by the so-called “**traineeships**”.

Strengths and weaknesses of changes

The contemporary labour market and employers representing sectors of key importance for Poland expect that the VET system will prepare flexible work candidates who embrace the concept of lifelong learning and have a broad spectrum of skills. These expectations can be explained by the weaknesses of the VET system, which has poor linkages with enterprises. It should be considered whether the curriculum reform, which is currently being prepared (and plans inter alia to strengthen general education in vocational schools) is a good idea. Does limiting the number of hours for vocational training indeed serve employers’ interests? Does being a flexible worker involve developing generic skills or rather expanding the vocational profile? The debate on this issue is only beginning in Poland. At

²⁶ The document defines directions of support from the EU funds available in the coming 7 years as part of the ERDF, ESF and Cohesion Fund. NSRO is a reference instrument for preparing operational programmes while taking account of the provisions of the National Development Strategy for 2007-2015 and the National Reform Plan for 2005-2008, which is a response to the challenges posed by the Lisbon Strategy.

the same time, the assumption to found the modernisation of VET on curricula and organisational changes that will bring closer vocational education and the labour market is well justified. Integration of vocational and general education (but not to the detriment of vocational training) should help better prepare pupils to perform in the economy and the society changing at such a fast pace. It should be borne in mind, however, that employers also need employees who are professionally prepared to operate the existing technologies, machines and tools. For this reason, placing excessive emphasis on general education at the expense of strictly vocational education will probably lead to the shortage of school leavers with specific practical skills and the transferring the costs of training onto employers.

In view of the above, development of workplace learning is an indispensable element of a well organised education system. In this system, the roles are specifically divided: the state takes care of the quality of the general education whereas the sphere of labour and economy supports the state in preparing candidates for work in line with the requirements of the day and the nature of jobs in contemporary economy.

Example 1. Traineeships for school leavers and graduates

The Promotion of Employment and Labour Market Institutions Act of 20 April 2004 stipulates that interested employers may submit applications for the organisation of **traineeships** for the unemployed (mostly school leavers and graduates). This means an opportunity for the unemployed to acquire practical skills needed in the job by performing tasks at the workplace without establishing an employment relationship with the employer. Such traineeships are open to unemployed up to 25 years of age and graduates who do not turn 27 within the first 12 months after leaving university. The condition for referring the unemployed to the traineeship is the lack of workplace experience. The proposed period of the traineeship cannot be shorter than 3 months or longer than 12 months. The traineeship is performed pursuant to a contract signed between the employer and the head of the local or municipal government, according to a programme, on the basis of the application specifying the name of the occupation or profession, description of tasks, confirming the qualifications of the mentor of the trainee. During the traineeship or vocational training at the workplace, the unemployed have the right to a grant up to 140% of the unemployed benefit payable by the local government.

The employer organising the traineeship or vocational training should inform the trainee of his or her rights and duties and provide a training in HES, fire protection regulations and work regulations. The trainee should obey the instructions of the employer or the mentor provided they do not breach the law, perform his or her tasks with diligence and comply with the working time agreed by the employer. Upon completion, the unemployed should prepare a report on the traineeship or vocational training, specifying the tasks performed and qualifications or skills acquired. The mentor is expected to help the trainee in performing the entrusted tasks and, by signing the report, confirms that it is accurate and true. The employer should issue an opinion in which he will provide information about the tasks, qualifications and vocational skills acquired during the traineeship, whereas the head of the district government (starost) is expected to issue a certificate on completing a traineeship or vocational training.

5.1. Equality in VET

Policy changes aimed to enhance equity in VET

Poland has one of Europe's highest formal education rates for people aged 6-24, and one of the lowest rates of school enrolment among children up to 5 years of age (pre-school) and among adults aged 25+. The rate of participation in vocational training is very low, particularly among SME employees. Poland is among a group of EU countries with the lowest continuing education participation rates. According to Eurostat, in 2002 the percentage of people aged 25-64 who participated in training was 4.3% in Poland, as compared to the EU average of 8.4%. People from disadvantaged groups and those in an unfavourable labour market situation (unemployed, people with low qualifications, older people, people with disabilities and from ethnic minorities) take little part in any educational activity.

For these reasons, it is planned to set up, in the near future, a supra-sectoral structure for the management of the national qualifications system, with the main components being the National Qualifications Framework and a validation system to ensure equality and utilisation of the potential of three areas of learning: formal, non-formal and informal. These changes should also improve the opportunities of disadvantaged groups in the access to VET. As part of this exercise, efforts will be made to integrate vocational education and training offered by the school system, higher education, labour market and NGOs.

The development of the policies to increase access to and make VET more attractive to the public was underpinned by the increasing educational aspirations of Poles, observable since the mid-1990s. This trend could still be visible in 2002-2009. However, although older and less educated people understand the need to educate their children, they themselves do not have much propensity to learn, train or improve their vocational qualifications. Information about the low level of participation of Poles in various continuing education forms is also corroborated by Eurostat data, which show that in 2006, 4.7% of adults (aged 25-64) participated in training, as compared to the EU-25 average of 10.1%.

In 2003, the Polish Government approved the "Strategy for the Development of Continuing Education Until 2010". This document outlined the desirable direction of changes in the state educational policy, but only from the perspective of enhancing the attractiveness of education and training and increasing adult participation rates. According to the definition of continuing education laid down in the Education System Act²⁷, continuing education comprises those establishments which offer adult education as well as other forms for attaining and expanding generic knowledge, as well as vocational qualifications and skills in out-of-school contexts for people who have completed compulsory education. At the same time, issues related to VET and vocational education of young people were not tackled by the Strategy. This deficiency, negatively affecting equity and social integration, will be addressed in the "Lifelong Learning Strategy", which is currently being prepared in line with the assumptions of the National Reform Programme for 2008-2011.

In the coming years, changes in VET will be driven by the implementation of the Lisbon Strategy and its assumptions, in particular the Copenhagen Declaration which defines the framework for changes in vocational and adult education as well as education of people with special educational needs.

The key policy directions for the modernisation of VET were outlined in a document prepared by the Ministry of National Education "What should be known about policy

²⁷ Art. 3 (17) of the Education System Act of 7 September 1991. *Dz. U.* No. 95/1991 item as amended.

changes in education to ensure effective implementation of ESF projects?" . The planned activities in the context of equity and social inclusion envisage inter alia:²⁸

- Integration of general and vocational education to suit the individual needs of learners and allow them for attaining key competences and sound vocational skills;
- Establishing a transparent qualifications systems and a flexible system of vocational exams which will take account of various learning contexts: formal, non-formal and informal;
- Uniformisation of the vocational exams system regardless of the learning context (i.e. in school or out of school);
- Inclusion of vocational schools into a system of qualification courses for adults, mainly related to retraining and provision of vocational skills, depending on employers' needs.

The anticipated results of changes include ensuring access to high quality education to all learners and improving the standards of teaching. Learners with special educational needs are to be a group that is given special attention to in the planned changes. This group includes pupils with dysfunctions, socially neglected pupils, as well as talented and gifted pupils.

Strengths and weaknesses of changes

The education system should counteract social inequity, including unequal access to VET. One example when the system fails to do so and perpetrates social inequalities is the prevalence of general education schools in preparing pupils for university, which entails depreciation of vocational schools preparing for the secondary school (maturity) exam – that is, *technikums* (technical vocational schools). In Poland, they are considered to be "inferior" schools. Basic vocational schools furnishing their pupils with worker's qualifications enjoy even less prestige in the eyes of the public. The state's activities aimed to reduce the differences between various paths of attaining vocational qualifications may improve this unfavourable situation. However, there are no activities aimed to restore the professional ethos of works and technicians. In this context, the title of the Ministry of National Education's project entitled "Vocational schools – schools of positive choice" sounds promising. The project will be implemented as part of the Human Capital Operational Programme in the years 2010-2012. Support will be directed to the following areas: organisation of vocational education and training, continuing professional development of VET teachers, cooperation of vocational schools with employers, promotion of VET.

Increasing educational aspirations and expanded possibilities to attain secondary and higher education open up educational opportunities for young people from rural areas, small towns and poorer regions. Yet, these are not the same opportunities that those which are enjoyed by youth from socially privileged groups and large cities. The popularisation of secondary and higher education has also a dark side as it fosters marginalisation of socially lowest groups, and those who are badly educated and poor, thus leading to further stratification of the society.

Among factors that pose barriers in the access to VET we can list the growing role of certificates and diplomas which are preconditions for entering specific educational paths. This creates the risk of marginalisation for those who do not have a relevant document confirming their education and/or qualifications. Therefore, we should look with

²⁸ Co warto wiedzieć o kierunkach zmian w edukacji, aby skutecznie realizować projekty z Europejskiego Funduszu Społecznego? Przewodnik [What should be known about policy changes in education to ensure effective implementation of ESF projects? A guidebook]. Ministry of National Education, Warsaw 2010.

satisfaction at the willingness manifested by the Ministry of Education to popularise the external exam confirming vocational qualifications and admit learners from other than formal educational paths to such an exam.

Extending the higher education offer at the level of *licencjat* (first-cycle programmes) and *magister* (second-cycle programmes) opened up opportunities for continuing education by a broader group of young people. However, the quality of education at upper secondary level or higher, as well as other types of barriers (distance, cost of education, standard of teaching) make it impossible for a considerable group of youth to make use of the offer proposed by best universities and colleges. There exists a problem concerning the improvement of the quality of VET which affects labour market access of those school leavers who do not continue education, and their ability to meet the increasing job requirements. So far, the issue of the quality of VET has not been given sufficient emphasis in educational policies.

Example 1. A Leonardo da Vinci project “PROCONSTR - improving vocational training in the construction sector with a view to identifying and validating qualifications in EU countries” 2008-1-PL1-LEO05-02059²⁹

The project is to be implemented in the years 2008-2010. It is coordinated by the Polski Związek Pracodawców Budownictwa (Polish Association of Employers in the Construction Sector) in Warsaw, and its partners are: Polish British Construction Partnership Sp. z o.o. - Warsaw, Poland; CIOB Chartered Institute of Building - Ascot Berkshire, United Kingdom; CREDIJ Centre régional pour le développement local, la formation et l’insertion des jeunes - Paris, France; Econometrica Ltd - Athens, Greece; Ufficio Scolastico Provinciale di Venezia - Venice, Italy; Universidade do MINHO - Guimares, Portugal. The aim of the project is to compare and enhance, both in the national and European dimensions, the condition of the VET system and improve the knowledge of basic vocational and technical secondary school-leavers in the construction sector as well as of workers who wish to continue their education.

By the end of 2010, an innovative set of teaching materials will be developed which will serve as a tool to equalise the level in terms of VET requirements in the partner countries, and will emphasise the transparency and validation of qualifications in a specific construction trade. Uniformisation of the basic principles of vocational qualifications in the partner countries will facilitate a smoother transfer of state-of-the-art technologies, will make it possible to make a mutual use of the knowledge and experiences of the partners, and will produce new workers able to meet the requirements of the contemporary European labour market.

The project will widely promote the concept of continuing professional development, and support activities involving the implementation of European tools in the field of VET aimed to equalise opportunities in European labour markets for both sexes, as well as younger and older workers having diverse education and vocational experiences. Cooperation of companies in the construction sector and civic and community organisations will be stepped up in order to jointly promote vocational development across Europe.

²⁹ Przykłady dobrej praktyki w programie *Uczenie się przez całe życie. Kreatywność i innowacje w projektach współpracy europejskiej* [Examples of good practices in the Lifelong learning programme. Creativity and innovation in European cooperation Project]. Foundation for the Development of the Education System, Warsaw 2009.

Policy changes aimed to increase equality in relation to risk groups

Equal access to education is one of the key directions in the state' educational policy. Activities in this area mostly focus on **pupils with special educational needs, including pupils with disabilities**. The notion of pupils with special educational needs refers to learners who have a relevant certificate confirming their need for special education; pupils who have difficulties in meeting the curriculum requirements owing to lesser mental capabilities, and those who have dyslexia, dysgraphia, dyscalculia, health condition (chronically ill children) and environmental limitations (children of emigrants, children from dysfunctional families). This group also includes talented and gifted children. Such an understanding of special educational needs is intended to implement and make the concept of equalising educational opportunities for all a reality.³⁰

People with disabilities still remain a group with a relatively low level of education. Nearly a half of people with disabilities have no more than elementary education, which means difficulties in the access to the labour market and maintaining employment. There is a tangible improvement in the education of pupils with disabilities. They are entitled to free textbooks, revalidation classes, prolonging the school period by at least a year at every stage of education and a smaller number of pupils in class. However, the education system still remains ill-adjusted to the needs of pupils with disabilities. Owing to pedagogical and organisational problems, schools treat pupils with disabilities differently than pupils without disabilities. One of the consequences is the fact that the education of pupils with disabilities frequently does not correspond to the level or title that they are awarded because schools abuse special forms of instruction or other facilitating arrangements with regard to such pupils. Vocational education is often ill-adjusted to the needs of the local labour market and the nature of disabilities. It is very probable therefore that for this reason many people with disabilities will be permanently vocationally inactive.

Socially maladjusted youth, youth threatened by social maladjustment, threatened by addiction or with behaviour disorders are covered by social therapeutic activities. Also, the number of pupils in classes attended with behaviour dysfunctions and disorders is smaller.

Pupils from national minorities and ethnic groups and pupils from abroad are entitled to free textbooks for the language of a relevant ethnic or minority group. For instance, as part of the "Pilot government programme for the Roma community in the Małopolskie province for the years 2001-2003", implemented in 13 municipalities of the region, a system for supporting Roma children attending integration classes was introduced, whereby i.e. Roma children were treated as bilingual or foreign language pupils, support teachers and Roma assistants were employed, who offered all-round assistance to Roma children and youth. This arrangement was continued as part of the nation-wide "Programme for the Roma community in Poland". Starting from 2008, the strategy for assisting Roma and foreign pupils was changed. In order to support the education of **foreign and Roma pupils** and enhance their integration with the Polish society, the provisions of Article 94a of the Education System Act on education of pupils who are not Polish citizens were amended. In particular, tuition fees were abolished for education of foreign pupils in upper secondary schools. Also, a provision was introduced that people with refugee status, people with consent for tolerated stay, people covered by temporary or additional protection and members of their families may receive education at the primary, lower secondary, upper secondary and post-secondary in the same way as Polish citizens. In autumn 2008, a strategy was adopted to discontinue Roma classes in Poland. Recruitment to such classes was terminated, and the existing such classes will gradually be

³⁰ Jak organizować edukację uczniów ze specjalnymi potrzebami edukacyjnymi? Przewodnik [How to organise the teaching of pupils with special educational needs? A guidebook]. Ministry of National Education, Warsaw 2010.

discontinued (up to 2011). Roma pupils starting school will learn in classes with their non-Roma peers, which will foster their integration. Should such a need arise, the school will ensure individual additional classes in Polish and other subjects (if necessary) to Roma pupils. Issues concerning the education of Roma children are analysed by the Team for Roma Affairs, liaised with Joint Commission of the Government and National and Ethnic Minorities.

Pupils from rural areas are supported by eliminating barriers related to commuting to the nearest school as part of the programme entitled "The small school", the aim of which is to maintain small village schools. Grants are awarded for activities aimed to develop the interests as well artistic and sports talents of children and youth from rural communities as part of out-of-school education; scholarships are awarded to young people from rural areas who continue education in secondary and basic vocational schools as part of the "Programme to equalise educational opportunities of rural youth". In addition to that, teachers from rural schools receive support in their efforts to start education in teacher language colleges or linguistic studies as part of the programme entitled "Ensuring deficit teacher staff for rural areas".

Socially excluded persons are people who, for various reasons, do not participate in activities that are considered normal by the society at large, who are not able to use basic public institutions and markets and are not able to satisfy their basic needs through their own effort, which in effect leads to poverty and limited participation in career, social and family life. Such people are offered to take up social employment through participation in Social Integration Centres (CIS in Polish). Social Integration Centres are organisational units involved in social and vocational reintegration by offering the following services:

- Developing skills which allow for performing social roles and attaining social status available to people who are not socially excluded;
- Acquiring vocational skills and preliminary vocational training, retraining or improving vocational qualifications;
- Learning how to plan life activities and satisfying needs through own efforts, mainly by earning one's own income through employment of business activity;
- Learning how to rationally manage one's own money.

Long-term unemployed – it is estimated that in Poland social exclusion caused by unemployment may affect from 500 000 to 3 000 000 people, mostly the long-term unemployed. The measure entitled "Social and vocational inclusion of groups threatened with unemployment", completed as part of the Phare 2003 "National Human Resources Development Programme" was addressed to the unemployed. In 2005-2006, as part of the Human Resources Development Sectoral Operational Programme, a project targeted at unemployed and working women was delivered. Entitled: "Taking an express to knowledge: first stop Training, second stop Employment", the project offered support to 390 women who took part in vocational training; career, legal and psychological counselling and, as part of the project, were provided care for children and other dependent persons. Another measure, implemented in 2006 and addressed to unemployed and economically inactive women was the project entitled: "Preparing unemployed women aged 50+ from Mazowieckie province to provide care services to older people and people with disabilities". The aim of the project was to acquire new vocational skills or improve qualifications and offering support to project participants in the labour markets in Poland and abroad in the field of care services provision. As part of the project, the project participants received weekly training (50 hrs of classes).

Extending period of career activity of **employees aged 50+** is among priority actions of EU Member States. On 17 October 2008, the Council of Ministers approved the programme entitled "Solidarity of Generations. Actions to increase career activity of people aged

50+”. Pursuant to the Lisbon Strategy, one of the goals of the European Union is to achieve the activity rate for people aged 55-64 at a level of at least 50%. Poland is in the group of EU countries where the labour market potential of this age group is used to a very small extent. On the one hand, the programme envisages activities which can provide incentives for employing people aged 50+ by entrepreneurs, and on the other it stipulates activities to improve qualifications, skills and efficiency of such people. Such training will be promoted in order to enhance both employability and productivity in this age group.

Strengths and weaknesses of changes

The weaknesses of the Polish policy to ensure equality in VET education include limitations in the access to information and communication technologies (computers, Internet, multimedia teaching aids); limitations in access to culture in the form of libraries, local culture centres, clubs, cinemas; lack of possibilities for developing pupils' abilities (e.g. due to lack of access to extracurricular or out-of-school activities); transport problems, particularly related to access to upper secondary schools. Material factors such as: lack of funds for the purchase of textbooks, notebooks, stationery; for commuting to school; for financing additional or compensatory classes in low-income families play a considerable negative role. The influence of factors related to inheriting the socio-economic status (and consequently lower educational aspirations) is also well visible. Assistance provided to people with disabilities still remains at an unsatisfactory level.³¹

An analysis of the situation of education in rural areas, prepared in 2002 by the Institute of Rural and Agricultural Development of the Polish Academy of Sciences (PAN)³² indicates that nearly 1/3 of rural municipalities are in a very bad situation educationally. The worst conditions for the operation of education are found in Podlaskie and Warmińsko-Mazurskie provinces. At the other extreme, regions where the condition of education in rural municipalities is relatively very good include Śląskie, Opolskie and Małopolskie.

Scholarships awarded to pupils of upper secondary schools and students as part of Measure 2.2. of the Integrated Regional Operational Programme (IROP) were meant to address the above problems concerning unequal access to education due to the lack of money for educational purposes in low-income families. In addition, the issue of equalising educational opportunities is also tackled by projects aimed to improve the quality of vocational and continuing education insofar as this may apply to schools in rural areas or to otherwise disadvantaged groups.

Partnership for education, continuing education and fostering cooperation between schools and continuing education centres with employers is an area that still receives little support, although it is undoubtedly one of the preconditions for the proper functioning of vocational and continuing education. Likewise, assistance to vocational school pupils in the special education receives very little attention in the implemented programmes and measures.

If the implemented projects and measures are to make a coherent intervention which can both prevent inequalities in access to education and mismatches between the education system and the requirements of the labour market, their results should be looked at from

³¹ Ewaluacja działań podejmowanych na rzecz systemu kształcenia i szkolenia w ramach EFS. Raport Końcowy przygotowany dla Departamentu Zarządzania EFS w Ministerstwie Rozwoju Regionalnego [Evaluation of activities for the education and training system implemented as part of the ESF. A final report prepared for the ESF Management Department in the Ministry of Regional Development]. Agrotec Polska Sp. z o. o., Polish Sociological Society, Warsaw 2008.

³² “Wiejskie obszary kumulacji barier rozwojowych” [Rural areas of accumulated development barriers], in: A. Rosner; J. Domalewski [eds.], “Typologia gmin wiejskich pod kątem widzenia sytuacji oświatowej” [typology of rural municipalities in terms of their educational situation], IRWiR PAN, Warsaw 2002

the perspective of the authorities in charge of specific schools. In case of vocational and continuing education, the district (*powiat*) is such an authority; it is also the basic entity for administering the labour market (through District Labour Offices - PUP in Polish). The threat to the sustainability for initiated projects is the fact that the local government authorities in charge of education are elected, and this leads to a lack of continuity in the implementation of the local strategy, and thereby difficulties in the proper "grounding" of good practices produced by the projects.

Example 1. The Community Initiative EQUAL

The Community Initiative EQUAL, was announced in Poland for years 2004-2006 (actions and financing finishing in 2008) and has been a part of the strategy of the European Union aimed at formation of new and better workplaces and assuring that nobody would be deprived of the access. One of nine thematic spheres undertaken in Poland concerned "Promoting lifelong learning and inclusive work practices which encourage the recruitment and retention of those suffering from discrimination and inequality in connection with the labour market."

Polish actions of EQUAL were a supplement to actions carried out within the scope of the "Sectoral Operational Programme - Human Resources Development" and the "Operational Programme - Regional Development". Almost 43 thousand people were surrounded by support within the frames of the EQUAL project. The number of agreements for projects co-financing amounted nearly to 300, to the total amount of about 700 mln zł. The year 2007 was a period of intensive realization of actions consisting in testing innovative methods and tools for improving the situation of discriminated or threatened with discrimination groups on the labour market: ex-offenders, immigrants, people 50+, long-term unemployed, women after a long break in their careers, the disabled etc. The actions were aimed at disseminating and including the results that had been worked out in previous years of the project's realization to the policy and the practice of institutions and organizations operating in the area of the labour market's policy and social integration.

For example, within the scope of Activity 2: trainings were carried out for penitentiary employment services, probation and public employment services; 78 social enterprises were started; activity of e-learning platforms was initiated. Within the frames of Activity 3: proposals of legislative changes were worked out in the area of the disabled employment and the pension jurisdiction; barriers in the development of social enterprises were identified and proposals of legal changes were worked out; databases of best traineeships within the education and vocational counseling were worked out.

Moreover, in 2007 the Managing Institution (the Ministry of Regional Development) accepted 4 projects supplementary to the EQUAL Initiative in order to disseminate its results and include them into the policy and practice. The projects are carried out by "The Cooperation Fund" Foundation (from July 2007- September 2008). They have cross-thematic character and regard the results and products supporting: lifelong learning, social economy, gender mainstreaming and rural areas. In the result analysis carried out under the project "Promoting the EQUAL results supporting the lifelong learning" 111 EQUAL results supporting lifelong learning have been recommended as good practices worth implementing on the wider scale. The project focused on mostly promoting the results and products supporting equal access to lifelong learning for particular groups threatened with social exclusion: people 50+, the disabled, women with children (combining family life with learning and career), long-term unemployed (development of social economy through development of lifelong learning opportunities). The project activities included creation and distribution of the database of EQUAL results supporting lifelong learning, promotional campaign in media promoting EQUAL results for aforementioned target groups and the idea of lifelong learning, debates with social

partners and parliament members about the changes in the law necessary to increase the access to lifelong learning for the above mentioned groups threatened with social exclusion and to implement EQUAL results in this field on the wider scale.

Example 2. The Government Programme of Education Development in Rural Areas in 2008-2013³³

Many phenomena accumulate in rural areas which constrain the development of their residents, such as the still unsatisfactory level of education, poor adjustment of vocational training to the local needs, lower aspirations in life, more difficult access to the labour market, and in some areas of the country - lower living conditions of rural residents.

The Government Programme of Education Development in Rural Areas in 2008-2013 is intended to support the development of educational infrastructure which is of critical importance for the civilisational progress in rural areas and improvement of living conditions of rural residents. The programme is intended to eliminate barriers in the access of rural residents to a broad educational, cultural, information and sports offer, which in the future should help reduce the gap between urban and rural areas, and build a society which is open to continuous development and qualifications improvement.

Moreover, rural children owe their difficult "starting position" and lesser educational opportunities also to a number of factors related to the functioning of the educational system in rural areas. The Government Programme stipulates that finding a solution to the problems outlined above will call for an effective, multidimensional cooperation of the government, local governments at all levels, NGOs, local communities, parents, teachers, volunteers, researchers and businesspeople. The general directions of action envisaged in the Programme are coherent with the directions of support which are crucial for rural development, stipulated in the National Strategic Plan for Rural Development in 2007-2013, and add new content to them. The operational goals of the Programme include inter alia: extending the educational offer for adults and supporting continuing education: lifelong learning, increasing access to education for rural residents with disabilities, encouraging rural communities to launch educational, social or cultural initiatives.

Example 3. Educational activities in the "Solidarity of Generations" programme

One of the goals of the "Solidarity of Generations. Actions to increase career activity of people aged 50+" is to improve the competences and qualifications of employees aged 50+. People over 50 years of age take part in training in a very limited way. On the one hand, this is the effect of employers' policies who assume that it is not worth investing in such employees, and on the other hand - people at this age may be reluctant to learn. Coupled with a relatively lower level of education and mismatches between qualifications and skills and employers' requirements, this leads to a widespread exclusion of this group from the labour market. They often lack such basic skills as operating modern equipment, including computers and software or knowledge of foreign languages.

Given this context, activities aimed to increase the educational activity of people aged 50+ will include: creating conditions for structuring learning paths for people aged 45+ (including use of professional vocational counselling, individualised curricula, e.g. through modular forms); popularisation of continuing education (e.g. district labour offices will be able to offer financial assistance to people in work who wish to improve vocational qualifications); customising the training offer to the needs of people aged 45+ (e.g. developing training programmes addressed solely to people aged 45 or more).

³³ The Programme of Education Development in Rural Areas in 2008-2013, approved by the Council of Ministers on 29 July 2008.

In addition, projects on vocational insertion and self-employment promotion addressed to this age group are scored in calls for tenders organised as part of the Human Capital Operational Programme.

5.2. Support services for groups at risk

Policy changes aimed to develop support services

According to the planned changes, a **team for special educational needs of pupils** will be established in every school; at least once a year, such a team will review and evaluate the effectiveness of assistance extended to pupils as part of individual educational programmes.

The team will inter alia prepare **individual educational and therapeutic programmes** for those pupils who have an official certificate confirming that they need special education. An individual educational programme for pupils with disabilities - regardless of the type of school - will combine learning with therapy, with an active participation of parents. As regards the therapeutic function, such an individual programme will be based on establishing a positive emotional contact with the pupils, and will strive to improve the disturbed functions, compensate deficiencies, support their mental and social development. It will also include various forms of therapy (such as hippotherapy, music therapy, dog therapy, etc.).

When preparing the changes, the situation of **talented pupils** was also addressed, although this particular group can hardly be described as one at risk. Talented pupils will be supported inter alia by **individual curricula** for one or more subjects and individual instruction, earlier commencement of school, mid-year promotions, extracurricular activities, special interests groups and out-of-school activities. In all these matters, the school team for special educational needs of pupils will be able to propose its own solutions.

The role of pedagogical and counselling services will change. In addition to giving opinions and issuing official certificates, these services will make in-depth diagnoses of pupils in situations when the support offered at school proves insufficient. In addition, pedagogical and counselling services will support teachers in designing individual educational and therapeutic programmes and other initiatives to support pupils' development.

The amended ordinance on the principles of offering and organising psychological and pedagogical counselling in public pre-schools, schools and other educational establishments introduced additional regulations which allow for offering corrective and compensatory activities. Following these changes, psychological and pedagogical counselling services will now be able to carry out pedagogical observations, design and implement individual courses of study, evaluate the activities performed by the team for special educational needs of pupils to be set up in every school. Also, school counsellors and school psychologists will now be obliged to cooperate with teachers and specialists employed by the school in preparing individual educational programmes (intended for pupils with disabilities or socially maladjusted; pupils with diagnosed learning difficulties; talented pupils) allowing teachers to run various types of compensatory and therapeutic classes provided they have completed additional relevant training. Similarly, psychological and pedagogical counselling services will be obliged to offer methodological and substantive support to teachers who organise counselling assistance for pupils, including provision of consultations and training should such a need arise.

It is planned that each child with special educational needs will have a **Charter of Needs and Benefits**. It will be a document that every such person up to 21 years of age would have (and up to 24 or 25 years of age in case of serious mental disability) who takes part in activities provided by schools and other educational establishments and who has been

diagnosed as having special development needs or special educational needs. The Charter of Needs and Benefits would be issued by the pedagogical and counselling services relevant for a given school. The specialists from the service would also be obliged to inspect whether the recommendations from the Charter are put to life.

Strengths and weaknesses of changes

The strengths of changes include the broadening of the tasks of pedagogical and counselling services by adding cooperation with schools in diagnosing specific difficulties experienced by pupils; preparing and implementing individual curricula; providing assistance to pupils with disabilities and socially maladjusted, who need special arrangements concerning organisation of the teaching process and methods of work, as well as pupils with chronic diseases and mental disorders; running therapy for children and youth with development disorders, behaviour dysfunctions, with disabilities and socially maladjusted; supporting teachers in planning and executing tasks related to educational and guidance; obliging pedagogical and counselling services to provide topical and methodological support to teachers in situations which require specialist knowledge and expertise from outside education.

One of the weaknesses of changes is that they do not envisage separate categories of pupils with special educational needs relating to VET. This raises some concern that the thrust of activities will focus only on general education schools, whereas special schools, voluntary labour corps and other establishments offering vocational preparation courses will not be covered by changes.

Support in projects financed by the ESF was mostly intended to improve access to education for people with special educational needs, and focused primarily on furnishing special and integration schools as well as pedagogical and counselling services with different types of didactic aids, including computers and specialised software. This type of support may be viewed positively as it ensures equipment and materials for diagnosing such people more effectively, for enhancing their independence, improving the standards of teaching and communication with the society as well as improving key competences. It should also be observed that not sufficient attention has been given to activities related to vocational preparation and acquiring vocational qualifications and skills.

Special education needs also refer to the training of staff and designing specialised curricula. ESF support has not been sufficient in this respect. Career guidance is another area of special education not covered by support. This issue requires a systemic solution and applies to all learners regardless of the context or age group.

Example 1. ESF projects supporting groups at risk³⁴

VET-related activities financed from the ESF, particularly Measure 2.1 "Increasing access to education promotion of lifelong learning", and Measure 2.2 "Enhancing the quality of education vis-a-vis labour market needs" of the Human Resources Development Sectoral Operational Programme 2004-2006 (HRD-SOP) and Measure 2.2 of the Integrated Regional Operational Programme (IROP) "Equalising educational opportunities through scholarship programmes", included projects aimed to reduce disparities in the access to education by pupils with special educational needs. These projects were addressed both to educational

³⁴ Ewaluacja działań podejmowanych na rzecz systemu kształcenia i szkolenia w ramach EFS. Raport Końcowy przygotowany dla Departamentu Zarządzania EFS w Ministerstwie Rozwoju Regionalnego [Evaluation of activities for the education and training system implemented as part of the ESF. A final report prepared for the ESF Management Department in the Ministry of Regional Development]. Agrotec Polska Sp. z o. o., Polish Sociological Society, Warsaw 2008.

establishments providing schooling to such people and to pedagogical and counselling services or other specialist services dealing with the diagnosing of disabilities in children and determining their specific educational needs, and offering assistance in selecting education and occupation as well as counselling for parents and teachers.

For instance, as part of the project "Purchase of modern equipment for teaching of pupils with special educational needs", special schools and integration classes were furnished with modern didactic and therapeutic equipment, with computers and specialised software (1400 establishments altogether), 3400 establishments received didactic aids, and 430 - specialised equipment for teaching pupils with disabilities. As part of the project encompassed by Measure 2.2 HRD SOP entitled "Furnishing psychological and counselling units with specialised equipment and software", 565 pedagogical and counselling services across the country were provided with necessary equipment, psychological tests as well as 16 Biofeedback sets for 16 such units (1 set in each province). The scale of assistance extended to establishments working with pupils with special educational needs reached nearly half a billion zlotys in both projects.

The projects in question were the first to be implemented on such a large scale, addressed to establishments teaching pupils with special educational needs. The project involving equipment purchases for pedagogical and counselling services covered all such entities in Poland, and for schools - covered ca. 20% of all such establishments. This shows the continuing demand for good-quality, modern equipment for teaching pupils with special educational needs. The positive aspect of the equalising of educational opportunities in the projects in question is also furnishing needed equipment for schools and other educational establishments in villages and small and medium-sized towns.

The implementation of these projects had only an indirect effect on bringing the system of education and training for people with special educational needs closer to labour market requirements. The purchased equipment is used for diagnosing the aptitude and predisposition of children and youth for pursuing specific occupations, but does not directly serve the needs of VET. For this reason, not very favourable opinions concerning the usefulness of the purchased equipment for labour market requirements were expressed by respondents during the evaluation of the project results. However, the use of equipment and didactic aids may contribute to enhance the independence of pupils during the learning process.

5.3. Active citizenship

Policy changes aimed to strengthen the presence of active citizenship in VET

Embedding active citizenship is one of the priorities of the National Reform Programme for 2008-2011.³⁵

Measures as part of Priority 1 "Active society" aim to develop an effective system of education; a modern social security and health care system; active labour market policies, and to lay the foundations for the development of an information society and conditions for increasing the level of social participation of citizens (through promoting social economy, social dialogue, non-governmental institutions, voluntary work). The reforms that are being introduced are based on the *flexicurity* concept (combining labour market flexibility with security of employment). They include both activities in the sphere of education, changes in the social security system and improvements in active labour market measures. A new model of civic activity will be promoted, which will be based on the so-called social economy, activity of NGOs and dialogue between administration and citizens.

³⁵ Ministry of Economy: National Reform Programme for 2008-2011 for the Implementation of the Lisbon Strategy, approved by the Council of Ministers on 18 November 2008.

As part of Measure 1 of this Priority entitled "Development of education in a knowledge based society and economy", a "Lifelong learning strategy" will be developed and implemented, along with the resultant legislative and institutional tools. Tasks related to the Strategy will cover the preparation and implementation of the national qualifications framework, promoting lifelong learning (in formal, non-formal and informal contexts), strengthening the partnership of entities organising the process of formal, non-formal and informal education and supporting informal learning. In the sphere of formal education, a flexible VET system will be established. Also, conditions for educational activation of the society will be created, inter alia via upgrading the level of vocational competences and key competences for youth and adults. Equalising educational opportunities is expected to be more effective, particularly in rural areas and in small towns.

Measure 3, "Active labour market policies" will inter alia aim to build a system for quality assurance in training for the unemployed and job seekers, and to ensure widespread access to basic job brokerage, career guidance and career information services. In addition to that, the Classification of occupations and specialties and descriptions of occupations and specialties will be updated.

Priority 1 "Active Society" of the National Reform Programme 2008-2011 involves the implementation of the National Programme "Social Security and Social Integration in 2008-2010".³⁶ This document defines the priority entitled "Integration through activation". It is planned that as part of this priority, tools and instruments for active integration (including also people with disabilities) will be developed. An important element of these activities will be extending support to the social economy sector, made up inter alia of foundations, associations, social integration centres, vocational insertion establishments and social cooperatives which operate in the field of social activation and integration. As part of the programme "Social Security and Social Integration in 2008-2010", the Promotion of Employment and Labour Market Institutions Act was amended in 2009, as a result of which a new instrument of active labour market policy addressed to the unemployed and to specific groups of job seekers was created - preparatory vocational training for adults. It will replace on-the-job training as a more effective and more attractive solution for potential beneficiaries. The new formula provides for the financing of practical vocational training for adults (for 12-18 months), which allows for taking the vocational title exam or apprentice exam, and of initial training for adults (3-6 months) whereby selected vocational qualifications or skills needed to perform specific vocational tasks may be attained and confirmed by a certificate. Participants of preparatory vocational training for adults do not have to cover the costs of the training, commuting, accommodation and exams, in addition to free medical and psychological checks. They will also be entitled to receive a grant (120% of the unemployment benefit).

The priority "Access to high quality social services" of the National Programme "Social Security and Social Integration in 2008-2010" inter alia stipulates modernisation of the VET system and popularising access to continuing education. The Ministry of National Education is working on a flexible system of vocational education and training which meets the requirements of employers. This exercise is planned to be completed by 2012.

In 2008, the Council of Ministers, at the request of the minister competent for social security, adopted the "Strategy to Support the Development of Civic Society for 2009 - 2015" (SWRSO in Polish).³⁷ The legal framework for the implementation of SWRSO was laid down in the Principles of Development Policy Act of 6 December 2006 and the Public Benefit Activity and Voluntary Work Act of 24 April 2003. It is assumed that civic society in

³⁶ The National Programme "Social Security and Social Integration in 2008-2010". Document approved by the Council of Ministers on 16 December 2008, Ministry of Labour and Social Policy, Warsaw, December 2008.

³⁷ Strategy for Supporting the Development of Civic Society in 2009 – 2015. Annex to Resolution No. 240/2008 of the Council of Ministers of 4 November 2008.

Poland refers to two areas: group activity of citizens, manifested by the operation of different kinds of communities, primarily the operation of NGOs, local communities, informal groups and social movements, as well as individual activity of citizens which refers to attitudes and civic awareness of Poles. Priority 1 "Active, aware citizens, active local communities" identified Measure 1.1. "Civic education", which strives inter alia to enhance the potential of the human resources and institutions dealing with various educational programmes related to the strengthening of civic awareness and continuing education programmes. The same Priority, Measure 1.4. "Creating the local infrastructure for civic activities" emphasises the need to support the development of local initiatives related to setting up centres of civic and cultural activity and information points for youth in the form of professional counselling and training, as well as supporting activities aimed to reduce disparities in access to new technologies, knowledge and information. Priority 3 "Development of non-governmental organisations for social integration", in Measure 3.2. "Ensuring access to services and provision of assistance to groups at greatest risk of social exclusion", emphasises issues concerning easier access and support to formal, non-formal and informal learning, health care, services aimed to ensure decent housing conditions, the judiciary, culture and sports, and other activities which may be relevant in ensuring at least basic living standards, creating opportunities for an independent life and social reintegration of those who leave childcare, medical and rehabilitation institutions. Measure 3.3. "Ensuring the establishment and functioning of mechanisms for comprehensive support of social integration" stipulates support to initiatives aimed to offer education and training to individuals, organisations and institutions dealing with socially excluded persons.

The goals and priorities of SWRSO will be implemented through activities envisaged in key government documents, viz.: National Development Strategy 2007-2015, National Strategic Reference Framework for 2007-2013 and the resultant Human Capital Operational Programme for 2007-2013, National Strategic Plan for Rural Areas for 2007-2013 and the Government Programme - Civic Initiatives Fund, which in 2008 was transformed into the Civic Initiatives Fund Operational Programme 2009-2013.

Strengths and weaknesses of changes

The development of active citizenship, equalising educational opportunities and facilitating access to education for disadvantaged groups can be enhanced by directing support to the field of vocational education and training. It seems however, that distance learning is not developed sufficiently in Poland, although it should play an important role in education processes and should support educational efforts in the society. In Poland, e-learning does not enjoy much popularity and, except for major academic centres, it remains in the sphere of marginal education activities. In particular, distance learning should be addressed to people with disabilities and with more difficult access to education, including rural and small town communities where people often live in poverty. To make distance learning a more tangible reality, an active state policy is required, in addition to systemic solutions. Modular VET curricula, developed with the ESF financing and adapted for e-learning purposes, should be used in distance learning.

Lifelong learning, underpinned by active citizenship, is not very popular in Poland, especially in rural areas and small towns, and therefore needs promotion. ESF co-financed projects supporting lifelong learning have revealed lack of coordination between the activities of different entities operating within the Polish VET system, including for example those dealing with career planning and vocational guidance (e.g. lack of cooperation between district labour offices and psychological and counselling services). There is a need for changes in the legislation to stimulate collaboration between education and labour market entities, and for promotional activities.

Example 1. A Leonardo da Vinci project “Professional personnel as the basis for the development of European enterprises” PL/07/LLP-LdV/PLM/140262³⁸

The project was implemented in the years 2007-2008, and coordinated by the Wielkopolska Chamber of Commerce and Industry, with the following partners: Deutsche Angestellten Akademie, Berlin, Germany, and Camara de Comercio Hispano Polaca, Barcelona, Spain. The project intended to support active citizenship in the sphere of VET, and its aims included: supporting project participants in acquiring and using knowledge, skills and qualifications aimed to facilitate their personal development; enhancing the attractiveness of VET; improving European mobility of VET learners; improving cooperation between institutions or organisations operating as training providers; popularising learning foreign languages.

The project was underpinned by the assumption that completing a placement in Spain or Germany, meeting new people, learning about the mechanisms of operation of enterprises in Europe, their work culture, new services and products offered by such enterprises, will open up new horizons for young workers. It was expected that all this would offer give them a new perspective of looking at their own career development, would encourage them to take up new challenges and embark on creative projects. Creative ideas will appear when young people are given an opportunity to see something new that goes beyond the usual routines of education and work known to them. The project also stipulated that some of the beneficiaries will strive to put to life their own creative ideas by setting up their own businesses. Creativity was one of the elements evaluated by mentors in the host companies.

³⁸ Przykłady dobrej praktyki w programie *Uczenie się przez całe życie. Kreatywność i innowacje w projektach współpracy europejskiej* [Examples of good practices in the Lifelong learning programme. Creativity and innovation in European cooperation Project]. Foundation for the Development of the Education System, Warsaw 2009.

6. QUALITY, EXCELLENCE AND ATTRACTIVENESS OF VET

6.1. Improving the quality of VET

The vocational education system plays an increasing role in the debate about the means of enhancing the competitiveness of the Polish and the European economy. Many documents stress that the competitive position of the entire European Union should be built on high quality human capital. In order to achieve this, it is necessary to invest in employee competences, in particular vocational competences. Vocational education gives the opportunity of obtaining a diploma confirming vocational qualifications after a passed vocational examination. Teaching is based on core curricula defining profiles of general vocational education or education for an occupation; it sets out the goals of education and the standard requirements which are the basis of examinations. The quality of these elements of the vocational education system will be modified.

The development of modern vocational education in Poland, adjusted to the needs of the labour market, is a major challenge. This area has for years been ignored and underinvested, the quality of education services is often too low, while expectations regarding the competences of graduates are high. Available funding, mainly from European funds (principally the Human Capital Operation Programme 2007-2013, Priority III: "High quality of the education system"), represents a great development opportunity for the sector of the education system; however, to use it optimally, it is necessary to appropriately diagnose the real causes of the observed problems. PISA surveys provide an example of such diagnosis. They test the quality of education. Students of post-lower secondary vocational schools have a lower score in the OECD Programme for International Student Assessment (PISA).³⁹ Table 1 presents the average score in 2006, when the survey covered lower secondary students as well as first and second year post-lower secondary students. In particular, students of basic vocational schools obtained a very low score. In addition, more than half of these students obtain a score not higher than level 1. This means that they have no skills or only very basic skills. Students with such competences are not prepared for the labour market. It should be noted that the score of Polish students improved between 2000 and 2006. However, according to researches analysing the score, the improvement was mainly driven by the introduction of the lower secondary school level. After lower secondary education, further development of students' skills facilitating their participation in social and professional life only takes place in upper secondary schools. Development of such skills in all other post-lower secondary schools is negligible. However, their graduates will soon need such skills on the labour market which today requires flexible acquisition of new qualifications.

Table 1. Average PISA 2006 score

Type of school	Science literacy	Mathematical literacy	Reading and writing
Lower secondary	498	495	508
Upper secondary	575	570	587
Technical secondary	499	499	507
Vocational secondary	488	483	495
Basic vocational	408	409	387

Source: Program Międzynarodowej Oceny Umiejętności Uczniów (**Programme for International Student Assessment**), OECD PISA, Wyniki badania 2006 w Polsce, (**2006 Poland Score**) Ministerstwo Edukacji Narodowej (**Ministry of National Education**).

³⁹ Program Międzynarodowej Oceny Umiejętności Uczniów (**Programme for International Student Assessment**), OECD PISA, Wyniki badania 2006 w Polsce, (**2006 Poland Score**) Ministerstwo Edukacji Narodowej (**Ministry of National Education**), http://www.ifspan.waw.pl/fles/gfx/PISA/PISA_2006_071130.pdf

The quality of vocational education in Poland is related to the existing model of school supervision. A new regulation came into force as of the school year 2009/2010. The Minister of National Education in communication with the Minister of Culture and National Heritage, the Minister of Justice, the Minister of Agriculture and Rural Development, the Minister of the Environment, the Minister of Infrastructure, the Minister of the Interior and Administration, and the Minister of National Defence signed the Regulation on pedagogic supervision.⁴⁰

The goal of this solution is to strengthen the system of pedagogic supervision including in particular analysis and assessment of the quality of education activities of schools and institutions. Pedagogic supervision should contribute to improvement of the education system. According to the Education System Act, pedagogic supervision includes:

- 1) assessment of the status and conditions of teaching, education and care activities of schools, institutions and teachers;
- 2) analysis and assessment of the results of teaching, education and care as well as other statutory activities of schools and institutions;
- 3) support for schools, institutions and teachers in their teaching, education and care activities;
- 4) inspiring teachers for pedagogic, methodological and organisational innovation.

Pedagogic supervision is to be exercised in a planned manner but it can also be performed on an ad hoc basis, in compliance with the principle of transparency of requirements and the principle of collecting information about schools and institutions from many sources, including information obtained in the course of supervision exercised by the headmaster of the school or the director of the institution.

The main goals of the system of pedagogic supervision set out in the Regulation include:

- to enable school faculty (headmasters and teachers) to work effectively on improving the quality of work of schools and institutions by providing them with information about quality;
- to provide information and tools necessary to test the compliance of schools and institutions with the requirements set out in the Regulation;
- to enable analyses of the quality of work of schools and institutions.

A fundamental principle of the new system of pedagogic supervision is the identification of three supervisory tasks of supervisory authorities including school superintendents, namely:

- 1) to evaluate education activity of schools and institutions;
- 2) to check compliance with regulations concerning teaching, education and care activities of schools, institutions and teachers;
- 3) to support schools, institutions and teachers in their teaching, education and care as well as other statutory activities.

The evaluation of education activity of schools and institutions is a practical test to determine the degree of compliance of a school or institution with the national requirements on the basis of an assessment of processes and results of teaching, education and care activities as well as conditions of a school or institution, its quality of management and its interaction with the environment.

Evaluation performed by the authority of pedagogic supervision is external evaluation. Evaluation performed by the headmaster of the school or the director of the institution is internal evaluation.

External evaluation will include:

- collecting and analysing information about education activity of a school or institution;

⁴⁰ Rozporządzenie w sprawie nadzoru pedagogicznego (**Regulation concerning pedagogic supervision**) published in Dz.U. No. 168, item 1324. It was signed on 7 October 2009 in implementation of the tasks delegated under Article 35.6 of the Education System Act of 7 September 1991 – Ustawa o systemie oświaty (Dz. U. from 2004, No. 256, item 2572, as amended).

- evaluating the degree of compliance of a school or institution with the requirements set out in the Regulation by the minister responsible for education.

The requirements are set out under four areas of activity of schools and institutions:

- 1) effects of teaching, education and care as well as other statutory activities of a school or institution;
- 2) processes in a school or institution;
- 3) interaction of a school or institution with the local environment, in particular relations with students' parents;
- 4) management of a school or institution.

External evaluation of a school or institution aims to determine the degree of compliance with the requirements where:

- 1) level A - means a very high level of compliance of a school or institution with a requirement;
- 2) level B - means a high level of compliance of a school or institution with a requirement;
- 3) level C - means a medium level of compliance of a school or institution with a requirement;
- 4) level D - means a basic level of compliance of a school or institution with a requirement;
- 5) level E - means a low level of compliance of a school or institution with a requirement.

Evaluation is to be performed in all areas of activity of a school or institution (comprehensive evaluation) or only in selected thematic areas of activity of a school or institution (thematic evaluation).

As a result of performed evaluation of a school or institution, the authority of pedagogic supervision prepares a report describing the level of compliance of the school or institution with each requirement. Thus, a report does not contain overall assessment of the school but rather assessment of the degree of compliance with each requirement subject to evaluation.

The new model of pedagogic supervision is supported by a system project of the Human Capital Operational Programme (Priority III, Measure 3.1, Sub-measure 3.1.2) "Programme improving the effectiveness of the system of pedagogic supervision and evaluation of the quality of work of schools" implemented by the Ministry of National Education in 2009-2010.

One of the existing means of testing the degree of preparation of students for the labour market is the examination confirming vocational qualifications, which evaluates knowledge and skills necessary for an occupation acquired by school graduates. Based on the experience of several years of practice of the education system and employers, MEN has taken measures to modernise the system of external examinations confirming vocational qualifications. The implemented change consists mainly in the possibility of confirming each individual qualification of an occupation acquired by a student in the education process and the issuance of a certificate confirming the qualification. On the confirmation of all individual qualifications for an occupation, the school graduate will receive a diploma and a supplement to the diploma. The proposed change will strengthen the practical aspect of vocational examinations at the technical secondary level, develop an IT databank of examination tests, and eliminate the seasonal cycle of examinations (currently only two sessions, in winter and in summer) to be replaced with vocational examinations held by examination centres all year round.⁴¹

⁴¹ Założenia projektowanych zmian. Kształcenie zawodowe i ustawiczne . Informator. Fundusze Unijne dla oświaty. **(Vocational and Continuing Education. Assumptions for Planned Changes. A Handbook)**. MEN, Warsaw, 2010.

System projects modernising vocational examinations will also improve the quality of vocational education.⁴²

The quality of vocational education is also a result of existing curricula. Unfortunately, no research is available to evaluate the curricula and textbooks used in vocational education. In particular, vocational schools face a major challenge of combining general education providing adequate general vocational and social skills necessary for social life with skills necessary for an occupation. A new challenge is posed by development of new core curricula of vocational education and implementation of modular curricula and educational packages complementing the curricula. This segment of qualitative change in vocational education will be supported by the following system projects under HC OP:

- *Improving core curricula as a the key to modernisation of vocational education (2008-2013).*
- *System of support for schools and educational institutions implementing modular curricula of vocational education (2009-2013).*
- *Modernisation of examinations confirming vocational qualifications (2010-2013).*

In order to ensure high quality of training for the unemployed and job seekers, the Promotion of Employment and Labour Market Institutions Act delegates to the minister responsible for labour the task of developing national vocational qualifications standards based on the requirements of job positions and employers as well as developing modular curricula of vocational training. The gradually developed qualifications standards and training modules are available in a public database open to employers free of charge for use in their enterprises. New labour market instruments have been introduced to enable some degree of monitoring of the quality of training for the unemployed and job seekers: a financial award for training institutions for high quality of services as expressed by high employability of graduates after training, and registration of training institutions by voivodship labour offices.

Few institutions offering training for the unemployed hold ISO 9001 quality certificates. Quality of modular training is also assured by means of "peer accreditation" of training institutions and programmes by the Polish Network of Modular Education (PSKM).

The efforts of the Ministry of Labour and Social Policy (MPiSP) to develop a quality assurance system of training for the unemployed and job seekers are supported by HC OP Priority I: "Employment and social integration", Measure 1.1: "System support of labour market institutions." The timetable of qualitative change includes among others:

- 2008: Council of Ministers approves a draft amendment of the Promotion of Employment and Labour Market Institutions Act (the amendment aims at improvement of the quality of training) - introduction of a new instrument of activation: vocational training of adults.
- 2009: new regulation on the new instrument: vocational training of adults, amendment of the regulation on placements of the unemployed.
- 2010: amendment of the classification of occupations and specialties - adjustment of the new classification to the new ILO standard ISCO 08 and issuance of a new regulation.
- 2008 - 2011: modernisation of the IT tools: www.ris.gov.pl and www.standardyiskolenia.praca.gov.pl.

⁴² Fundusze unijne dla oświaty. Kształcenie zawodowe. Poradnik beneficjenta. (EU Funds for Education. Vocational Education. A Beneficiary Handbook). Ministerstwo Edukacji Narodowej (Ministry of National Education). Warsaw, May 2009.

Strengths and weaknesses

It should be stressed that the main tool of modernising and assuring quality of the vocational education and training system of youth and adults should be a validation system comprising the processes of identification, evaluation and recognition of competences acquired in different ways at different stages of life. There are many reasons for taking necessary actions to develop solutions of validation of competences acquired through experience gained at work. The main reason is the reduction of the cost of confirmation of competences acquired through experience as the given person already has some knowledge and skills so his or her participation in training only to get the necessary certificate would be a waste of time and money.

While Poland has some basic foundations to establish a validation system, there is still no consistent and transparent system in the context of lifelong learning. The Ministry of National Education sees the need of accelerating work on the implementation of mechanisms of evaluation and recognition of achievements of learning other than formal learning, especially for persons who are currently in a disadvantaged position. In the Polish context with its strong dominance of formal education, this should be a top priority task. A system approach to the validation of qualifications and competences reveals a need of closer co-operation between MEN and other ministries, in particular MPiPS and MG.

In order to ensure an effective system of validation of qualifications and competences, there must be standards of knowledge, skills and competences necessary for a given occupation. In an out-of-school education system it should be the standard vocational qualifications (an instrument under the Promotion of Employment and Labour Market Institutions Act); in the school system, it should be the new core curricula of education for an occupation including also partial qualifications of the occupation.

In the absence of a validation system in Poland, the development of the National Qualifications Framework (KRK) in Poland should include the following tasks:

- Identification of existing validation mechanisms in the Polish national qualifications system, which do not yet make up a coherent system but can be a basis of development and improvement of a system. The identification should be carried out with reference to reports on the development of validation in Poland prepared by request of the European Commission (2005 and 2007 reports).
- The identification should, as much as possible, cover not only relatively low vocational and qualification requirements but also the entire area corresponding to all qualifications levels described in the EQF including the highest qualifications level.
- Evaluation of compliance of the identified validation methods in Poland with the European validation rules set out in the 2004 document of the European Commission and newly drafted Cedefop reports.
- Evaluation of the horizontal (sectors) and vertical (by level of learning achievements) scope of the identified validation methods in Poland, and identification of the scope where validation should be developed first.
- Identification of best practice of validation systems and methods in selected EU countries, identification of the main countries which participate or will participate in the exchange of qualifications with Poland, i.e., movement of learning and working individuals.
- Identification and evaluation of the needs of the Polish labour market, education system continuing education (training) system and non-governmental organisations including the scale and directions of development of validation.
- Recommendations for the KRK model in Poland including a validation system.
- Recommendations for economic, educational and social policy with regard to development of a validation system in Poland.

6.2. Promoting excellence in VET

Initiatives taken by the Minister of Education in order to improve the quality of education services, especially in the out-of-school system, are reflected in the Education System Act, which has introduced a system of accreditation of institutions offering education in out-of-school forms.⁴³

Accreditation is an external means of quality assurance of the education process and its results. If an institution enters the accreditation process, it is on track to quality. Accreditation is voluntary.

According to the Act, accreditation is a competence of the school superintendents. The Minister of National Education and Sport has defined in a regulation specific rules for accreditation including the specific terms and mode of granting and withdrawing accreditation of continuing education institutions, practical education institutions and further vocational education and training centres, offering initial vocational education in out-of-school forms, and institutions performing education activities managed pursuant to regulations on economic activity. Institutions eligible for accreditation must offer education within the scope defined in the accreditation application for at least one year, in out-of-school forms listed in the application, including not less than 30 hours of education; it should also implement and disseminate innovative curricula and methodological and organisational solutions enhancing the quality of offered education.

An institution is eligible for accreditation if:

- it has necessary infrastructure equipped with teaching facilities;
- it employs qualified personnel;
- it develops and distributed methodological and teaching materials.⁴⁴

The accreditation process involves a team of evaluators who assess the institution applying for accreditation. The team includes representatives of school superintendents as well as external parties: representatives of employers and labour offices. This ensures objectivity and impartiality of evaluation as well as closer correlation of education with the needs of the labour market and expectation of employers. Thus, the teams provide external evaluation and recommendation to school superintendents.

Accreditation of an institution ensures:

- improved quality of provided services;
- higher confidence in the training institution;
- enhanced competitiveness on the education services market;
- higher marketing potential;
- better motivation of employees to improve qualifications;
- focus of the institution on achievement of set standards;
- higher prestige of the institution;
- extended training offer.

Benefits to clients of accredited institutions include:

- credits from vocational training can be transferred to schools for adults offering vocational education;
- access to high quality education services;
- better employability;
- obtaining a training certificate issued by a recognised institution;

⁴³ The specific conditions and mode of granting and cancelling accreditation are set out in: Rozporządzenie Ministra Edukacji Narodowej i Sportu z dnia 20 grudnia 2003 r. w sprawie akredytacji placówek i ośrodków prowadzących kształcenie ustawiczne w formach pozaszkolnych (**Regulation of the Minister of National Education and Sport of 20 December 2003 concerning accreditation of institutions and centres providing out-of-school forms of continuing education**) (Dz. U. No. 227, item 2247).

⁴⁴ <http://www.koweziu.edu.pl/pliki/akredytacja.doc> - information brochure on accreditation of continuing education institutions

- educational obligation can be performed in out-of-school forms.

Thanks to accreditation applications, school superintendents have detailed information on the type and quality of education services provided by continuing education institutions.

Powiat labour offices which select training providers can take into account their accreditation. In particular, continuing education institutions accredited by a school superintendent may be entered in the register of training institutions maintained by the voivodship labour office. Registration is obligatory for training institutions which apply for benefits from the Labour Fund or the National Rehabilitation Fund for the Disabled for training of the unemployed and job seekers according to Article 20 of the Promotion of Employment and Labour Market Institutions Act.

Employers interested in improving the qualifications of their employees can commission training from accredited institutions which ensure a high quality of offered services. Employers who hire an employee may take into account certificates of out-of-school education from such institutions.

Quality assurances of vocational education and training is also supported by the Lifelong Learning Programme. This includes among others the Leonardo da Vinci programme (mobility) project "Exchange of experience of vocational education and training professionals" (VETPRO). In Leonardo da Vinci programme projects, the term "exchange" refers to transfer of knowledge, experience and innovative methods and practices of vocational education and training. Experience exchange projects include foreign visits of vocational education and training professionals and training of employees of training institutions and enterprises. Such projects aim at transferring interesting foreign solutions to Poland and at improvement and modernisation of vocational training methods. Experience exchange projects give participants an opportunity of personal development help to improve vocational education and training systems by introducing new solutions in the home institution.

The Polish Chamber of Training Providers (PIFS),⁴⁵ established in 2005, has recently contributed to promotion and improvement of the quality of vocational training. PIFS provides information and opinions about the situation on the training market and changes in legal regulations applicable to the sector. The leading media regularly ask the opinion of PIFS representatives and experts about training of adults, co-financing of training from EU funds, the professional status of trainers, etc. This position of PIFS is a result of hard voluntary work of members of the Chamber. Their professionalism is appreciated by government institutions, local governments and other organisations. PIFS integrates the training providers community around its mission and goals. After years of lobbying, PIFS representatives are now members of many groups of consultation of issues relevant to the community of training providers. The Chamber has built lasting relations and partnerships with the key ministries, their agencies (e.g., PARP - Polish Agency for Enterprise Development) and local governments. The Chamber is a real representation of the sector. Regional Representatives in 10 voivodships are building local structures of PIFS; in some cases they are active in Monitoring Sub-committees of HC OP within the Marshal Offices. PIFS has developed a Code of Best Practice observed by Chamber members. PIFS has also developed Poland's first Glossary of Training Terms and continues to promote it in the media. PIFS cooperates with organisations of enterprises in the Polish Chamber of Commerce (since 2006) and employers in the Confederation of Private Employers Lewiatan as a partner. The Polish Chamber of Training Providers groups over 300 training institutions (February 2009) from all over Poland and new members join every month. Its member training providers represent all regions, including both large cities and small towns.

⁴⁵ PIFS - <http://www.pifs.org.pl>

140 Centres of Excellence (CE) have been established in Poland (mainly at universities) under the EU Fifth Framework Programme for Research and Technological Development (FP5). Their mission is:

- to promote the best Polish research centres in the EU;
- to develop international cooperation within the European Research Area;
- to increase the role of science and research as a driver of the competitiveness of the Polish economy;
- to strengthen the links between research and practice stimulating new innovative solutions;
- to strengthen cooperation of science teams pursuing similar research goals;
- to strengthen the national innovation system by creating strong research and implementation structures.⁴⁶

Most of the Centres of Excellence also disseminate knowledge by organising seminars, courses and conferences and publishing monographic studies and articles.

Centres of Excellence are research institutions or organisational units engaged in scientific research and developing state-of-the-art technologies at the top global level. They group research teams with an outstanding track record of achievements, which cooperate in joint areas, perform joint research and technology projects, cooperate closely with the industry, and offer training and education. In principle, Centres of Excellence should enjoy organisational independence, but they must be organised around a recognised research centre (for example, a unit of the Polish Academy of Sciences, a higher school, or a research and development institution). The Centres of Excellence programme does not provide for creation of new research institutions; instead, a Centre is a "laboratory" closely cooperating with the industry or other research centres. Centre of Excellence researchers focus on strategic areas and use the infrastructure of several institutions operating under joint scientific and organisational leadership, and they enjoy relatively much autonomy.

Strengths and weaknesses

National education policy and supporting EU funds encourage the development of excellence programmes in vocational education and training because education of highly qualified specialists can better address the requirements of the labour market.

Many vocational education and training centres (e.g., Continuing Education Centres, Practical Education Centres, the network of the Association of Vocational Training Establishments ZZDZ) hold ISO certificates for education services, which significantly contributes to quality assurance of their services. These institutions can be considered "centres of excellence" in a given area, e.g., welding, numerically controlled machines, mechatronics, car diagnostics, etc.

Polish Centres of Excellence at higher schools and research institutes are focused on research in advanced technologies rather than provision of education services. The absence of systemic links with vocational education and training at the pre-tertiary level hinders the transfer of knowledge to this segment of education.

It is necessary to promote best practice in the development of centres of excellence, especially centres focused on development processes in different sectors.

The market of training services provided by different types of educational institutions and businesses remains poorly identified. Statistics of out-of-school education are scarce. The accredited institutions information system has been designed to improve the situation but it is not effectively disseminated at the local level and among users of education services. The development of the database did not popularise the concept of accreditation of educational institutions. Too few institutions are interested in accreditation.

⁴⁶ Information on Centres of Excellence - http://www.kpk.gov.pl/centra_doskonalosci/index.html

Actions should be taken to promote the accreditation system, both among service providers and users, including among others:

- commissioning training only from accredited institutions;
- disseminating information (especially among enterprises) about accredited institutions and forms of training;
- disseminating information on the accredited institutions database.

HC OP should include support aimed at training representatives of voivodship and poviát labour offices and representatives of organisations of enterprises for work on accreditation boards. This would also help to disseminate information about the accreditation system among all those interested in continuing education.

The lack of systematic research of the quality of vocational education and training in Poland makes it difficult to make judgments and to identify best practice of quality assurance of vocational education and training. Hence the great importance of the project "Survey of the quality and effectiveness of education and institutionalisation of research infrastructure" co-financed by the European Social Fund, Human Capital Operational Programme, Priority III: "High quality of the education system", Sub-measure 3.1.1: "Creating conditions and tool of monitoring, evaluation and surveys of the education system".

The same Programme (Priority III, Measure 3.1, Sub-measure 3.1.1) will also include the project "Survey of the education system" implemented in 2009-2015.

Example 1: Vocational school as a school of choice

The planned changes in the vocational education system are aimed to develop and implement a new model of vocational school taking into account quality standards consistent with the European Quality Assurance Reference Framework for Vocational Education and Training (EQARF). The changes require that headmasters and teachers of vocational schools are prepared for the application of new solutions including among others development of school curricula in compliance with the requirement of necessary flexibility and correlation of general subjects with vocational subjects. Actions aimed at improvement of the status and quality of vocational education in the project include the development of organisational and legal instruments and extending support to vocational schools and teachers in the application of new tools and quality standards of vocational schools by organising and conducting a series of specialised workshops for managers and teachers of vocational schools.

These goals will be pursued by the HC OP (Priority III) system project "Vocational school as a school of choice" implemented by the Ministry of National Education (2010-2012).

One of the main goals of the project is to strengthen the links between vocational education and the work environment by engaging employers in the vocational education process. Relevant actions will include in particular dissemination of best practice of cooperation between vocational schools and educational institutions with employers, and development of solutions incentivising employers to support technical teaching infrastructure of schools and institutions as well as vocational training of vocational teachers. In addition, effective cooperation between vocational schools and employers will be based on promotion of the best vocational schools, both locally and nationally, as part of the project; this should help to develop active sectoral centres of vocational training closely linked to employers. Effective promotion of vocational education is important not only with regard to cooperation between schools and employers but also in the broader context of the planned modernisation of the vocational education system and with regard to dissemination of vocational skills among students facing a choice of further education and professional career so that vocational schools really become schools of choice. The project provides for actions aimed at improving the attractiveness of vocational education and, in consequence, increasing the interest of students in a rational choice of a vocational

education path in the process of creating an individual career path. This goal will be pursued among others by identifying best vocational education paths of graduates of vocational schools and conducting a national campaign to promote the choice of vocational education paths by students of primary and lower secondary schools.

6.3. Higher level qualifications in VET

Poland is a country of educational boom. The number of higher school students has increased from 394 thousand in the academic year 1990/1991 to nearly 2 million now. The scholarisation ratio in the age group 19-24 years has reached 48% and is one of the highest in Europe. The Polish rate of 500 students per population of 10 thousand is the sixth highest world-wide. The number of students, faculties, and higher schools has increased.

One of the problems of Polish higher education is low and decreasing interest in sciences and technical studies, which are important from the perspective of needs of a knowledge-based economy. Poland has on average 11.1 graduates of natural sciences and technical faculties per 1,000 people. By comparison, the EU average is 12.9. Concerns are raised by a clear downward trend: the number of candidates enrolling for engineering, technical and information science faculties of higher schools decreased by nearly 6 percent in 2007.

In the absence of transparent information necessary for employers to evaluate the quality of education in each higher school and faculty and for students to assess vocational careers of graduates, the choice of faculty is suboptimal as students tend to opt for the "easy" faculties. Therefore, the recently implemented solutions of commissioning faculties in higher schools should be complemented by further incentives for students to choose faculties of strategic importance to national development and for higher schools to make such faculties more accessible by means of the adequate allocation of resources.

Programmes at ISCED 5B level in Poland include tertiary vocational programmes, usually of short duration, aimed at preparing students for the labour market. This education is predominantly provided by State Vocational Higher Schools (PWSZ) established pursuant to the Vocational Higher Schools Act of 26 June 1997. They are schools of a new type and provide vocational education at BA, MSc or MA level. They were usually established in former voivodship (region) capitals in view of local demand for specialists in a given area. The faculties and specialties offered by PWSZ include administration, economics, foreign languages, technical sciences, environmental protection, pedagogy, tourism.

A graduate holding an MSc degree ("Engineer") is a professional who develops or applies engineering know-how. Today the MSc degree follows graduation from a relevant faculty of a higher school, in Poland typically a Technical University. According to applicable regulations, the degree is not sufficient to perform independent technical functions in some engineering specialties; this is only possible on completion of a required traineeship in the occupation and passing an examination before a board appointed by the relevant professional self-government. This process is also known as "obtaining qualifications".

According to a survey of the needs of the labour market in the next five years prepared by request of the Ministry of Science, despite the economic slow-down caused by the crisis, Poland may have a shortage of ca. 46 thousand MSc degree holders in 2013. According to a 2007 OBOP survey, some 60 percent of enterprises reported a shortage of MSc degree holders.

However, only around 15 percent of the nearly 2 million students in Poland study at technical and industrial faculties. The ratio in other EU countries is 30-40 percent. Only around 6-7 percent of students study sciences. According to the Ministry report, in the next five years the labour market will have a need for graduates of applied mathematics, financial mathematics, technical physics and information physics. Chemistry and energy science, especially nuclear energy, have been added to the list of strategic faculties by

request of employers. Industrial design has also been added to the list. Industrial design has traditionally been the creative specialty of Poland. Polish graduates win awards at international fairs, Polish designs are bought by producers of furniture and accessories from around the world. Secondary school graduates who choose a faculty from the Government list have an opportunity to receive a high scholarship; in addition, the higher school will pay for their make-up course in mathematics and physics. According to schools, make-up courses are necessary considering that mathematics has not been an obligatory subject of matriculation examinations for 25 years.

Poland has a big demand for specialists in specific areas. According to the Ministry of Science and Higher Education, the most sought-for specialists are: IT scientists, physicists, environmental protection and biotechnology specialists. As a result, the Ministry commissions these faculties in higher schools in order to educate these experts (see Example 1 below).

Another priority issue is to develop internal quality management systems in higher schools to differentiate the level of funding for schools depending on their research achievements and the quality of the education process as measured mainly by the preparation of graduates for the labour market (including the Dublin descriptors).

Example 1. “Commissioned Faculties”, a special programme to increase the number of students of faculties strategic to economic development

“Commissioned Faculties” is a special programme to increase the number of students of faculties strategic to economic development, implemented by the Ministry of Science and Higher Education since 2008. The programme has a budget of over PLN 1 billion until 2013. It is implemented under HC OP, Measure 4.1: “Strengthening and developing the educational capacity of higher schools and increasing the number of students of faculties of key importance to a knowledge-based economy”. The objectives of the programme include:

- to build a development capacity of higher schools by enabling them to extend and enrich the educational offer;
- to ensure effective management of the higher school system and to adjust the structure of supply of graduates to the needs of the economy.

Commissioned education is implemented by improving the attractiveness of education in technical faculties, mathematics, natural sciences including among others the following projects:

- implementation of new or amended curricula (including curricula developed under Sub-measure 4.1.3);
- development of scholarship programmes for students of commissioned faculties;
- development and implementation of make-up curricula addressed to first-year students of the commissioned faculties, including improvement of competences necessary to continue studying at the faculties;
- implementation of new or amended curricula (including curricula developed in Sub-measure 4.1.3);
- other forms of education defined by the institution to enhance the attractiveness of education at the commissioned faculties.

The target faculties include: automation and robotics, biotechnology, construction, chemistry, energy, physics/technical physics, information science, material engineering, environmental engineering, mathematics, mechanics and mechanical engineering, mechatronics, environmental protection, design.

Over 2,000 students started to study in commissioned faculties last year. Half of them received scholarships of PLN 1,000 each. The pilot project "Commissioned education in technical faculties, mathematics and natural sciences" continues this year.

This year's edition of the project was originally planned to implement 27 projects. However, the Ministry decided to increase the budget to PLN 370 million and implement all approved projects: 59 projects in 42 schools.

The goal of the project is to increase the number of graduates of faculties of key importance to the economy. A competition of projects selected schools which will offer education in commissioned faculties in the academic year 2009/2010 in the following faculties/specialties: automation and robotics, biotechnology, construction, chemistry, energy, physics/technical physics, information science, material engineering, environmental engineering, mathematics, mechanics and mechanical engineering, mechatronics, environmental protection, design.

In order to improve the attractiveness of education in commissioned faculties, higher schools offer students mathematics and physics make-up courses, English language courses, science camps, classes delivered by prominent specialists in different fields, courses providing additional vocational qualifications, study visits to enterprises which offer jobs to graduates.

Higher schools participating in the project offer e-learning and finance the participation of students in research and technology conferences. Students take part in specialty computer courses and get access to state-of-the-art computer software; they have access to the expertise and experience of mathematicians and experts employed by banks, financial institutions, IT firms and laboratories. In order to further improve the attractiveness of education offered by commissioned faculties, prominent foreign professors are invited to deliver lectures.

6.4. Improving horizontal and vertical permeability of education and training systems

In order to improve horizontal and vertical permeability of vocational education and training, the Ministry of Education has approved changes to the vocational and continuing education system including among others:

- modernisation of the classification of occupations for education, identification and separation of qualifications of occupations, development of a register of nationally recognised vocational qualifications in connection with the classification of occupations and specialties for the labour market and the developed system of the National Qualifications Framework;
- development of a system of external examinations to confirm and recognise vocational qualifications acquired in formal, non-formal and informal learning, including expansion of the network of examination institutions;
- adjustment of the structure and organisation of vocational education to the needs of the European, national, regional and local labour market, taking into account education of people with special needs;
- development of new core curricula of vocational education in connection with descriptors of results of education (knowledge, skills, competences) and vocational education standards describing the requirements of employers and the labour market;
- extending organisational and methodological support for the development of curricula and education tools for vocational education curricula including modular curricula.

The modernisation of the system will include among others improvement of procedures of classification of occupations for vocational education with the option of adding new occupations to the classification by request of sector and employer organisations and professional associations. This will accelerate the process of adjusting the classification of

occupations to the expectations of the economy and the labour market (currently only ministers responsible for relevant occupations may propose the addition of new occupations to the classification).⁴⁷ In addition, the system of the classification of occupations is to be changed. In the new system, the classification of occupations for education will include qualifications separated for individual occupations. Such qualifications will be consistent with the National Qualifications Framework and will be separately confirmed by external vocational examinations. As a result, the concept of qualification will be fundamental in vocational education.

The development of the National Qualifications Framework puts a strong emphasis on the need to ensure the possibility of acquiring qualifications in different forms of learning including both school and out-of-school systems. The interdisciplinary approach to modernisation of vocational education will enable schools to develop educational offers attractive to the labour market by combining traditional school education with out-of-school education.

The development of a transparent system of qualifications and a flexible system of vocational examinations including different learning contexts (formal, non-formal, informal) will prepare mobile graduates equipped for lifelong learning.

The main goals of the division of occupations into qualifications include:

- an open education system in the context of lifelong learning, supporting progressive acquisition of learning achievements at every age;
- transparency of qualifications and competences available on the Polish and European labour market (the current holistic approach to occupation does not support the comparability of learning achievements acquired in Poland and outside Poland);
- integration by the Polish Government of the Recommendation of the European Parliament and of the Council on the establishment of the European Qualifications Framework for Lifelong Learning (EQF) and the Recommendation of the European Parliament and of the Council on the establishment of a European Credit System for Vocational Education and Training - development and implementation of the National Qualifications Framework including the national qualifications register;
- a new approach to learning, moving from the current focus on the education process to a focus on learning achievements;
- improved quality of vocational education;
- possibility of accumulating learning achievements from different contexts (validation of non-formal and informal learning);
- facilitating educational and vocational mobility of students and graduates of vocational schools;
- expectations of employers with regard to mobile employees, faster adjustment of education to labour market needs;
- development of a flexible system of vocational examinations.

The modification of the classification of occupations for education will involve the grouping and integration of occupations (reduction of the number of occupations). Within these occupations, qualifications will be identified and named, to be confirmed in external examinations. The qualifications will be described in the new core curricula of education for an occupation as a set of knowledge, skills and attitudes. The occupations defined for education will be divided into vocational qualifications on the basis of the classification of occupations and specialties for the needs of the labour market.

These goals will be pursued under ESF HC OP (Priority III).

⁴⁷ Założenia projektu zmian w kształceniu zawodowym i ustawicznym. (**Assumptions for draft changes in vocational and continuing education**). MEN, Warszawa 2010.

Strengths and weaknesses

The strengths of the improvement of horizontal and vertical permeability of vocational education and training include among others the modular approach, increasingly implemented in the school and continuing education system and given preference by the Ministry of National Education (MEN) and the Ministry of Labour and Social Policy (MPiPS).

The existing database of modular curricula of vocational education and training for the labour market is a good basis for their further development and application. The modular approach ensures mobility and transfer across different systems and forms of education and learning, including school and out-of-school systems. This implies both horizontal and vertical mobility of modules which provide specific qualifications. Hence the modular approach in vocational education and training should be considered a universal structural concept, which offers individuals access to education in different life situations while ensuring vocational mobility.⁴⁸

According to the National Centre for Supporting Vocational and Continuing Education (KOWEziU) and the Polish Network of Modular Education (PSKM), interest is rising in dissemination of education concepts based on modular curricula and their implementation in school practice. Managing authorities of public schools are also analysing and comparing the success rate at examinations confirming vocational qualifications in schools which educate in the same occupations using subject-based (traditional) and modular curricula. However, there are still many barriers which hinder the use of the increasingly rich and attractive offer of modular curricula.⁴⁹

Further efforts are required to ensure that the modular education concept becomes an integral part of the curricula offered by vocational and continuing educational institutions and schools, in particular:

- The introduction of innovative modular curricula to the vocational school system requires a change of the stereotypical approach to curricula where content is based on subjects, i.e., abandonment of the division of vocational education into theoretical vocational education and practical vocational education.
- The modular structure proposed in innovative curricula is based on integration, within the modules, of the goals and contents of education, both theoretical and practical, derived from different disciplines of science and technology. The modular structure of curricula enables flexible adjustment of the education and learning process to the technical and teaching conditions of the school, and primarily to the evolving needs of the labour market, economic conditions and development of technologies.
- In the vocational and continuing education model, the modular approach should be the preferred mode of acquiring vocational qualifications and competences in formal, non-formal and informal education.
- The modular approach applied to the division of occupations into qualifications and the division of the content of vocational education into learning units (modules - work units corresponding to vocational tasks) should be the point of departure in the development of a European Credit System for Vocational Education and Training (ECVET) in Poland (according to the Recommendations of the European Parliament and of the Council). This requires cooperation of the Ministry of Education, the Ministry of Labour and other partners as well as connections between this work and the development of the National Qualifications Framework and the National Qualifications System.

⁴⁸ Modułowe programy nauczania dla zawodów. Materiał metodyczny dla autorów programu. (**Modular curricula of education for an occupation. Methodology materials for curricula authors**). MENiS, Warsaw, 24 April 2003.

⁴⁹ Symela K.: Modułowe kształcenie zawodowe w Polsce – elementy diagnozy. Materiał informacyjny dla uczestników konferencji i szkoleń. (**Modular vocational education in Poland: aspects of a diagnosis. Information materials for participants of conferences and training**). PO-KL, Projekt „System wsparcia szkół i placówek oświatowych wdrażające modułowe programy kształcenia zawodowego (HC OP project “System of support for schools and educational institutions implementing modular curricula of vocational education”). KOWEziU, Warsaw 2009.

- The implementation of modular education in the practice of education requires amendments of the education law concerning the category of “teacher of vocational education”, the functions and tasks of practical and continuing education centres in the implementation of modular education and hiring specialists - employees of industrial and service enterprises in vocational schools to deliver classes within selected modules (“profiled classes”) among others for users to acquire basic and specialty vocational qualifications.

These proposed amendments of the education policy are hindered by the lack of a trans-sectoral “Lifelong Learning Strategy” formally approved by the Government.

Example 1: Development of innovative curricula of vocational education

The concept of introduction of modular curricula to the school system was supported by the implementation of the project “Development of innovative curricula of vocational education” under the Human Resources Development Sectoral Operational Programme co-financed by the European Social Fund in 2005-2008. The project was co-ordinated by the National Centre for Supporting Vocational and Continuing Education (KOWEziU) and directly implemented by Institute for Sustainable Technologies - National Research Institute in Radom (ITeE-PIB) in cooperation with leading institutions of school education. The project included the development, promotion and distribution of modular curricula for 131 occupations listed in the classification of occupations for vocational education and the development of around 3,500 educational packages comprising a student textbook and a teacher manual supporting the implementation of each module in the curricula.

The list of curricula approved for use in vocational schools, published every year, has for several years included both traditional subject-based curricula and alternative modular curricula. The Minister of National Education gradually approves for use in schools curricula developed during the project. In the school year 2009/2010, the list included 384 proposed curricula of education for an occupation, including 157 modular curricula. As the offer of curricula is being extended to include modern modular curricula, schools are increasingly interested in the introduction of such curricula to the education process. However, it should be mentioned that schools are free to choose for each occupation any curriculum from the list.

The gradually updated offer of modular curricula of education for occupations is available on the website www.koweziu.edu.pl under the tab “Programy modułowe i pakiety edukacyjne” (Modular curricula and educational packages”). The files with documents can be downloaded by logged users.

6.5. Teachers and trainers

According to the Education System Act, vocational training of teachers is a responsibility of teacher training institutions and methodology consultants. Teacher training institutions are both public and private. The rules of establishment, organisation and operation of teacher training institutions are set out in a Regulation of the Minister of National Education and Sport.⁵⁰ Institutions may apply for accreditation confirming high quality of provided forms

⁵⁰ Rozporządzenie Ministra Edukacji Narodowej i Sportu z dnia 23 kwietnia 2003 r. w sprawie warunków i trybu tworzenia, przekształcania i likwidowania oraz organizacji i sposobu działania placówek doskonalenia nauczycieli, w tym zakresu ich działalności obowiązkowej oraz zadań doradców metodycznych, warunków i trybu powierzania nauczycielom zadań doradcy metodycznego (**Regulation of the Minister of National Education and Sport of 23 April 2003 concerning the conditions and mode of establishing, transforming and liquidating, as well as organisation and mode of operations, of teacher training institutions, including the scope of their mandatory activity and tasks of methodology advisors, the conditions and mode of delegating the tasks of methodology advisors to teachers**) (Dz. U. No. 84, item 779).

of vocational training of teachers. The National In-Service Teacher Training Centre (www.codn.edu.pl) is an important institution supporting the development of teacher competences and institutions which provide vocational training to teachers. The Centre website presents a range of interesting information. In addition, public and private teacher training institutions are active on the regional and local level (their list is available on www.codn.edu.pl).

Development of vocational teacher competences at the central level is supported by the National Centre for Supporting Vocational and Continuing Education (KOWEziU, www.koweziu.edu.pl).

Qualification requirements for teachers, including vocational teachers, are governed by the Regulation of the Minister of National Education and Sport of 10 September 2002 concerning specific qualifications required of teachers and identification of schools and cases where teachers without higher education or training at a teacher training institution can be hired (Dz.U. No. 155, item 1288). According to § 2 of the Regulation, a teacher of theoretical vocational subjects in all types of schools must have at least higher vocational education including a methodology background, in comparison with other teachers of general subjects who must hold an MA degree including a methodology background.

In addition, due to the specificity of vocational education, § 10 of the Regulation separately governs qualifications required of teachers of practical vocational education. Under the legal requirements, a teacher of practical vocational education must hold at least a matriculation certificate of the relevant faculty of a technical secondary or equivalent school and confirmation of a vocational title as per the type of classes to be taught, including a methodology background, as well as:

- have completed an occupational health and safety course;
- have completed at least two years of work in the occupation to be taught or hold the title of qualified worker (employee) or hold the title of foreman in the occupation to be taught, including a methodology background.

The learning achievements of students largely depend on the quality of teachers' work and their methodology background. Teachers give content to curricula and shape students' attitudes required by the labour market in the process of vocational education and training and traineeships.

Due to fast social and economic change combined with ongoing progress and role of modern technologies, teachers have to continuously improve their skills in order to equip students with the latest knowledge and necessary skills. Today, teacher education and training is a must because teachers shape education of students and educate new generations.

Today's schools are increasingly well equipped with technologies and well managed. Every teacher must have the necessary knowledge. It would be impossible to adjust the standards of the Polish legal and economic system to the European Union law and economy without developments in education. Many countries focus on teacher training as a central condition of reform and change in education. This approach is gradually being integrated into the Polish policy of teacher education and training.

The main legal act which regulates all aspects of teacher status is the Teacher's Charter.⁵¹ According to the law, a teacher must have higher education, including a methodology background, or complete a teacher training course. The specific qualification requirements are set out in the Regulation of the Minister of National Education.⁵²

⁵¹ Ustawa z dnia 26.01.1982 r. – Karta Nauczyciela (**Teacher's Charter Act** of 26.02.1982) (consolidated text Dz. U. from 2006, No. 97, item 674, as amended).

⁵² Rozporządzenie Ministra Edukacji Narodowej i Sportu z dnia 10 września 2002 r. w sprawie szczegółowych kwalifikacji wymaganych od nauczycieli oraz określenia szkół i wypadków, w których można zatrudnić nauczycieli niemających wyższego wykształcenia lub ukończonego zakładu kształcenia nauczycieli (**Regulation of the Minister of National Education and Sport of 10 September 2002 concerning specific qualifications required of teachers and identification of schools and cases where teachers without higher education or training at a teacher training institution can be hired**) (Dz. U. No. 155, item 1288), after 1 September 2009: rozporządzenie Ministra Edukacji

In the school year 2007/2008, around 600 thousand teachers (FTEs) were employed in Polish schools. Teachers are an important segment of the labour market: they accounted for 3.1% of all employees in 2006. It is one of the highest ratios in the European Union: only 5 countries had a higher ratio. Around a third of all teachers worked in primary schools, less than 19% in lower secondary schools, and a similar proportion in post-lower secondary schools. A large group of teachers work in pre-primary educational institutions (around 10%). The number of teachers is relevant when compared to the number of students; a comparison reveals important differences depending on the type of school. The best situation is in primary and lower secondary schools with a proportion of 1 teacher to 13 students in the school year 2007/2008. The worst situation is in basic vocational schools with a proportion of 1 teacher to 19 students, and in post-upper secondary schools with a proportion of 1 teacher to 26 students. The situation in other schools is comparable, with a proportion of 1 teacher to around 14 students. In this regard, Poland is also among the top ranking countries in Europe: only five countries had a better proportion of teachers to students in primary schools in 2006. However, education research usually does not indicate a significant relation between a lower number of students per class and the quality of education. What is key is the teacher's customised teaching approach, which not always requires a lower number of students per class.⁵³

The Teacher's Charter, the legal act which regulates conditions of work in the occupation, defines a four-degree system of teacher promotion. The lowest degree is "trainee". After one year of work, on passing an examination, a teacher may become a "contract teacher". After another three years, on fulfilment of specific conditions, a teacher becomes an "appointed teacher". The final degree is that of "certified teacher". Appointed and certified teachers account for around 77% of all teachers. The proportion is similar in rural and urban areas. This means that there are no further promotion opportunities in the education system for almost 40% of teachers (certified teachers), with the exception of management positions; this may weaken the incentive to improve one's qualifications.⁵⁴

In terms of the quality of education, teacher education and training are of key importance. A clear improvement has been noted in this area. Less than 64% of teachers had higher education in 1994.⁵⁵ The proportion was 90% in 2002. Teacher education standards were implemented in 2003; the standards regulate teacher education in higher schools. This should help in future to improve the quality of teacher qualifications and consequently the quality of the entire education system. The existing standards are set out in a 2004 Regulation of the Minister of National Education and Sport.⁵⁶

From the perspective of the effectiveness and quality of the system, it is of key importance that teachers can upgrade their knowledge and competences to ensure that their knowledge corresponds to the current state of play in the given area and to labour market trends.

Narodowej z dnia 12 marca 2009 r. w sprawie szczegółowych kwalifikacji wymaganych od nauczycieli oraz określenia szkół i wypadków, w których można zatrudnić nauczycieli niemających wyższego wykształcenia lub ukończonego zakładu kształcenia nauczycieli (**Regulation of the Minister of National Education of 12 March 2009 concerning specific qualifications required of teachers and identification of schools and cases where teachers without higher education or training at a teacher training institution can be hired**) (Dz.U. No. 50, item 400).

⁵³ Raport o Kapitale Intelktualnym Polski (**Poland's Intellectual Capital Report**), Zespół Doradców Strategicznych Premiera (Team of Strategic Advisors to the Prime Minister), Warsaw, 2008.

⁵⁴ Kształcenie i doskonalenie nauczycieli. Poradnik beneficjenta. (**Teacher Education and Training. A Beneficiary's Handbook**). Ministerstwo Edukacji Narodowej, Departament Funduszy Strukturalnych (Ministry of National Education, Structural Funds Department). Warsaw, May 2009.

⁵⁵ Elżbieta Drogosz-Zabłocka, Barbara Minkiewicz, „System zapewniania jakości kształcenia a edukacja dla pracy” (**Education Quality Assurance System and Vocational Education**), Raport o rozwoju społecznym Polska 2007 (**Poland Social Development Report 2007**), UNDP, Warsaw, 2007.

⁵⁶ Rozporządzenie Ministra Edukacji Narodowej i Sportu z dnia 7 września 2004 r. w sprawie standardów kształcenia nauczycieli (**Regulation of the Minister of National Education and Sport of 7 September 2004 concerning teacher education standards**) (Dz.U. No. 207, item 2110).

The issue of adequate skills and competences is particularly relevant in the case of teachers of vocational education. They must not only monitor the development of their area of knowledge but also have the opportunity to acquire knowledge about practical activity of enterprises. The problem of recruitment of teachers of vocational education in Poland results from low remuneration, close to the national average and not good enough to attract good specialists.

The theory of education and training and methodological practice in Polish schools identify the following categories of teachers:

- **Teachers of general subjects** (NPO) who provide education in general subjects (Polish, foreign languages, history, mathematics, chemistry, physics, and other depending on the faculty of vocational education);
- **Teachers of theoretical vocational subjects** (NTPZ) who teach general vocational subjects (or modules), basic for an occupation and specialised, depending on the faculty of vocational education;
- **Teachers of practical classes** (NZP) who perform the process of practical education according to the curriculum applicable to the occupation and the school's teaching and education work plan. These teachers are responsible for organising classes which form and develop skills, habits and faculties. They also have a significant influence on formation of students' vocational personality. NZP are also known as "**occupation teachers**".

In addition, the structure of vocational education and training includes the position of "**practical class/practical occupation instructor**" (IZP), either an occupation teacher or a special expert in a given vocational field (e.g., physician, engineer, technician, craftsman - foreman in the occupation).

According to the current education legislation, the main legal acts do not use the category of "**vocational school teacher**". The Teacher's Charter does not endow vocational school teachers with any status. It only identifies the title, but contains no definition, of instructors and managers of practical education in an occupation employed outside education by employers, providing practical education in an occupation to vocational school students.

Notwithstanding the specificity of the process of education and training in vocational schools, qualification requirements are the same for all teachers, irrespective of the type of school they work for, with the exception of teachers in art schools. The main requirement for teachers in all kinds and types of educational institutions is to have higher education including a methodology background.

There are exceptions to this rule under amendments introduced by the Act of 19 March 2009 amending the Education System Act and amending certain other Acts (Dz.U. No. 56, item 458) which came into force on 22 April 2009 (except for provisions with other effective date). According to one of its provisions (Article 7), headmasters of schools and directors of institutions which provide vocational education may employ persons who are not teachers but have a specialist background (e.g., economic, medical, technical, agricultural, etc.) under the Labour Code. The goal of the amendment is that school headmasters no longer need to follow previous regulations (remuneration at the level of contract teacher, approval of the school superintendent) but may hire specialists and offer them remuneration at the certified teacher level and only co-operate with the managing authority (no requirement of school superintendent approval).

This seems to provide an effective incentive for professional specialists to work in schools and to offer important benefits to schools by linking vocational education with the work environment and strengthening school personnel by hiring people with knowledge of modern techniques and technologies in the economy.

The national policy of the teacher education and training system aims at ensuring optimum professional preparation of all teachers for the occupation. The system should integrate the following:

- definition of skills required from all teachers and trainers in the context of their changing role in knowledge-based society;
- creating conditions facilitating the performance of tasks of teachers and trainers in knowledge-based society among others through vocational education and training in the context of lifelong learning (continuing education);
- ensuring adequate recruitment of candidates for the occupation of teacher, for all subjects and at all levels of education; and
- enhancing the attractiveness of vocational education and training, recruitment of people with vocational experience in other fields to the process of education and training.

These goals will be pursued among others under HC OP Priority III: “High quality of the education system” and Priority IX: “Development of education and competences in the regions”. Under Priority III, important teacher education and training activities are planned including:

- development and launch of studies as a core element of a coherent system of teacher education;
- development and implementation of uniform rules and procedures of accreditation of teacher training institutions applicable across Poland.

Teacher education and training activities are mainly (and directly) planned under Measure 3.3: “Improved quality of education” comprising two Sub-measures in this area with system projects and competition projects:

3.3.1. Effective teacher education and training system - system projects (implemented by MEN)

3.3.2 Effective teacher education and training system - competition projects

Competition projects in 2009 offered:

- Launch of new types of post-graduate courses training teachers of vocational subjects.
- Development and pilot implementation of vocational training programmes for teachers of vocational education in enterprises.

HC OP Priority IX: “Development of education and competences in the regions”, Measure 9.4: “Highly qualified personnel of the education system” supports teachers directly. It includes projects mainly aimed at adjusting the qualifications of the personnel of the education system, i.e., teachers and trainers of practical vocational education and administrative personnel, to requirements depending on the specificity of the region. The specificity is reflected among others in the strategic directions of development, the need for new qualifications due to technological and technical changes, changes in faculties of education, and changing demographics.

Teacher education and training in the Lifelong Learning Programme includes the Comenius programme which provides financial and substantive support for:

- partnership of European educational institutions (implementation of joint projects);
- teachers’ participation in vocational training;
- vocational training of prospective teachers (traineeships as assistants).

Methodological competences of teachers of vocational education in the area of application of modular curricula in schools are improved under the HC OP system project “System of support for schools and educational institutions implementing modular curricula of vocational education” (see Theme 8). The project will train over 300 trainers and experts on modular education who will provide advice to schools and institutions (CKP, CKU) on building and implementing modular curricula.

A large group of teachers and practitioners in the economy will be trained in 2010 for the purpose of separation of qualifications and development of new core curricula in the HC OP system project “Improvement of core curricula as a key to modernisation of vocational education”.

The modular approach is given preference by MPiPS in training for the unemployed and employees of public employment services, resulting in improvement of competences of

trainers and instructors of practical education. This is supported by HC OP (Measure 1.1: "System support of labour market institutions") projects:

- Project 1.5: Modernisation of the database of vocational qualification standards and modular training curricula (implementation period 2008 - 2010).
- Project 1.6: Modular training of employees of labour market institutions providing labour market services and vocational activation programmes (implementation period 2008 - 2010).
- Project 1.7: E-learning training offer for employees of labour market institutions (implementation period 2008 - 2010).
- Project 1.10: Training for the personnel of public employment services (implementation period 2008 - 2010).

Strengths and weaknesses

The main weakness of the existing system of further education and in-service training of teachers of vocational subjects is the lack of substantive support for teachers of vocational subjects in many sectors.

The operating concept of teacher in-service training institutions should change. The new concept should differentiate between voivodship (regional) public institutions and institutions managed by powiat (district) governments as well as the many private institutions. The training market abounds in similar teacher training courses offered by local government centres and private institutions owned by natural or legal persons.

In the current context of further education and training, it is almost impossible to provide substantive support to teachers of vocational subjects due to a shortage of sector specialists and methodology consultants.

Number of teachers of vocational subjects		
2006-2007	2007-2008	2008-2009
68,142	66,418	63,223
100.00%	97.47%	92.78%

According to the Table above, the ratio of vocational education consultants employed by regional teacher training centres to teachers of vocational subjects was 1 to **1,129** (56 consultants to 63,223 teachers) in the school year 2008/09.⁵⁷

According to the Table, the number of teachers of vocational subjects is decreasing: it has decreased by 7.22% in the past two years.

It should be stressed that in addition to teachers, the voivodship training system also supports school headmasters and employees of pedagogic supervision and school management authorities: they should be addressed with a wide offer of voivodship institutions, in particular to prepare school headmasters for:

- diagnosing the vocational and methodological skills of teachers of vocational education and planning teacher in-service training depending on the actual conditions in the school;
- analysing the needs of the school for development and cooperation with employers;
- adjusting individual vocational training plans of teachers to the process of change in school systems of vocational education;
- monitoring the process of vocational training of teachers.

Courses and other forms of training provided by voivodship institutions should be available only on request, for instance of the school superintendent (pursuant to the applicable procedure of coordinating such tasks with the managing authority) as a result of

⁵⁷ On the basis of MEN-DKZU materials, 2009.

exercised supervision and identified irregularities, or on request of the Marshal of the voivodship.

Example 1: Accreditation in the Polish Network of Modular Education

The Polish Network of Modular Education was established in February 2002 by initiative of the Personnel Education and In-Service Training Centre of the Institute for Sustainable Technologies - National Research Institute in Radom with the financial support of the Leonardo da Vinci pilot project "European Bank of Development of Modular Curricula and Educational Technologies - EMCET de Bank" and in communication with other European and Polish institutions. The project created a network called the "Polish Network of Modular Education" (PSKM). Its Programmatic Board was elected from among the founding members and is responsible for programming, organisation and coordination of the network according to the PSKM Charter. The Board appointed a Chair, two Deputy Chairs and Secretary of the Board from among its member; they represent PSKM in Poland and internationally.

In the second stage of development, in 2005-2007, PSKM implemented a Leonardo da Vinci EMCET2 pilot project enabling the development of regional networks of modular education in Poland (establishment of the Regional Silesian Network of Modular Education, RŚSKM), the formalisation of the operation of the European Modular Education Network ModENet, and the development of a model of cooperation between the Polish and the European network (www.emcet.net).

The EMCET2 pilot project developed a process of exchange of European and Polish experience in the area of modular education and learning and quality assurance of education services. The project improved a model of "peer accreditation" (initiated in the EMCET de Bank project) of institutions grouped in the Polish Network of Modular Education PSKM (currently around 100 members - vocational education and training institutions) and a model of accreditation of modular curricula of vocational education and training.

The accreditation model and procedures were developed for the needs of the Polish Network of Modular Education (PSKM). It is a "peer accreditation" of providers of modular education and training within the group of institutions organised in PSKM and RŚSKM. Under the proposed model, accreditation consists of processes and procedures whereby an authorised organisational unit (PSKM Accreditation Team) collects information about an institution (providing vocational education or training) or modular curriculum (of vocational education or training), analyses it and performs audits, and on this basis decides whether the institution or modular curriculum fulfil the criteria and can be given an accreditation certificate. Certificates are issued by PSKM.

The Accreditation Team of the Polish Network of Modular Education is appointed by the PSKM Programmatic Board. Its main task is to manage the accreditation process of institutions and modular curricula of vocational education and training, in particular:

- accept and review accreditation applications;
- appoint audit teams;
- perform final evaluation;
- grant and register accreditation certificates.

The PSKM Accreditation Representative (Head of the Accreditation Team) presents for signature of the Chair of the Programmatic Board a certificate (as per a set template) which confirms the fulfilment of the quality criteria by a modular curriculum or an institution providing modular education or training.

The adopted peer accreditation model is designed to create a "club of recognised quality" of institutions which develop and implement modular curricula; membership of the club is granted for up to 3 years following a voluntary audit of the quality criteria. An accreditation certificate can be regularly renewed (updated). Quality audits are performed by teams of highly qualified auditors recognised by the community, who are familiar with

the methodology of developing and implementing modular curricula in school and out-of-school systems.

The accreditation model provides reliable information that an educational institution offers modular curricula in line with methodological and substantive requirements. Accreditation enables clients to choose a training institution which provides knowledge and skills of adequate quality. Employers will most likely prefer graduates holding a diploma of a training institution which has faced the challenge of quality evaluation and received an accreditation certificate. It should be noted that in addition to validation, concessions and licences, accreditation is one of the external forms of quality assurance in education; an education/training curriculum or institution is at each time evaluated on the basis of specific requirements and standards. The institution self-evaluation form contains a range of criteria necessary to offer training services of quality required for effective competing on the European open market.

PSKM accreditation is part of HC OP system and regional projects developing a modular offer of vocational education and training, and network representatives are trainers and experts.

7. ENHANCING CREATIVITY AND INNOVATION

7.1. Creativity, innovation and entrepreneurship in VET

The document "Poland 2030: Development Challenges" is a green paper and constitutes the basis of the strategic Government document "Long-term National Development Strategy". The key factors of development listed in the document include:

- Conditions for fast growth of investments;
- Growing vocational activity and mobility of Poles (investment in human capital);
- Growth of productivity and innovation;
- Effective regional and social diffusion of development;
- Strengthening social capital and effectiveness of the state.⁵⁸

In the development of intellectual capital it is also key to identify synergies between the education system and the innovation system. On the one hand, an effective innovation system drives demand for high qualifications and increases the educational premium; on the other hand, the education system develops competences necessary to develop new innovative solutions and to absorb high technologies across the economy. In other words, structural change in the innovation and education system (intellectual capital) is a prerequisite of preparing employees for a knowledge-based economy.

Enhancing innovation and creativity, including entrepreneurship, at all levels of education and training is a priority direction of the EU policy by 2020 and also translates into the vocational education and training policy of Poland. This area is covered by the following programmes:

- Lifelong Learning Programme (LLP) including study visits of vocational education and training professionals (addressed to persons responsible for development of education and training policy at the local, regional, and national level), and Leonardo da Vinci innovation transfer projects and partnership projects. The Comenius programme measure "Mobility of school education personnel" gives the school personnel the opportunity to participate in European training aimed at:
 - improvement of knowledge and vocational qualifications;
 - introduction to modern and innovative pedagogic methodologies;
 - opportunity of establishing international cooperation with European educational institutions.
- Human Capital Operational Programme (HC OP, 2007-2013), in particular:
 - Priority III: "High quality of the education system" and the planned implementation of 100 innovative curricula, including entrepreneurship, mathematics and natural sciences, and technical subjects under the new core curricular of vocational education.
 - Priority IX: "Development of education and competences in the regions" providing for modernisation of the vocational education offer and its adjustment to the needs of the local and regional labour market, programmes of cooperation of schools and educational institutions providing vocational education with enterprises and labour market institutions, and equipping schools and educational institutions providing vocational education with teaching materials (including textbooks).
 - Priority II: "Development of human resources and adaptation potential of enterprises" (Measure 2.1.3: "Development of human resources by promoting knowledge, transfer and dissemination of innovations").
 - Priority IV: "Tertiary education and science" including the following objectives:
 - Adjustment of education to the needs of the economy and the labour market.

⁵⁸ Polska 2030. Wyzwania rozwojowe. (**Poland 2030: Development Challenges**) Kancelaria Prezesa Rady Ministrów. (**Office of the Prime Minister**). Program Operacyjny Pomoc Techniczna Ministrów (Ministers Technical Assistance Operational Programme), Warsaw, July 2009.

- Improving the quality of the educational offer of higher schools.
 - Enhancing the attractiveness of education in mathematics, natural sciences and technical sciences.
 - Improving the qualifications of personnel in the R&D sector.
- The Innovative Economy Operational Programme (IE OP, 2007-2013) supports creativity and innovation in vocational education and training; the OP objective is to develop the Polish economy on the basis of innovative enterprises.⁵⁹
 - The Seventh Framework Programme for Research and Technological Development (FP7) provides substantive support to development of innovation and creativity. It is the largest mechanism of funding and developing scientific research at the European level. It is a seven-year programme (2007-2013).⁶⁰ The programme is the main instrument of implementation of the strategic objective of making the EU the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion. The triangle of education, research and innovation is necessary to achieve this objective. The programme includes the following specific objectives:
 - supporting the whole range of international research and technological development activities;
 - enhancing excellence, dynamism and creativity of European research at the frontier of knowledge;
 - reinforcing the human potential in research and technology by providing improved education, training and better access to research infrastructures; stimulating intersectoral mobility, life-long training and career development;
 - encouraging closer dialogue between the science community and the citizens of Europe in order to improve citizens' confidence in science;
 - supporting broad application of results and dissemination of knowledge gained through research activities financed by public resources.

The implementation of changes proposed in the vocational education system by the Ministry of National Education in 2007-2013 will be possible thanks to financial support under HC OP. It will finance system and competition projects developing new quality standards for schools offering vocational education and adjusting vocational education to the qualification needs of the labour market. Support for creativity, innovation and entrepreneurship will in particular be offered in system projects:

- Improvement of core curricula as a key to modernisation of vocational education.
- Modernisation of examinations confirming vocational qualifications.
- Vocational school and a school of choice.
- Support system for schools and educational institutions implementing modular curricula of vocational education.
- Lifelong learning remote education implementation and dissemination system model.
- Development of a vocational counselling model and an online vocational education information system.

and competition projects:

- Launch of a new type of post-graduate courses preparing teachers of vocational subjects for the occupation.
- Adjustment of selected schools for traineeship of students prepared for the occupation of teacher.
- Development and pilot implementation of vocational training programmes for teachers of vocational education in enterprises.

⁵⁹ Innovative Economy Operational Programme:
http://www.poig.gov.pl/WstepDoFunduszyEuropejskich/Strony/o_poig.aspx

⁶⁰ National Contact Point for Research Programmes: <http://www.kpk.gov.pl/7pr/podstawy/index.html>

It should be noted that the European Parliament designated 2009 the Year of Creativity and Innovation. The programme of the Year in Poland (coordinated by MEN) included national and regional conferences with the intention that the education system is very interested in creating conditions for development of creativity and talents of youth by supporting innovative activities of schools and institutions.

The main innovations in the vocational education and training curricula include the creation of conditions for the implementation of a new generation of modular curricula linked directly to vocational tasks performed in the work environment and oriented at learning achievements. Creativity, innovation and entrepreneurship are supported by individual modules or subjects in vocational education curricula oriented at entrepreneurship in a given occupation or sector, e.g., construction, mechanical engineering, electronic engineering, information science, etc. Currently developed new core curricula of vocational education will also cover this area.

Innovation in vocational education is particularly supported by the offer of modular vocational training for the labour market recommended by the Ministry of Labour and Social Policy (MPIPS). Training providers have access to a database administered by MPIPS including the offer of modular vocational training curricula (357 training curricula) for different occupations needed in the economy and for employees of public employment services. The education services market also provides an e-learning training offer, which is gradually being developed. It is considered a "pedagogic innovation".⁶¹

The formation of entrepreneurial attitudes is complemented by classes offered by "School Career Centres" (SzOK) in vocational schools (an output of the MPIPS programme "First Job") and by "Academic Career Offices" (ABK) in higher schools. A major role is played by vocational counsellors in the vocational education system and vocational counsellors providing services within the Public Employment Services. These activities raise the awareness of students, the unemployed and job seekers about the importance of creativity, innovation and entrepreneurship in personal development, economic growth and employment. Counselling services also shape the ability to embrace change as well as creativity and problem solving skills as competences supporting innovation and applicable in different vocational and social contexts.

Strengths and weaknesses

The development of creativity, innovation and entrepreneurship in vocational education and training is favoured by the existing development policies of the state, education system decision makers and enterprises.

Despite much progress made in adjusting school education curricula, major further efforts are required in areas including: supporting the development of teacher competences, updating evaluation methods, introduction of new modes of organisation of education. The main challenge is to ensure that all students use innovative methodologies, including less privileged students, participating in vocational education and training, adult education and higher education.

It seems necessary to create organisational, legal and institutional conditions supporting and promoting innovation in the context of adjustments necessary in a fast changing world. It is important to ensure coordination, exchange of experience and best practice.

It is necessary to further raise the awareness of the general public about the importance of creativity, knowledge and flexibility in leading a wealthy and satisfying life at the time of

⁶¹ MPIPS database: <http://www.standardyviszkolenia.praca.gov.pl/index.action>

rapid technological changes and global integration, and to shape skills improving employability in all areas where creativity and innovation play a major role.

Example 1: New core curricula of vocational education, a system project of the Ministry of National Education

The system project “Improvement of core curricula as a key to modernisation of vocational education” is implemented in 2008-2013 under the Human Capital Operational Programme, Priority III: “High quality of education”, Measure 3.3.: “Improved quality of education”, Sub-measure 3.3.3: “Modernisation of the content and methods of education”. The Minister of National Education delegated the implementation of the project to the National Centre for Supporting Vocational and Continuing Education (KOWEZIU).⁶²

The main objective of the project is to improve the quality of vocational education by modernising and verifying the core curricula of education for an occupation in order to adjust them to the requirements of a knowledge-based economy in line with the planned changes of curricula and organisation of vocational education. The implementation of the project addresses the following needs:

- traditional vocational education at the post-lower secondary level is not adjusted to the requirements of a knowledge-based economy;
- the classification of occupations in vocational education must be verified and adjusted to the requirements of a knowledge-based economy;
- the content of education comprised by core and detailed curricula for occupations is updated too infrequently;
- vocational education is insufficiently well adjusted to labour market needs;
- the educational offer of vocational schools, practical education centres and continuing education centres must be made more attractive and correlated with labour market needs;
- many students have insufficiently well developed learning skills and habits of continuing vocational education and training;
- vocational schools unsatisfactorily well develop key competences (especially communication in foreign languages, mathematical competences and basic competences in natural sciences and technical sciences, as well as information sciences and entrepreneurship).

In order to achieve this goal, it is necessary to update and modernise the content of the core curricula. The project will engage an occupation expert and specialists from the economy, representatives of the Central Examination Board (CKE), Regional Examination Boards (OKE) and vocational schools. Project work will take into account the expectations of employers with regard to vocational school graduates. An individual’s employability on the labour market largely depends on the quality of education, including detailed curricula developed on the basis of core curricula. Improvement of the core curricula will have a major impact on the correspondence between education and the requirements of a knowledge-based economy, and will improve the quality of vocational education.

The hard outputs include among others the development of 100 curricula of education for an occupation on the basis of the new core curricula as well as 300 model curricula for specialties. In addition, training will be provided to the teams of experts involved in dividing occupations into qualifications, designing the core and detailed curricula of vocational education, in line with the National Qualifications Framework adopted in Poland.

⁶² Project information: <http://pokl.koweziu.edu.pl/>

7.2. Improving quality of teaching

Improving the quality of teaching is the key measure of reforms of vocational education and training undertaken in Poland. All the major strategies as well as HC OP (Priority III) approved by the Government refer to improving the quality of teaching and the application of innovative solutions in the educational process.

The documents of key relevance to innovation in vocational education and training are the National Strategic Reference Framework 2007-2013 and the Guidelines for implementation of innovative projects and transnational cooperation under the Human Capital Operational Project.⁶³ The Guidelines set out the rules of implementation of innovative projects co-financed by the European Social Fund under HC OP. The ESF supports promotion and policy mainstreaming of innovation as well as transnational and interregional activities, in particular through exchange of information, experience, outputs and best practice and by developing a complementary approach and coordinated or joint initiatives.

Innovation and transnational cooperation, relevant to the development of human resources, were supported by the EQUAL Community Initiative in Poland in 2004-2006. HC OP included implementation of projects of innovation and transnational cooperation under each HC OP Priority excluding transnational cooperation projects oriented at supporting local initiatives in rural areas under Priorities VI, VII, and IX. Under Priority X "Technical assistance", transnational cooperation can be implemented by competent institutions participating in the implementation of HC OP provided that such actions are in line with the objectives of Priority X. This solution will ensure that implementation is as flexible as possible while facilitating the application of innovative tools developed under HC OP and experience acquired in transnational cooperation.

The objective of innovative projects is to identify new, better and more effective problem solving methods in the areas supported by the ESF. There are two types of HC OP innovative projects:

- Innovative projects aimed at development, dissemination and policy mainstreaming of new solutions;
- Innovative projects not aimed at development of new products but at dissemination and policy mainstreaming of best practice / new solutions developed under other programmes or HC OP projects ("dissemination projects").

Implementation of innovative projects can produce solutions providing tools applicable at the local, regional, and national level. An innovative project may include a transnational component, e.g., adaptation of solutions implemented in other countries / regions and their dissemination.

The Managing Institution (Ministry of Regional Development - MRR) publishes a list of themes of innovative projects every two years on the basis of the evaluation of previously implemented projects and the evolving situation in the relevant areas of support.

Examples of HC OP innovative themes in the area "Education and Higher Schools"⁶⁴ include:

1) Solutions linking education and higher schools with the needs of the economy and the labour market:

- Developing methods of activating entrepreneurship of children and youth;
- Actions aimed at growing the interest of lower secondary and post-lower secondary school students in continuation of education in faculties of key importance to a knowledge-based economy;

⁶³ Wytyczne dotyczące innowacyjności i współpracy ponadnarodowej w ramach Programu Operacyjnego Kapitał Ludzki (**Guidelines for implementation of innovative projects and transnational cooperation under the Human Capital Operational Project**) prepared pursuant to Article 35.3.4c of the Development Policy Implementation Act of 6 December 2006 - Ustawa o zasadach prowadzenia polityki rozwoju (Dz. U. No. 227, item 1658, as amended).

⁶⁴ On the basis of Annex 1 to the document: "Wytyczne dotyczące innowacyjności i współpracy ponadnarodowej w ramach Programu Operacyjnego Kapitał Ludzki" (**Guidelines for implementation of innovative projects and transnational cooperation under the Human Capital Operational Project**). MRR, Warsaw, 1.04.2009.

- Supporting the acquisition of vocational qualifications by students of post-lower secondary schools offering general education;
 - Monitoring the careers of graduates in order to improve the quality of education and better adjust the educational offer to the needs of a knowledge-based economy and the requirements of the labour market;
 - Modernisation of the vocational education offer in connection with the needs of the local / regional labour market.
- 2) Lifelong learning:
- Teaching process oriented at learning achievements, including the development of competences of creative thinking, innovation and team work in students;
 - New models of lifelong learning, including integration of the existing models of continuing education.
- 3) Creative approach to teaching:
- Development of a system of innovation incentives for teachers developing new innovative curricula, teaching methods, techniques and tools;
 - Supporting students with individual educational needs;
 - Improvement of education methods and curricula and vocational education activation of non-typical target groups.
- 4) Activity of higher schools in other areas:
- Projects opening up higher schools to social activity and innovation and to access to knowledge accumulated within the higher school;
 - Solutions for commercial applications of research.
- 5) Improvement of specialty skills of persons children and youth education professionals employed in institutions and non-governmental organisations.
- 6) Preventing social pathologies by applying new methods in lower secondary and post-lower secondary education.

Strengths and weaknesses

An important contribution to promotion of creativity, innovation and entrepreneurship was made by the Polish team selected by the Polish Federation of Engineering Associations (NOT) participating in the vocational skills competition **EuroSkills2008**. Vocational skills competitions motivate young people for vocational education and training. EuroSkills promotes vocational skills in order to increase vocational social activity and the competitiveness of the economy. The competition in Poland was part of the implementation of the main objectives of the Copenhagen process - cooperation in vocational education and training. EuroSkills offers a unique opportunity to improve the image, quality, and attractiveness of vocational education. The EuroSkills competition in 2010 and after represents a new organisational challenge to the promotion of Polish vocational education on the European level. It seems that this requires a stronger involvement of MEN, MPiPS, MNiSW, MG and other ministries in order to create conditions of institutionalisation of the initiative in Poland and integration of the existing technical and vocational student olympics held in Poland.

Competitions of entrepreneurship knowledge and skills addressed to different age groups are very popular; they are regularly opened by foundations, professional associations, employer organisations, schools and higher schools, non-governmental organisations and others (see Example 2).

In connection with a draft Regulation concerning the admission to school use of pre-primary education curricula, school education curricula and textbooks (also applicable to curricula and textbooks in vocational education) and cancellation of admission, the Education System Act amended in 2009 introduces the general rule of delegating the new decision making competences with regard to such documents to teachers and school headmasters. According to the new Regulation, a teacher submits a proposed curriculum to

the headmaster, who asks the opinion of the teachers' meeting and may admit the curriculum to use in the school. The school headmaster is also responsible for inclusion of the core curricula of education for an occupation in the detailed curricula. The current regulations are thus amended substantively, not only by eliminating the central function of the Ministry of National Education in admission of curricula of education for an occupation and profiles of general vocational education; this also eliminates the requirement of asking for an opinion concerning the substance of new curricula, which cannot be simply replaced by an opinion of the headmaster and the teachers' meeting in the case of vocational and general vocational education. The question arises whether evaluation of a curriculum by colleagues of its author can be objective. Under existing regulations, an individual curriculum of education for an occupation or a profile prepared by a school for its own use must first be approved in an opinion of the school superintendent and, in the case of some occupations, an opinion of the relevant minister responsible for the occupation. In the case of a curriculum of education for a specialty (if such is allowed under the core curriculum), the opinion of the school subject team responsible for the occupation must be asked. In practice, schools generally use model curricula admitted every year to use in schools by the Minister of National Education as schools can rely on their quality; in addition, the cost of development is borne by the offering institution (MEN or other institution which has developed the curriculum of education for an occupation on its own initiative). A low percentage of schools in the vocational education system teach occupations by using curricula developed independently by the school itself. It is likely that the proportion will change in the future due to the implementation of ESF HC OP system and competition projects, but it will become apparent only in the school year 2012/2013 when the new core curricula of education for occupations are in force.

Development of vocational skills related to new technologies requires providers of vocational education and training to organise and conduct teaching under modular curricula, oriented at outputs, with the application of activating teaching methods like projects or simulation methods. The educational content is increasingly well integrated with the application of information and communication technologies. This has its implications to the development of innovative pedagogy.

The introduction of new specialties in vocational occupation resulting from economic developments and related labour market needs requires improvement of vocational and methodological skills of teachers of vocational education, including among others education in mechatronics following the addition of the occupations of Mechatronics Assembler and Mechatronics Technician to the classification of occupations for education. Education in mechatronics offers new methods of education and learning and opens up new vocational career opportunities. Mechatronics specialists are in demand in many specialty occupations in all sectors of the industry and the economy and in many areas of intelligent applications of machinery and equipment. However, technical higher schools do not educate mechatronics engineers. Vocational schools do not have specialists in plastics processing, robotics and many other vocational areas which determine new job occupations in companies. It is necessary to organise and improve skills of vocational school teachers and the skills of headmasters including management of new educational processes in vocational schools in the form of courses, workshops, training and seminars.

Research carried out by the Institute for Sustainable Technologies - National Research Institute under the Multiannual Programme PW-004 "Improvement of innovation development systems in production and operation in 2004-2008" identified topics related to modern technologies of production and operation in the generally available offer of modular curricula of vocational education. In particular, this concerns the "occupations of the future": Mechatronic Assembler, Electronic Assembler, Industrial Automation Assembler, Milling Machine Operator, Numerically Controlled Lathe Operator, Programme Process Engineer and Tool Setter, Mechatronic Technician, Medical Electronic Technician,

Environmental Engineering and Land Improvement Technician, Information Technology Technician, Electronics Technician, Computer Graphics Operator. Examples of training themes related to mechatronics include: "Pneumatic and electric pneumatic systems", "Hydraulic and electric hydraulic systems", "Microprocessor control", "Mechatronic equipment assembly", "Industrial mechatronic systems", "Mechatronic system maintenance and repair", "CAD, CAM, WOP assisted design". The implementation of such advanced training obviously requires the necessary standard of technical teaching equipment, which results in higher costs of training a specialist.

Example 1: Innovative curricula and education packages for vocational education

The project "Development of innovative curricula of vocational training" was prepared by the Vocational and Continuing Education Department of the Ministry of National Education and implemented in 2005-2008 with co-financing from the European Social Fund under the Human Resources Development Sectoral Operational Programme. The project included activities aimed at improvement of the quality of education with reference to labour market needs by developing innovative modular curricula. The objective of the project was to develop, promote and distribute modular curricula and education packages. MEN delegated the implementation of the project to the National Centre for Supporting Vocational and Continuing Education (KOWEziU), an institution with extensive experience in development of documentation for vocational education, including core curricula of education for an occupation, subject-based detailed curricula, modular detailed curricula, education packages and other documentation commissioned by the MEN Vocational Education Department, e.g., supplements to diplomas confirming vocational qualifications. The project developed 131 modular curricula of vocational education and 3,438 education packages for 185 occupations (54 modular curricula developed by KOWEziU and 131 modular curricula developed in the project).

Project promotion included 26 regional conferences organised and held across Poland. The goals of the conferences included dissemination of project outputs and applications of modular curricula and education packages in school practice among headmasters and teachers, practical and continuing education centres, and representatives of pedagogic supervision institutions. The conferences included presentations by representatives of the Ministry of National Education, representatives of the contractor, KOWEziU employees, authors of curricula and packages, and vocational educators. The participants of the regional conferences were introduced to the new education offer of the Ministry and received promotion materials developed in the project. The conferences gathered over 2,500 participants.

Modular curricula and education packages developed in the project were distributed in electronic format (CD and DVD) to school superintendents, practical and continuing education centres (CKP and CKU), Voluntary Labour Corps (OHP) and further training centres (ODiDZ). The packages can also be used in schools which provide vocational education according to subject-based curricula.

Vocational education requires significant investments, especially to develop and upgrade technical teaching infrastructure. In order to ensure the adequate quality of practical education of students and a good success rate at examinations confirming vocational qualifications on the basis of teaching infrastructure, equipment and machinery, according to the requirements set out in core curricula of education for an occupation, schools were gradually equipped in the project "Equipping CKU, CKP and vocational schools in vocational examination posts" co-financed by the European Social Fund in the total amount of PLM 133 million. At 31 December 2008, in part I and II of the project, 1,157 schools and institutions were equipped in examination posts.

7.3. Innovation-friendly institutions

The Polish Government is strongly in favour of creating conditions of development vocational education and training innovations in combination with development of key competences in the curricula. In this regard, special preference is given to competences of use of information and communication technologies as well as entrepreneurship competences. These are fundamental competences necessary for social, professional and economic life, as clearly reflected in the priorities, objectives and measures of the existing national education and development policies.

According to existing applicable regulations, public schools and institutions may conduct innovative and experimental activities (Regulation of the Minister of National Education and Sport of 9 April 2002, Dz.U. 15 May 2002).⁶⁵ **Innovation** means innovative curricula, organisational or methodological solutions aimed at improvement of the quality of work of the school. Pedagogic innovation in a school must be approved by the relevant local school superintendent. A **pedagogic experiment** means activities aimed at improving the effectiveness of education in the school, which modify the conditions, the organisation of education classes or the scope of teaching content, conducted under the supervision of a research institution. A pedagogic experiment is a specific type of "pedagogic innovation" with a broader scope of impact. An experiment in a school must be approved by the minister responsible for education. In the case of an experiment in education for an occupation, the minister responsible for education asks the opinion of the minister responsible for the occupation.

An innovation or experiment may start after the school has ensured the human resources and organisational resources necessary to plan experimental activities. An important requirement for an innovation or experiment is that the school or institution is granted additional funding from the budget or other sources, e.g., ESF projects. In addition, the managing authority should give written approval for financing the planned activities. Other specific requirements are set out in the Regulation.

In practice, introduction of pedagogic innovations addresses educational needs following changes on the labour market, extension of the educational offer, adjustment of education to changes resulting from progress of science and technology, students' interest in active participation in the creation and perception of arts, improvement of the quality of education. The topics of innovation are adjusted to the level of education and the type of school or institution. The objectives and concepts of actions implemented as pedagogic innovation are oriented at acquisition of new competences, development of interests, talents of children and youth, and better preparation for further education at next levels. Schools and institutions which implement innovations pursue educational goals including both the acquisition of new knowledge and skills by students as well as development of the students' personality and system of values, habits and attitudes.

The National Centre for Supporting Vocational and Continuing Education (KOWEziU)⁶⁶ supports innovation in vocational education. It is the central public institution of teacher in-service training of national scope acting pursuant to the Education System Act. The mission of the Centre is:

- to take actions supporting the quality of education according to the national education policy, in particular dissemination and support of lifelong learning;
- to support changes introduced in the education system by performing tasks in the area of vocational training of teachers of vocational education and adult education.

The specific tasks of the Centre include:

⁶⁵ Rozporządzenie Ministra Edukacji Narodowej i Sportu z dnia 9 kwietnia 2002 r. w sprawie warunków prowadzenia działalności innowacyjnej i eksperymentalnej przez publiczne szkoły i placówki (**Regulation of the Minister of National Education and Sport of 9 April 2002 concerning the conditions of innovative and experiments activities conducted by public schools and institutions**) (Dz. U. No. 56, item 506).

⁶⁶ KOWEziU: <http://www.koweziu.edu.pl>

- to identify and analyse educational needs of teachers of vocational education and teachers of schools for adults;
- to prepare national programmes of vocational training of teachers of vocational schools, teachers of schools for adults and vocational counsellors, to develop educational materials and to train personnel to implement the programmes;
- to implement national programmes of vocational training of teachers of public training institutions, teacher training centres and pedagogic supervision in the area of vocational and continuing education;
- to provide teachers with methodologies necessary to implement module curricula and education packages in vocational education and to disseminate this form of education;
- to develop, implement and promote innovative projects of vocational and continuing education including remote education;
- to organise and train methodology counsellors in vocational subjects;
- to create and develop a national system of pedagogic information in vocational and continuing training, including development of diagnostics, analytic and prognostic materials concerning preparation of teachers, development of databases and databanks;
- to monitor, inspire the development of materials and projects of system solutions for vocational education curricula and textbooks;
- to develop model curricula of education for an occupation, including modular curricula, and education packages, and to promote the concept of individual curricula of education for an occupation developed by schools;
- to maintain a library of curricula and textbooks admitted to use in schools;
- to inspire and coordinate actions aimed at improvement of the quality of work of teachers vocational and continuing education, etc.

The Centre offers the IT platforms “KOWEZIU Education Platform” and “Vocational Educator” which support further education and training of teachers of vocational education in areas related to creation of innovation.

The best method of teaching entrepreneurship is teaching through practice, in cooperation with the community of entrepreneurs. This concept is at the core of the activity of the Youth Entrepreneurship Foundation which prepares children and youth for life in a market economy and civic society. The programmes of the Foundation introduce young people to the rules of economics and business and allow them to master practical skills. They develop students' capacity of critical thinking, instil an active approach to life, teach creativity, effective communication, and team work. The Youth Entrepreneurship Foundation participates in Junior Achievement Worldwide, the oldest (established in 1919) and fastest growing global organisation of economic education for young people active in almost 100 countries. More than 1,624 thousand Polish students have participated in Foundation programmes. 664 thousand students participated in ten programmes of the Foundation in the school year 2006/2007. Particularly interesting is the programme “Young Enterprise” where students can take the international *Cambridge - Young Enterprise International Examination*, aimed at testing and evaluating practical skills and experience acquired in the enterprise. One month before the examination, students receive a case study (in Polish) of an actual enterprise operating in the United Kingdom. During the exam, students answer a set of questions about the case study and their own experience and problems encountered in the student enterprise. Students who pass the exam receive a certificate confirming their participation in the exam and acquired competences. Young people who create student enterprises can also participate in the National Young Enterprise Competition PRODUKCIK (the final round of the National Young Enterprise Competition in the school year 2006/2008 takes place on 31 May - 1 June 2007). In the final round, the jury evaluates the enterprise evaluation report, the enterprise presentation, the layout of its stand and its product. The winners of the National Competition receive the first prize and represent Poland in the European Company of the

Year Competition where young people from around 30 European countries compete with presentations of their enterprises.

The Polish Agency for Enterprise Development (PARP)⁶⁷ is a government agency operating pursuant to the Act of 9 November 2000 which defines the scope of tasks, the supervisory authorities, the rules of preparing annual work plans and reporting performance. The mission of PARP is to support entrepreneurship by implementing activities aimed at the application of innovative solutions by enterprises, development of human resources, expansion to foreign markets, regional development. These activities help to improve the competitive position of the Polish economy both on the European Union market and on the global market. PARP implements own projects oriented at promotion and development of innovative attitudes, projects, enterprises, including research and development (R&D) units, and stimulates the development of technology transfers. The PARP Supervisory Board oversees its activity. The Supervisory Board is composed of representatives of ministries most relevant to economic development: the Ministry of the Economy, the Ministry of Regional Development, the Ministry of Finance, and representatives of enterprise and employers organisations (Confederation of Polish Employers, Polish Confederation of Private Employers Lewiatan, Polish Craft Association, Polish Chamber of Commerce, and National Council of Trade and Service Associations). In addition, the PARP Supervisory Board includes a representative of regional government.

PARP publications and the output of its projects have been used by vocational education and training professionals for ten years.

The Agency focuses on stimulating and creating attitudes of entrepreneurship. In pursuing this mission, the Agency undertakes activities which support and develop the competitiveness of enterprises, human resources, institutions of the business community, and regions. In addition, the Agency performs research and analyses within its competences aimed at identification of needs of enterprises, in particular SMEs, in order to use them as input in developing proposals of actions for entrepreneurship, innovation, and development of human resources. PARP implements activities supporting international co-operation including Poland's participation in leading international and world exhibitions.

Strengths and weaknesses

In order to better adjust education to labour market needs and improve the employability of graduates, the Ministry of National Education introduces modular curricula and enters into agreements with employers organisations and chambers of commerce to implement practical vocational education. However, to ensure that modular curricula are broadly used, competences of teachers of vocational education must be improved with regard to innovative activating methods of teaching (e.g., project methodology, teaching by experience, simulation games).

By comparison with general education, vocational education is much less well supported by information and communication technologies (ICT). There is a lack of support in the form of teaching methods for most subjects of vocational education. The teacher education and training system insufficiently develops and disseminates innovative educational methods.

Effective integration of school and out-of-school education is possible if local governments (poviats) create sectoral vocational education centres on the basis of continuing education centres, practical education centres, and schools for youth and adults. Similar institutions operate in other EU countries. A centre could coordinate the work of member organisational units to ensure best possible utilisation of infrastructure, technical teaching equipment and human resources.

⁶⁷ Polish Agency for Enterprise Development: <http://www.parp.gov.pl/index/main/>

It is necessary to strengthen the role of vocational schools as local centres of pedagogic innovation, culture, continuing education, and civic activity. In this context, it is necessary to create and develop technical teaching infrastructure in combination with ICT systems. Key competences of students should be developed in order to ensure the employability of Polish graduates on the labour market. It is necessary to strengthen different forms of general and vocational education at all levels of education and to adjust them to changes on the labour market while preserving general development values. According to the education development strategy, students in the education process should acquire key competences including knowledge and skills (e.g., foreign languages, ICT, interpersonal skills, entrepreneurship) including practical skills.

A high quality of education requires good curricula which are continuously improved (but not in a revolutionary way). The content of school curricula is not yet adjusted to real needs of the 21st century mainly due to imperfect links between education and the economy and the labour market.

Improving the quality of vocational education requires building its prestige and preventing negative selection of students enrolling in vocational schools at all levels. It is also necessary to increase the status of practical vocational education, mainly through close cooperation with employers. This approach to vocational education will improve the chances of graduates on the labour market and help to adjust qualifications to the needs of specific job positions. It will also be supported by the development of modular curricula, which should be in the focus of vocational education and training in order to respond flexibly to the needs of the economy.

It is also necessary to more broadly use innovative and useful European experience and business experience of organisation and management as well as the experience of innovative enterprises.

Example 1. i-Lab

The innovation laboratory is an inspiring, innovative solution designed to transfer participants from everyday environment to an unconventional space of creative thinking and problem solving. i-Lab is a great tool supporting team work including planning, conflict management, organisational change, thought mapping, consensus, consultations and focus groups, training etc.

i-Labs have been used over the past years in training activities in the United Kingdom, Finland, Germany. A new stage of dissemination of innovation laboratories came with the Leonardo da Vinci pilot project UK/06/B/F/PP/162-564 *European i-Lab Competence Development Programme*⁶⁸ implemented by the Institute for Sustainable Technologies - National Research Institute (ITeE-PIB). In more than two years of cooperation (2006-2008), the project established Poland's first innovation laboratory at ITeE-PIB in Radom.

The i-Lab concept is based on the coexistence and interaction of three elements:

- Dedicated space;
- ICT;
- Facilitation techniques.

i-Labs are designed to give the participants a sense of joint efforts by working in a dedicated space that in no way resembles the regular working environment. i-Lab sessions include brainstorming, cooperation among participants, joint problem analysis (automatically generating feedback) as well as relaxation during sessions.

The methodology of team work in innovation laboratories is based on the long known method of brainstorming. The advantage of i-Lab solutions lies in specially designed computer software which support the brainstorming process. The tool supports sourcing and organisation of ideas and concepts and visualisation of all anonymous entries on the

⁶⁸ <http://www.ilab.eu.com/> - Link to the platform

screens of session participants. Sessions include both direct or remote participation (teleconferencing).

The special computer software used to record and process ideas is used as one of many useful work tools. It has many advantages:

- Group members do not have to wait in line in order to present ideas. Fast processing of ideas broadens the thinking of group members and gives them space for evaluation and coordination of actions.
- Software is used anonymously. This allows users to present ideas openly, against the grain of traditional hierarchies and degree of caution sometimes exercised in traditional meetings.
- Many ideas can be presented quickly to other users and recorded within a short time.

7.4. Encouraging partnership

The directions of change in vocational education proposed by the Ministry of National Education include the priority action of preparing young people for entry to the labour market by offering vocational education, in particular practical education, in collaboration with employers. Schools and workplaces are mutually complementary places of the acquisition of knowledge. Thanks to placements, young people can acquire skills and experience necessary to work in an enterprise. Their first contact with the world of production at the stage of education equips them with important assets necessary to enter the labour market successfully. However, this requires effective incentives for employers to collaborate with schools. Vocational education is an area of education directly related to the labour market. Therefore, the influence of employers on the process of vocational education should be integrated into planning, organisation, implementation and evaluation of the process in order to reduce to the minimum the gap between education and the labour market. In this regard, it is necessary to integrate school and out-of-school systems, to strengthen relations and cooperation between schools and the work environment by ensuring opportunities of practical education and traineeships, to invest in teachers-practitioners, to equip schools and institutions with technical teaching infrastructure, to promote best practice, and to identify incentive mechanisms activating the participation of representatives of the work environment in education.

Considering the special role played by employers in the process of vocational education, the Ministry of National Education has taken the initiative of entering into cooperation agreements with employer organisations, chambers of commerce and other non-governmental organisations to improve vocational education, especially practical education. The legal basis of such agreements is provided by the Education System Act (Article 70.6). The proposed scope of cooperation includes among others:

- development of networks of enterprises which offer practical education to students of schools providing vocational education;
- improvement of the quality of traineeships by developing standards of traineeships in occupations in collaboration between schools and employers or sector associations of employers;
- supporting schools by providing teaching equipment including modern teaching tools and materials;
- participation of employers in organising additional extramural classes for students of the last years of post-lower secondary schools which provide vocational education, improving their employability after graduation;
- vocational training of school teachers by employers.

This collaboration will create among others a network of enterprises of top education standards where students will be practically introduced to modern methods of management and work organisation as well as use and application of modern technologies, and teachers will have the opportunity to update their theoretical and practical knowledge. Employers will contribute additional teaching equipment to schools among

others by providing materials on implemented innovations and offered products and by providing their products to schools and practical education institutions to be used in practical education. Employers, employers organisations and other non-governmental organisations will participate in out-of-school education offered to students of the last years of schools providing vocational education in order to prepare them for seeking and finding jobs. Employer collaboration aimed at improving the quality of vocational education should prepare young people for work at a level appreciated by all employers and corresponding to the requirements of the European labour market.

Eleven agreements have been signed to date with employers organisations including: Polish Foundrymen's Association, Business Centre Club, Polish Craft Association, Polish Chamber of Road Engineering, Association of Polish Electrical Engineers, Confederation of Polish Employers, Polish Chamber of Commerce, Association of Polish Engineers and Mechanical Technicians, Gas Industry Chamber of Commerce, Construction Industry Chamber of Commerce, and National Council of Trade and Service Associations.

Similar agreements can be signed at the local level. In order to ensure practical vocational education of students, schools become more active by entering into cooperation agreements with employers recognised on the market. It is also an effective form of promoting the school in the local community, attracting better students and teachers. Students of schools which cooperate with employers improve their employability and can quickly adapt to a job. Employers can use the experience gained in collaboration with the school in training and development of own employees. Schools need to cooperate with employers in order to offer vocational education in a real work environment and to introduce students to the latest and most expensive technologies.

Actions are taken in order to incentivise employers for participation in the vocational education process, including financial mechanisms of support for employers cooperating with educational institutions in vocational training. These mechanisms include co-financing of the employers' cost of vocational education of young employees paid from the Labour Fund. Co-financing is available pursuant to Article 70b of the Education System Act and depends on the form and duration of education. In addition, local governments as school managing authorities receive from the state budget the educational segment of the general subsidy in order to finance school tasks including the management of post-lower secondary schools which provide vocational education including practical education for an occupation also out of schools directly at employers' enterprises.

In order to provide managing authorities with funds necessary for the implementation of tasks of vocational education, the P8 weight used in the distribution of the education segment of the general subsidy has been gradually increased from 0.15 to 0.17 in 2009 and 0.19 in 2010.

Strengths and weaknesses

Cooperation between schools and employers is increasingly effective year by year (as demonstrated by many examples) but it still faces some barriers. After all, cooperation is mutually beneficial as schools can adjust the content of education to the needs of enterprises and get access to modern techniques and technologies while employers have the opportunity of introducing their products as technological innovations and, in the long term, they can recruit highly qualified employees. Cooperation of education institutions, employers and social partners is necessary in order to ensure high quality of vocational education.

The still unsatisfactory cooperation of schools and institutions of vocational education with employers is stressed in studies, survey and research reports prepared for the purposes of the labour market and raised by the central and local governments, business and professional organisations. The problems mainly concern the implementation of practical education for a profession in the real work environment, the participation of employers in

the education and examination process, and investment in the development of the technical teaching infrastructure of schools adequate to the needs of employers.

It is very important that employers in different sectors participate in the development of a network of examination centres and in the work of examination boards. The participation of employers in such activities has been marginal.

It is necessary to develop new and lasting forms of support for the integration of research, business and culture communities at the regional and local level. Schools and higher schools in Poland, even the leading ones, are not sufficiently well integrated with their environment. Educational institutions should be bound by a legal obligation to appoint collegiate programmatic and advisory bodies (stakeholder councils, sponsor councils) working to ensure better synergies and cohesion between the pursued educational mission and the needs of local, regional, and national communities. Support including EU funds should be provided to all kinds of initiatives strengthening social networks and social capital at the cross-section of business, education, science and culture - joint initiatives, networking, clusters.

Consistent legal and organisational measures should be taken to change the existing status of teachers as defined by the Teachers' Charter and long practice. A teacher should be an authority, a coach and mentor for students; a partner in education and upbringing of children for parents; and a co-worker for other teachers. Real implementation of the new teacher model requires transformation of the teacher education, recruitment and induction system. Changes should be made in the forms of improvement of competences at the workplace (more practical and team activities) and incentive system tools (bonuses for education outputs).

The dominant form of adult education should change from that based on school methods of formal education to improved access to a range of non-formal and informal education. The two key drivers of effective adult education are good motivation for learning and knowledge available at the outset; hence, new methods of adult education must focus on utility of the content and its match with the learning style of the individual, which is often inflexible at this stage of life. The education process should include recognition and validation of competences acquired informally. Deregulation of the economy should curb the observed trend where investment in the development of competences considered crucial by employers (knowledge of products, markets, strategies) is subordinated to investment in the development of competences considered crucial by the state (knowledge of regulations). Support for training in enterprises should be mainly focused on the development of general competences and it should use the forms of learning available at the work place (self-learning, coaching at the work place, in-house training, mentoring, e-learning, m-learning).

Example 1: 14th edition of the Entrepreneurship, Finance and Management competition

The Polish-American Freedom Foundation and the Educational Enterprise Foundation in Łódź have opened the 14th edition of the Entrepreneurship, Finance and Management competition.

The mission of the competition is to promote integration of knowledge of management and finance and use of active teaching methods in education. The main objective is to verify knowledge and skills acquired in a higher school and to give the opportunity of their practical application. The specific objectives of the competition are as follows:

- To stimulate the capacity of selective use of information in making decisions towards a clearly defined economic objective;
- To integrate the factor of time in economic thinking, including both operational and strategic decisions;

- To demonstrate negotiating skills supported by adequate microeconomic argumentation taking into account a changing environment;
- To integrate the communities of students from different academic centres;
- To collect information on the quality of education.

The competition is open to teams of third-year students of MA courses in Economics and Management in a regular, single- or double-degree system. Each higher school can be represented by only one team. A team may consist of three to five students. The cost of board and bed during the competition is paid by the Educational Enterprise Foundation, the cost of travel is paid by the participants. The teams can review the tasks assigned in previous editions of the competition on the website www.fep.lodz.pl/pfiz.html.

Example 2 - National Innovation Network (KSU)

The National Innovation Network of the National Services Network (KSU)⁶⁹ is a group of providers of advisory services supporting innovation according to standards set out in the Regulation of the Minister of the Economy and Labour of 27 January 2005 concerning the National Services Network for Small and Medium-sized Enterprises. According to the new strategy of development of the National Services Network, the KSU National Innovation Network is to provide services in identified areas of innovation gaps on the market. Currently the services include:

- technology audits; and
- technology transfer processes including:
 - preparing a technology proposal or enquiry;
 - review of profiles of technology providers or users;
 - contacting technology providers or users;
 - advisory in implementing the technology, negotiating and executing an agreement between the technology provider and user;
 - monitoring implementation of the technology and performance of the agreement and other aspects of post-implementation assistance.

The service provision process is to be financed under Measure 5.2 of the Innovative Economy Operational Programme; initiatives aimed at ensuring the adequate qualifications of consultants, cooperation in the network, and improvement of the organisation's capacity of providing such services are to be financed under Sub-measure 2.2.1 of the Human Capital Operational Programme. The KSU National Innovation Network currently groups over 40 organisations. Other institutions of the business environment are interested to join the system.

⁶⁹ National Services Network for SMEs: <http://ksu.parp.gov.pl/pl>

8.1. Improving efficiency, equity, levels of VET funding

The main assumption of the system of financing education, including vocational education and training, is compliance with the constitutional principle of free education of children and youth up to 18 years of age in all public primary, lower secondary and post-lower secondary schools. The state budget also finances adult education in the school system.

Upon reactivation of local governments in 1990, work was started to develop a coherent system of financing education in Poland. Over nearly 20 years of modifications of the system, Polish research on education economy has developed a body of interesting studies based on Western concepts of learning economy. A financing system can be analysed at least in three dimensions:

- financing entities;
- procedures of defining the amount of financial transfers;
- the substantive scope of tasks financed from different sources.

Many entities participate in the Polish system of financing education. These include Polish and foreign, as well as public and private entities. According to the current legal situation, the central (state) budget remains the main party financing education. Central budget financing includes three instruments: the educational segment of the general subsidy, specific grants, and specific reserves. The general subsidy is the largest source of funding. With their limited scope of competences and occasional provision of funding, other entities play a secondary role complementary to that of the central budget. The section below describes these entities, both Polish and foreign.

Polish entities which provide funding complementary to that from the central budget include local governments at the gmina (municipal), powiat (district), and voivodship (regional) level. Local governments are the managing authorities of educational institutions and are responsible for their finance. However, local governments in Poland are very dependent on the financial condition of the central budget; consequently, their actual capacity of providing additional funding for the education system is insufficient to meet all expectations of the local community with regard to the scope and quality of education services. The other social partners of the central budget include legal persons other than local governments (e.g., non-governmental organisations: foundations and associations) and natural persons (e.g., parents of students who pay parent association fees). Their financial contribution is invaluable, but its impact is usually local in scope and depends on their industriousness and will to contribute extra funding towards a noble goal. While financing of education from such sources plays a marginal role on the national scale, it may in the long term make a difference in terms of the chances and achievements of school students depending on where they live. The central budget is additionally supported by foreign entities including the World Bank and the European Funds (education programmes: Socrates, Leonardo da Vinci, Youth, LLL) and programmes of development of human resources in the context of the labour market (e.g., the Human Resources Development Sectoral Operational Programme - HRD SOP, the Human Capital Operational Programme - HC OP). Despite the high number of entities participating in the financing of the Polish educational system, they are not linked by a network of mutual relations codified in legal regulations. As a result, funding of some tasks is available from several sources while other activities lack sufficient funding.

Education tasks related to the management (and funding) of schools and education institutions by local governments are financed from the revenue of local governments. The revenue of local governments includes among others the education segment of the general subsidy. According to the Local Governments Revenue Act, the amount of the education segment of the general subsidy granted to each local government is set annually in the

Budget Act. The education subsidy is set for each calendar year and transferred to the local governments from the central budget. Due to the complex structure of education tasks implemented by local governments, the algorithm of distribution of the education subsidy comprises many factors and parameters, which represent the specificity of the components of the subsidy related to both school and out-of-school tasks. The algorithm of distribution of the education subsidy is modified annually on the basis of an analysis of economic indicators, which reflect the average cost of education and activity of schools and education institutions. The relations captured by the algorithm are based on solutions consistent with the principle that "funding follows the student", i.e., the subsidy is calculated on the basis of the number of students enrolled in schools and education institutions managed or financed by each gmina (municipality), powiat (district), and voivodship (region). Due to the scarcity of funding, most of the funds disbursed by local governments for education are used to finance obligatory expenses including salaries, social security contributions, and Labour Fund fees. These represent more than 85% of the total spending for education (86% in minas, 87% in powiats and voivodships). The average school has a very similar proportion of categories of spending. Table 1 presents the central budget spending according to the Budget Act for 2008 and 2009. The spending increased by 8.1%, a positive trend also for organisers of vocational education.

The 2010 Regulation concerning the mode of distribution of the education segment of the general subsidy for local governments (the Regulation was published on 28 December 2009, Dz. U. No. 222, item 1756, and come into force on 1 January 2010) increased the weight P_8 for vocational school students from 0.17 to 0.19. The change of the weight for students of vocational schools was justified by the high cost of education in such schools. It should be noted that modular curricula are currently being introduced in vocational education. Education based on such curricula is a modern form of education adjusted to the individual capacity of the student and actual labour market needs. Modular education is much more expensive as it requires small groups of students and high standards of technical teaching equipment at each post. Modular education significantly improves the effectiveness of the vocational education system.

In summary, the system of financing formal education in Poland is complex due to the complexity of the process of education. The Polish education system is diverse due to:

- the age of students (the target model of the 21st century is continuing lifelong learning);
- curricula offered by a wide range of institutions (institutions are diverse in terms of their organisation, facilities and infrastructure, location, faculty, etc.);
- diversity of managing authorities (ministries, local governments, other legal persons, natural persons), which frequently operate under different legal and financial regimes.

This situation is additionally complicated by the immense scale of transition as well as demographic problems of Poland.

Given the current situation of public finance, no prompt and significant improvement is expected in the amount of subsidies available to local governments, including district authorities which manage vocational schools. It is expected that the spending for education will increase substantially in the coming years, as provided in the government agenda, and consequently the amount of the education subsidy will increase, improving the level of funding and the operation of schools and education institutions, including vocational education.

Table 1. Central budget spending according to the Budget Act for 2008 and 2009, Sections 801 "Education" and 854 "Educational Care"

Section Division	Item	Budget Act [PLN'000]			
		Current spending	Capital expenditure	EU projects	TOTAL Plan (3+4+5)
1	2	3	4	5	6
2008 in total		33 449 644	77 520	391 039	33 918 203
801	EDUCATION	1 173 504	67 675	369 218	1 610 397
854	EDUCATIONAL CARE	213 737	9 845	21 821	245 403
82	EDUCATION SEGMENT OF GENERAL SUBSIDY	30 910 553	0	0	30 910 553
83	SPECIFIC RESERVES	1 151 850	0	0	1 151 850
2009 in total		36 134 979	50 558	80 183	36 265 720
801	EDUCATION	1 352 318	48 207	71 300	1 471 825
854	EDUCATIONAL CARE	240 841	2 351	8 883	252 075
82	EDUCATION SEGMENT OF GENERAL SUBSIDY	33 399 798	0	0	33 399 798
83	SPECIFIC RESERVES	1 142 022	0	0	1 142 022

Education in public schools for adults is free of charge. However, due to the financial shortage in public schools, non-personnel expenses may be subsidised by student associations. In schools with student associations, students pay voluntary fees to the associations (in an amount set by the associations). Education in non-public schools is tuition-based. Non-public schools with the rights of public schools receive a subsidy from the central budget. Out-of-school education is fee-based (e.g., fees for extramural examinations are based on the average monthly salary). Financing of continuing education is yet another issue. Funding may be provided by the central budget (mainly school education), enterprises (school and out-of-school education), students, foreign aid.

Continuing education of employees

The cost of development of qualifications and acquisition of new skills by employees can be paid from several different sources:

- fully paid by employees;
- fully paid by employers;
- partly paid by employees and partly paid by employers;
- fully or partly paid from the company training fund;⁷⁰
- from subsidies and co-financing.

The cost of continuing education of employees and employers may be partly or fully paid from the company training fund, which the company may establish by allocating at least 0.25% of the salary fund or making other contributions. An employer who has established a training fund may apply to the staroste (district executive) for reimbursement of the cost of employee training from the Labour Fund.⁷¹

1 Training funds are regulated under the Promotion of Employment and Labour Market Institutions Act (Ustawa z dnia 20 kwietnia 2004 r. o promocji zatrudnienia i instytucjach rynku pracy, Dz. U. from 2008, No. 69, item 415, as amended).

2 The conditions of reimbursement of the cost of employee training by the staroste are set out in Article 69 of the Promotion of Employment and Labour Market Institutions Act of 20 April 2004 (Dz. U. from 2008, No. 69, item 415, as amended). Under the Act, the Minister responsible for labour may set out in a regulation the specific conditions of reimbursement of

An enterprise which has a company training fund and is coping with temporary financial problems due to the economic crisis may apply for co-financing of the cost of training (up to 6 months) and post-graduate courses (up to 12 months) of employees by the Labour Fund (Article 22 of the Law of 1 July 2009 concerning alleviating the impact of the economic crisis on employees and enterprises, Dz. U. No. 125, item 1035, and Regulation of the Minister of Labour and Social Policy of 24 August 2009 concerning specific conditions of co-financing the cost of training and post-graduate courses by the Labour Fund and specific conditions of financing scholarships and social security contributions, Dz. U. No. 136, item 1119).

In addition, the Labour Fund covers the cost of activation of the unemployed and other beneficiaries registered in the poviát labour office through training, traineeships, vocational training of adults, and post-graduate courses (Promotion of Employment and Labour Market Institutions Act of 20 April 2004, Dz. U. from 2008, No. 69, item 415, as amended).

If an employer offers education to people with disabilities, the employer may apply for funding of such education from the National Rehabilitation Fund for the Disabled (PFRON). The reimbursement of the cost of training of people with disabilities is regulated by the Vocational and Social Rehabilitation and Employment of People with Disabilities Act, Dz. U. from 2008, No. 14, item 92, as amended, and Regulation of the Minister of Labour and Social Policy concerning the conditions and mode of refunding the cost of training of employees with disabilities, Dz. U. from 2008, No. 18, item 116. An employer may apply to PFRON for co-financing of the improvement of qualifications of employees with disabilities, reimbursement of the cost of training of employees of disabilities related to a necessary change of the production profile, and reimbursement of the cost of training related to preparing persons with disabilities for work on the open labour market or self-employment.

Polish employers may apply for co-financing of the cost of employee training by the European Union. Co-financing depends on the size of the enterprise, its financial standing, geographic location, and type of planned training. The legal basis is the Commission Regulation (EC) of 12 January 2010 No. 68/2001, as amended, on the application of Articles 87 and 88 of the EC Treaty to training aid.

The European Social Fund available under the Human Capital Operational Programme 2007-2013 is a particularly important source of funding for education. The objectives of the Programme include dissemination of education in society at every level of education while improving the quality of education services and strengthening their links with the needs of a knowledge-based economy; improving the level of professional activity and employability of the unemployed or vocationally inactive persons; reducing social exclusion; enhancing the adaptability of employees and enterprises to changes that take place in the economy.

Continuing education in vocational activation of the unemployed and other beneficiaries

Continuing education is provided by many different institutions of the labour market, including poviát labour offices which support vocational activation, mainly activation of the unemployed, by organising training, traineeships and vocational training of adults. The unemployed and other beneficiaries are referred to training organised by public

the cost of training as well as remuneration and social security contributions. The Regulation of the Minister of Labour and Social Policy concerning reimbursement from the Labour Fund of the cost of training as well as remuneration and social security contributions for reimbursed remunerations (Dz. U. 2007, No. 93, item 625) was cancelled on 1 February 2009 and no new Regulation has been adopted.

employment services, including poviats labour offices. Training is offered on an individual basis and in groups.⁷²

The unemployed may participate in training without being referred by the poviats labour office. They may be granted a training loan by the staroste from the Labour Fund.

Traineeships consist in acquisition of practical skills by the unemployed necessary to do a specific job by working at the workplace but without having an employment contract with the employer. Poviats labour offices assist employers in selecting the adequate candidates for traineeship on the basis of traineeship programmes drawn up by the employers and their requirements with regard to education, vocational qualifications, as well psychological, physical and medical criteria.⁷³

Vocational training of adults is organised by poviats labour offices for the unemployed and other beneficiaries and is provided by employers. It includes practical learning of an occupation by adults or work training for adults. Practical learning of an occupation by adults is addressed mainly to the long-term unemployed who lack the adequate vocational qualifications. After practical training, the participant may take a journeyman exam or a qualification exam in order to receive a vocational title.⁷⁴

Work training for adults is also addressed to persons with vocational qualifications which are partly obsolete and need to be upgraded. After work training and passing an examination, the participant receives a certificate of qualifications.

In addition, the unemployed may participate in post-graduate courses and the cost may be paid by the staroste from the Labour Fund. Financial assistance is conditional on justification of the need for a post-graduate course by the unemployed.⁷⁵

Strengths of financing vocational education and training

- Access to European funds generates demand and expands the vocational education and training offer for youth and adults.
- Modernisation of the vocational and continuing education system initiated by MEN is a good basis for improvement of the system of financing vocational education.
- The education subsidy transferred to local governments increased in 2008-2010. It is a very positive trend.
- The *Education Development Strategy 2007-2013* prepared by MEN, subsection *New Solutions for Financing Education* reads as follows:
 - A mixed system of financing education should be developed by combining the existing subsidy calculated on the basis of the number of students with educational standards (employment, equipment etc.) and task-based financing.
 - Mechanisms will be developed to effectively combine financing of continuing education from the central budget, local government budgets, and private funds (employers and users of education).

⁷² These forms of activation of the unemployed are considered continuing education and are provided by poviats labour offices under the Promotion of Employment and Labour Market Institutions Act (Dz. U. from 2008, No. 69, item 415, as amended)

⁷³ Specific guidelines are set out in the Regulation of the Minister of Labour and Social Policy of 20 August 2009 concerning specific conditions of traineeships for the unemployed (Dz. U. from 2009, No. 142, item 1160).

⁷⁴ Specific guidelines are set out in the Regulation of the Minister of Labour and Social Policy of 7 April 2009 concerning vocational training for adults (Dz. U. from 2009, No. 61, item 502).

⁷⁵ See: Promotion of Employment and Labour Market Institutions Act of 20 April 2004 (Dz. U. from 2008, No. 69, item 415, as amended).

- These plans should be the basis of specific actions aimed at introducing these elements to the practice of financing vocational education; these are presented in the first part of this study as examples of systems of financing vocational education in Europe.
- In continuing education offered by the Ministry of Labour and Social Policy, the cost of training of the unemployed depends on the training faculty (sector). This fixing model should be used in formal training.

Weaknesses of financing vocational education and training

- The lack of an LLL Strategy formally approved by the Government, which is a weakness in the context of the need to develop a coherent system of financing education for lifelong learning.
- The Polish education spending as a percentage of GDP ranks Poland much below the European average. According to a Cedefop report, the average education spending in Europe is 5% of the GDP, but in Poland public spending for education was 3.9% of GDP in 2007. The 2009 central budget spending for education is at 2.62% of GDP, less than in 2008 (2.64%). The global education subsidy as a percentage of GDP has been decreasing steadily from 2.9% in 2003 to 2.5% in 2006 and 2.4% in 2008.
- In the 1990s, when management of schools was transferred to local governments (gminas), Poland introduced a system of financing education through the education segment of the general subsidy. The current system has been largely in operation since 1999. Changes implemented after 1999 were aimed at approximating the system to the actual cost of education, but this was not always effective. As local governments competed for limited financing from the central budget, some amendments of the algorithm of calculating the subsidies deepened the inequalities in access to funding available for specific educational activities. Article 28.6 of the Local Governments Revenue Act provides that the “Minister responsible for education, upon the opinion of the minister responsible for public finance and of a representation of local governments, shall determine in a regulation the mode of distribution of the educational segment of the general subsidy to local governments, taking into account in particular the type and category of schools and institutions managed by the local governments, the vocational promotion degrees of teachers, and the number of students in the schools and institutions.” In the case of vocational schools, there is unfortunately only one weight (currently P8) which has been used for years with the designation “for students of post-lower secondary schools and post-primary schools which provide vocational education, including practical learning of an occupation.
- The algorithm of calculation of subsidies does not take into account the specificity of the costs of teaching of a sector or occupation. The current method of calculation of funding in particular does not differentiate among vocational schools depending on the core curricula, which are very different in different types of vocational schools and forms of education.
- The financing of educational activities through the education subsidy calculated as a flat rate per student does not account for costs depending on the type or category of school. This is the main weakness of the current form of financing: funds are granted per student but spent per class. Hence the different opinions on the financial implications of salary raises for teachers. The statistics of the education subsidy demonstrate a clear increase of the subsidy per student, but local governments do not benefit from this money; even if a student brings in more money for the school budget, the number of students per class is decreasing while the number of classes is not. And even if the number of classes decreases, the decrease is less fast than that of the average number of students per class; after all, the overhead costs of schools are not decreasing (administrative personnel and support costs, maintenance expenses).

- Vocational education requires significant capital expenditures, in particular for the development and modernisation of the technical teaching infrastructure. There is a shortage of local government funding available for investment in modern machinery and equipment in vocational schools.
- The barriers in relationships between schools and employers should be overcome and employers should be actively involved in the education of their future employees, including investment in modern machinery and equipment in schools.
- The Polish labour market policy is not effective. While employers pay a contribution of 2.45% per employee and thus finance more than 90% of the Labour Fund, only a few percent of all employers use labour market services. Labour offices focus on registration of the unemployed rather than their activation. A thorough reform is necessary in this field in order to ensure that the Labour Fund really supports employees and employers.

Example 1: Analysing the effectiveness of the training fund as a statutory instrument supporting continuing education

A research project entitled “Analysing the effectiveness of the training fund as a statutory instrument supporting continuing education” was carried out by initiative of MPiPS in 2005-2006.⁷⁶ The project was implemented under the Human Resources Development Sectoral Operational Programme 2004-2006 co-financed by the European Social Fund. The project was conducted by the Institute of Labour and Social Studies (IPISS)⁷⁷ between March and November 2006.

The objective of the project was to diagnose the practical utility of the training fund as one of the human resources development instruments enshrined in the Promotion of Employment and Labour Market Institutions Act of 20 April 2004. The intention of the legislator was to support employers in their efforts to improve the vocational qualifications of employees in order to retain employment.

The research project indicated that the training fund was used at a very low level: the population of employers who used the instrument in Poland was notional (only 4.2% of the total number of surveyed enterprises reported that they have a company training fund established pursuant to the Promotion of Employment and Labour Market Institutions Act of 20 April 2004). However, employers contributed a range of comments concerning some aspects of continuing education in general and company training funds in particular. The comments and observations of those respondents willing to establish a fund were used to prepare recommendations for improvement of the effectiveness of the company training fund as an instrument supporting continuing education.

The survey produced a range of recommendations for improvement of the use of the training fund as an instrument of human resources development.

The outcome of the survey confirmed the general conviction of the low level of utilisation of the training fund: the population of employers who used the instrument in Poland was notional. Among the surveyed employers, 55.8% had no knowledge of the rules of establishing and using company training funds. The majority of them (85%) did not establish a training fund; over 70% of the respondents were not planning to establish a training fund. Only 16 of the 380 surveyed employers (i.e., 4.2% of the total respondents) reported that they have a company training fund established pursuant to the Promotion of Employment and Labour Market Institutions Act of 20 April 2004. It should be noted that out of the 380 surveyed companies, 33 employers established a training fund on their own

⁷⁶ <http://www.mpips.gov.pl/index.php?gid=1000>

⁷⁷ The project was implemented by a research team comprised of: Dr Iwona Kukulak-Dolata, Dr Halina Sobocka-Szczapa, Iwona Poliwczak MA, and Łukasz Arendt MA. The team head was Dr Elżbieta Kryńska.

initiative before 2004, under regulations other than the provisions of the Promotion of Employment and Labour Market Institutions Act.

None of the 16 identified employers who established a company training fund used subsidies from the Labour Fund, which means that the instrument was not used within the meaning of the Law. Employers finance employee training mainly from own funds and sometimes from subsidies (assistance funds). In interviews, the respondents mentioned the complexity and long duration of statutory procedures and their concern with multiple audits as the main obstacle in their relations with the labour office. In general, employers have a low opinion of state aid meant to support continuing education of employees.

The report contains a lot of interesting data about the quality of human capital in the surveyed enterprises and the methods of its improvement. In the opinion of most employers, employees have qualifications adequate to the needs of the company. The main shortcomings include a shortage of technical and specialty expertise (8.4% of indications), a shortage of vocational practice, experience and manual skills (7.4%), a shortage of creativity, autonomy, decision-making capacity and commitment to work (6.1% of indications). Most employers prepare company training plans but 44.8% of respondents do not prepare plans. Only 11.2% of the surveyed respondents co-operated with labour offices in educating their employees. This consisted in training of the unemployed - potential job candidates according to needs, reporting job vacancies to the labour office, reimbursement of the cost of employee training, employers' receipt of information on training offered by training institutions. The research indicated that the training process in companies is generally not tied to the company's development strategy. Only around 40% of employers initiate employee training. More than one half of employers finance employee training but they have little knowledge of the opportunities of financing from other sources.

The main financing recommendations include:

- Activities increasing the interest of companies in continuing training of employers and employees, despite their multiple directions, should be primarily focused on reducing the cost of training incurred by employers. In general, solutions should be proposed aimed at increased co-financing of such activities in order to encourage employers to establish and use a company training fund in the company's HR policy.
- On the basis of employers' opinions, solutions should be recommended aimed at tying the company training fund with the tax system by way of tax credits and/or tax reliefs already at the stage of establishing a fund and additionally at the stage of using the fund.

In summary, it is important to make efforts aimed at improving the operation of the company training fund because this instrument is very useful even now and its usefulness will only increase with time.

8.2. Use of Lifelong Learning Programme funds

The Lifelong Learning Programme is a European Union programme of vocational education and training in 2007-2013. The objective of the programme is to develop different forms of lifelong learning by supporting co-operation between education and training systems in the participating countries.⁷⁸

The programme should contribute to improvement of the quality and attractiveness of vocational education and training in Europe. The Lifelong Learning Programme currently comprises four sectoral programmes (Erasmus, Leonardo da Vinci, Comenius, Grundtvig), one transversal programme, and the Jean Monnet programme.

⁷⁸ Information on the LLL Programme: <http://llp.org.pl/o-programie>

In 2008, 542 project applications were filed, including 406 exchange and internship projects, 113 partnership projects, and 23 innovation transfer projects. Of those, 153 exchange and internship projects, 14 innovation transfer projects, and 46 partnership projects were approved, including 8 projects co-ordinated by Polish institutions. The co-financing available for the approved projects totalled EUR 14,954,961 (mobility projects EUR 10,302,156, innovation transfer projects EUR 3,722,805, partnership projects EUR 930,000). This amount does not include the budget for financing preparatory visits. The total amount available in the 2008 competition of the Leonardo da Vinci programme in Poland is EUR 15,052,000. The highest number of projects was implemented by institutions from the regions of Śląskie (28), Mazowieckie (26), and Świętokrzyskie (18).⁷⁹

In 2009, 733 project applications were filed, including 570 mobility projects, 120 partnership projects, and 43 innovation transfer projects. Of those, 149 exchange and internship projects, 15 innovation transfer projects, and 58 partnership projects were approved, including 18 projects co-ordinated by Polish institutions. (These figures changed in the contracting process). The co-financing available for the projects in 2009 totalled EUR 15,948,957 (mobility projects EUR 10,948,395, innovation transfer projects EUR 4,149,560, partnership projects EUR 1,187,000). The amount does not include the budget for financing preparatory visits. The highest number of projects was implemented by institutions from the regions of Śląskie (40), Mazowieckie (35), and Małopolskie (30).⁸⁰

Strengths of the LLL Programme

- Contribution to the dissemination of lifelong learning concepts.
- An important strength of the LLL Programme is that the available subsidies (co-financing) are an additional source of funding for implementing institutions. Each institution may use the money available from the structural funds for necessary investments (which of course have to be in line with the project assumptions).
- The LLL Programme has a very positive impact on the development of vocational education and training organisations and the improvement of their competitiveness on the education services market.
- It is an important strength that the assistance from the LLL Programme is addressed to a broad group of beneficiaries. Each beneficiary may apply for co-financing of projects in different areas.
- The interest of potential beneficiaries in projects is increasing steadily, as demonstrated by the number of submitted applications in subsequent years of implementation of the Programme in Poland.
- It is possible to apply for Certificates for Mobility for projects (as of 2009), confirming that the organisation has the experience and capacity necessary to implement high quality projects. A certificate facilitates application for co-financing for other projects.
- Increasing intellectual capital of the individuals and institutions participating in the LLL Programme.

Weaknesses of the LLL Programme

- It is necessary to improve the evaluation of the output of the LLL Programme at the national level and integrate the most effective solutions into the system.
- There is a persisting language barrier, especially in innovation transfer projects and partnership projects.

⁷⁹ LdV Projects Library 2008: http://leonardo.org.pl/s/p/artykuly/7/7/Kompendium_2008.pdf

⁸⁰ LdV Projects Library 2009: http://leonardo.org.pl/s/p/wspolne/kompendium2009_www.pdf

- Vocational schools and educational institutions (CKU, CKP) lack a legal personality, which is a barrier to independent application for projects, although the biggest beneficiary group is that of vocational schools, centres and organisations involved in vocational education and training.
- The interest of labour market partners (employers organisations, enterprises, professional associations) in the programme is relatively low, among others due to lack of application skills and the requirement of making a financial contribution.
- Low interest of institutions implementing projects (innovation transfer and partnership projects) in commercial application of results.

Example 1: Traineeship in enterprises for individual applicants

In a 2009 pilot action “Traineeships in enterprises for individual applicants”, the Foundation for the Development of the Education System (FRSE, the National Agency) opened a competition for an additional action: traineeships in foreign enterprises for individual applicants as part of initial vocational education.⁸¹

The pilot was open to people already in the process of vocational education (who had completed or were in the process of theoretical education and were also participating in practical training in craft establishments or were at the final stage of education in vocational schools) who already had some vocational qualifications (students of the last years of vocational schools, young journeymen).

The pilot covered the following sectors: construction, food, wood, artisanship, services, mechanical engineering, including among others: Plumber, Electrical Fitter, Vehicle Mechanic, Confectioner, Baker, Cook, Pork-butcher, Hairdresser, Goldsmith/Jeweller, Artisan, Carpenter, Parquet Layer.

The pilot allowed individual applicants to participate in foreign vocational traineeships tailored to their individual vocational development needs and the requirements in the current workplace, and sensitivised the employers of the beneficiaries (craftsmen, small and medium-sized enterprises) to company gains resulting from improved vocational qualifications of young employees including acquisition of practical experience in a foreign enterprise of a similar profile.

The action gave preference to traineeships in enterprises with a duration of around 5 weeks as such a period could ensure the attainment of the goals of internship, including improvement of practical skills and work experience in a different environment / organisational culture. In justified cases, shorter traineeships (but not shorter than 3 weeks) and longer internships (not longer than 10 weeks) were also financed.

Traineeships could be completed in all EU Member States. The host institutions were social partners: crafts associations, professional organisations, vocational and practical education centres, and the target group of small and medium-sized enterprises (including crafts establishments) in Germany, France, Italy, Spain, Denmark, Finland, and Ireland, operating in the following sectors and industries: construction, wood, machinery, catering, services, artisanship. It should be mentioned that language training and culture induction were an obligatory part of the traineeships project for each beneficiary. The language and culture induction was assigned a flat-rate budget of EUR 200 per person. Induction could be provided on an individual basis as well as in smaller or bigger groups. The intermediary organisation could organise classes for a bigger group of beneficiaries in a region if they matched the topics and the dates of internships.

The traineeship programme has to be agreed by the beneficiary and the employer or training institution (it had to be aligned with needs) as well as the host organisation in order to avoid a clash between the expectations of candidates and the actual capacity of

⁸¹ Link: <http://leonardo.org.pl/index.php/ida/89/>

the host enterprise. The arrangements could be made on an individual basis by candidates or via the intermediary institution.

After traineeships, the beneficiary received a certificate from the host institution. The certificate presents the start and end date of the internship and a brief description of the traineeships. The certificate is accompanied by the actual programme of the traineeships. The National Agency recommends that the employer applies for confirmation of the qualifications acquired by the employee and for a EUROPASS-Mobility from the National Europass Centre.

The action provided funding to 71 trainees.

8.3. Use of other EU funds

The Ministry of Regional Development is the main co-ordinator of EU funds in Poland. Poland disbursed 101.3% of the budget available in 2004-2006; the 2007-2013 budget totals nearly EUR 67 billion. According to statistics, Poland ranks second after Germany in applying for funding in the financial perspective 2007-2013. Poland is one of the 12 EU Member States (among all 27) to have applied to the Commission for payments under all operational programmes (Poland has no less than 21 OPs). This is good news for the Polish economy as the “anti-crisis potential” of EU membership can be fully tapped.⁸²

The Human Capital Operational Programme offers most opportunities of co-financing education projects. The Programme has 10 Priorities implemented both at the national and the regional level.

Funding of education infrastructure is mainly available under the Regional Operational Programmes (ROP). Polish beneficiaries may also apply for international funds available under the above mentioned programmes including the Lifelong Learning Programme and the Transborder Co-operation Programmes of European Territorial Co-operation.

Nearly EUR 3.4 billion was allocated to education under the Human Capital Operational Programme (HC OP) and the Regional Operational Programmes (ROP) in 2007-2013.

In 2009, for the first time, major progress was made in the implementation of HC OP.⁸³ It should be noted that the degree of implementation of the monitoring indicators of most Priorities increased in close correlation with the degree of the use of funds. This was particularly true of progress made in the Regional Component of HC OP. The situation was different in the Central Component of HC OP. While the degree of contracting was satisfactory, the disbursement process was much slower, which affected productive performance. The implementation of employment projects, especially Priority VI: “Labour market open for all”, was the most advanced in 2009, as in 2008. The highest increase was reported in the number of persons granted funds to enable self-employment: over 54.8 thousand at the end of 2009, nearly 55% of the target. The implementation of the indicator of key employees of the public employment services who have completed training in the out-of-school system was also very high (ca. 52% of the target). The implementation of Priority I was much slower; the best performance was reported for the indicator of the number of public employment service institutions participating in projects aimed at the implementation of service standards (ca. 29% of the target).

Concerning the adaptability of employees and enterprises, significant progress was made in the Regional Component, in particular with regard to indicators of the number of trained employees (over 36%); however, the indicator of the number of supported enterprises remained very low (1.6% of the target), which requires a thorough investigation of the reasons and implementation of adequate corrective measures. Interestingly, the

⁸² Ministry of Regional Development – European Funds:

http://www.mrr.gov.pl/fundusze/fundusze_europejskie/strony/funduszeuropejskie.aspx

⁸³ HC OP Periodic Implementation Report (December 2009).

http://www.efs.gov.pl/AnalizyRaportyPodsumowania/poziom/Documents/Sprawozdanie_okresowe_Iipolrocze_09_2.pdf

implementation of the same indicator in the Central Component was much higher (over 37% of the target value). Concerning education projects, the implementation of indicators of Priority IX improved significantly. The best performance was reported for indicators of supported pre-primary educational institutions (72%), grassroots social initiatives (84%), and vocational schools and educational institutions which implemented development programmes (39%). The implementation level of most indicators of Priority III was very low; 5 of the indicators have not been implemented to date. The best progress was made in the number of core curricula reviewed at the level of primary, lower secondary and post-lower secondary education in order to better match labour market needs: the degree of implementation was over 28% of the target.

In 2009, out of all formally correct applications, 26,655 applications were approved in substantive verification, totalling nearly PLN 25.9 billion in value. Substantive verification of 9,099 applications, totalling over PLN 6.4 billion in value, is still in process. In the Central Component, 2,135 applications were approved, totalling nearly PLN 10.7 billion in value (the Central Component mainly comprises high-value system projects). In the Regional Component, 24,439 applications were approved, totalling nearly PLN 14.7 billion in value (the Regional Component comprises projects in all regions). In addition, under Priority X: "Technical assistance", 81 applications were approved, totalling over PLN 508.9 million in value.⁸⁴

In 2007-2013, under the Innovative Economy Operational Programme (IE OP), enterprises, business environment institutions, science and research institutions, and public administration institutions will receive support in the amount of more than EUR 9.71 billion for the implementation of many different projects improving the innovativeness of the Polish economy and Polish enterprises. Of this amount, EUR 8.25 billion is contributed by the European Regional Development Fund (ERDF) and the remaining EUR 1.46 billion by the Polish budget. The programme comprises vocational education and training issues.

Among others, IE OP Measure 12: "Enhancement of human resources of science" implements the following programmes:

TEAM Programme - support for projects with the participation of BA, MA, PhD and post-PhD students in the leading research teams in Poland;

International Phd Projects Programme - support for institutions which co-operate with foreign partners in PhD courses;

VENTURES Programme - support for application projects with applications in the economy implemented by BA, MA and PhD students and graduates;

WELCOME Programme - support for projects implemented by prominent foreign researchers who have established research teams in Polish research institutions;

POMOST Programme - grants for parents returning to jobs in research and for pregnant women researchers;

HOMING PLUS Programme - subsidies for young researchers as an incentive to start research work in Poland.

Strengths and weaknesses

Structural policy financed by the ESF in the financial perspectives 2004-2006 and 2007-2013 is a modernisation endeavour unprecedented in the history of Poland. It is unique both due to the scale of available funds and the scope of planned and implemented measures. The importance of the endeavour is reflected in public debates. The management of structural funds has been one of the most frequently and vividly discussed issues of the past years. Special attention of the media, commentators and opinion leaders is for obvious reasons focused on large infrastructure investments and, in the context of

⁸⁴ MRR monthly report at 1 February 2010.

the current economic slow-down, on instruments which are anti-crisis measures. However, the structural funds cover a very broad range of measures implemented in the context of a lively public debate; they play an invaluable role in the successful implementation of the strategic vision outlined in the National Development Plan and the National Strategic Reference Framework.

Indeed, European funds have opened a new chapter in the development of the Polish education service market. In the 1990s, prior to its accession to the European Union, Poland experienced a real boom in higher education. New higher schools emerged overnight in Poland. Recognised higher schools were flooded with enrolling students, they expanded and modernised their curricula, and opened new faculties in response to the new expectations in the economic environment. However, the 1990s also brought a crisis in vocational and continuing education, trapped within archaic structures oriented at education and training of human resources for large state-owned industrial establishments.

Everyone appreciates the advantages of the ESF. Many interesting projects would not have been possible without EU co-financing. The Human Capital Operational Programme has enabled higher schools to open new attractive faculties and specialties, which is particularly relevant in view of the current baby bust.

The Human Capital Operational Programme is also an opportunity to promote education in sciences: they are considered key to economic growth but have over the past years been much less attractive for candidates compared to the humanities and social sciences. The previous programming period (HRD SOP) did not offer as much to higher schools. Besides, higher schools were cautious about EU funding: they carefully compared necessary investments with future benefits, which seemed intangible to them. Schools rarely hired experts to monitor application opportunities and prepare projects. Higher schools preferred to use the services of consulting firms. Today things have changed: higher schools are willing to invest in experts who prepare and process grants.

Weaknesses include: formal requirements for applications, obligatory reporting, time-consuming process, strong competition, inflexibility of disbursement of received funds, obligatory own financial contribution, application writing skills, necessary knowledge of English, uncertainty of granting funds, lack of stability necessary for long-term plans of the organisation.

Example 1: Swiss-Polish Co-operation Programme

The Swiss-Polish Co-operation Programme was launched on 14 June 2007 (the date the Swiss Parliament granted financial assistance to Poland). It is based on a five-year commitment period and a ten-year disbursement period.⁸⁵

The first calls opened by the Ministry of Regional Development (MRR) in 2008 was very limited: one call was addressed to beneficiaries in only four regions, the other call was not an open call.

MRR opened the first call for proposals in the focus area "Regional development initiatives in peripheral or disadvantaged regions". The projects were implemented in selected regions: Lubelskie, Podkarpackie, Świętokrzyskie, and Małopolskie. Three activities were eligible for support. The first activity was "Development of the local entrepreneurship and agricultural processing for development of non-agricultural sources of income in rural areas" (e.g., employment support in small and medium-sized manufacturing enterprises, support for processing of environmental food and edible forestry products). The second activity was "Development of human resources, in particular related to youth and persons from agricultural areas that may be subject to social exclusion, including modern forms of vocational and continuous training" (e.g., consultancy on choosing a new occupation and obtaining new vocational qualifications, promotion of continuous education in rural areas

⁸⁵ Programme information: http://www.programszwajcarski.gov.pl/Informacje_Ogolne/Strony/Informacje.aspx

through the Internet, subsidising workplaces in small and medium-sized enterprises for employees from the former agricultural sector). The third eligible activity was "Development of networks, partnerships, social capital - support for non-governmental institutions and organisations engaging in rural development" (e.g., support for local initiatives promoting the region, in particular its products, services, culture and art).

In early January 2010, a call for proposals was opened under the Scholarship Fund as part of the Priority "Human and Social Development", focus area "Research and Development" of the Swiss-Polish Co-operation Programme. The aim of the Programme is to establish scientific partnerships, which will develop individual researchers' capacities (human capital); foster scientific progress and innovation (scientific prospects); and establish or enhance networks between researchers (networking).

The Fund is implemented in Poland by the Swiss institution CRUS: Rectors' Conference of the Swiss Universities.

The Scholarship Fund co-finances the following projects:

- Research fellowships of PhD students and junior researchers (PhD holders) from Poland to do research in Swiss institutions. Fellowships have a duration between 6 and 24 months. An average fellowship for a six-month period is CHF 25,000 in the first year and CHF 27,500 in the second year in the case of a PhD candidate and CHF 40,000 for post-docs. Additionally for instance travel costs may be reimbursed up to a limit. Fellowship researchers may participate in the VKHS course in Freiburg to prepare students for entrance examinations in Switzerland (the VKHS course is not mandatory).
- Visits of senior researchers from Poland or Switzerland to design and implement research projects, e.g., five-day visits to Switzerland or Poland with a maximum allowance of CHF 2,500.

Funding can support all academic disciplines. The call for proposals is open until 1 April 2010.

8.4. Improving VET governance

Education at the national level is governed by the Minister of National Education, who coordinates and implements the national education policy, partly supervises school superintendents (at the regional level), and co-operates with other authorities and organisational units. In the area of vocational education, the Minister of National Education co-operates with other ministers, including the Minister of the Economy, the Minister of Labour and Social Policy, the Minister of Health, the Minister of Culture, in defining specific rules of pedagogic supervision in different types of schools. In addition, in regulations and decisions, the Minister of National Education defines the legal framework of all educational institutions, including vocational education and training institutions.

Education in the 16 voivodships (regions) is governed by school superintendents, until recently appointed by the Minister of Education, now appointed by the voivode. Thus, school superintendents are exclusively regional administration officials reporting to the voivode, although they implement the policy of the Minister of Education. The main tasks of school superintendents include pedagogic supervision of schools and educational institutions, including private schools and institutions. The regional authorities manage regional schools and institutions, including medical schools and social worker schools, as well as public institutions of further education and in-service training of teachers, as well as pedagogic libraries.

In the 314 poviats (districts), upper secondary education (including vocational education) is governed by the starostes. This includes post-upper secondary schools and special schools (primary and secondary), sport schools and sport champion schools, Practical Education Centres (CKP), Continuing Education Centres (CKU), and psychology and pedagogy counselling centres. A school which provides education for an occupation or general vocational education should have a positive opinion of a school superintendent. Local governments maintain

registers of private schools and institutions within their competences. An entry in the register of some types of schools (e.g., medical and art schools) also requires a positive opinion of ministers responsible for these areas.

In the past years, the Ministry of National Education has been harmonising the education legislation with the new tasks of vocational education and training following the implementation of education reforms, life long learning concepts, and a knowledge-based economy. The new (and amended) laws did not concern vocational education and training directly, but they also have an impact on such schools. The Education Information System Act of 19 February 2004 has special relevance to the collection of data necessary for the implementation of the national education policy, improvement of the quality of education, and financing of education. The education information system includes the collection of data on schools and educational institutions, students, graduates, teachers and other staff, and on performance of the education obligation. Data are collected for all types of schools and institutions including vocational education. The Education System Act of 7 September 1991 has been amended by introducing new principles of providing material assistance to students. The amendment is particularly relevant to the vocational education system because students in such schools have less achievements (according to the scores of matriculation examinations in vocational secondary schools) and come from poorer families. Material assistance includes social benefits and awards for achievements.

Over this period, the Minister of National Education issued a range of regulations concerning governance of vocational education. The acts directly related to vocational education and training include among others regulations concerning the classification of occupations for vocational education, the core curricula of education for occupations, extramural examinations, the accreditation of schools and centres providing out-of-school continuing education, the conditions and mode of grading, classifying and promoting students and conducting tests and examinations in public schools, acquisition of vocational promotion grades by teachers, the rules of issuing and the templates of graduation certificates, official diplomas, and other school forms, teacher training institutions, public institutions of continuing education, public institutions of practical education, public centres of vocational further education and training, and exercising pedagogic supervision and evaluation of the quality of work of schools.

The competences of the Minister of National Education include defining occupations for which education can be provided in schools (on request of relevant ministers); the task of harmonising vocational education with the needs of the regional or local labour market derives directly from the statutory role of poviats local governments to which tasks are delegated in the area of post-lower secondary education, school and out-of-school continuing education, and implementation of the local labour market policy. Poviats local governments use instruments to influence the adjustment of the structure of education to the evolving economic and social (including demographic) conditions: they have the competence to define the network of schools, including vocational schools, and thus to decide about the structure of education in their relevant territory.

The same level of governance includes poviats labour offices and their consultation bodies: poviats employment councils. In defining the occupations for which a school will provide education, the headmaster of the school which provides vocational education, in communication with the managing authority of the school and upon asking the opinion of the school superintendent, shall also ask the opinion of a voivodship or poviats employment council.

The curriculum reform in vocational education allows for the introduction, at the end of the period of education in most occupations, of a specialty, that is short induction to a future job position or group of similar job positions. Vocational schools select specialties mainly with regard to the needs of the local labour market. The curriculum of a selected specialty of an occupation is prepared by the school curriculum team relevant for the occupation or is based on a curriculum proposed by MEN.

Considering the foregoing, schools and local governments as their managing authorities, as well as labour market institutions, should co-operate and take coherent actions aimed at harmonising the vocational education offer to the social and economic needs of the region in line with the directions of development set in regional strategies. In rationalising the network of schools and the faculties of vocational education, local governments may consider specific cultural conditions of the area and the education aspirations of the population.

The Education System Act amended in 2009 gives school headmasters the competence to approve curricula upon asking the opinion of the teachers' meeting. The school headmaster is responsible for accommodating the core curriculum of education for an occupation in the curriculum of the occupation. The new competence allows school headmasters to respond quickly to the needs of the work environment and to adjust the content of teaching and the curricular of vocational education.

Governance of vocational education and training will also be improved through system projects of the Ministry of National Education implemented under HC OP:

- Improvement of the education governance strategy at the regional and local level.
- Improvement of the system of collecting and analysing education system data including the development of the education information system.
- Research on the performance of the education system.

as well as actions aimed at modernisation of vocational education:

- Improvement of core curricula as a key to modernisation of vocational education.
- Support system for schools and educational institutions implementing modular curricula of vocational education.
- Development of a system of development and promotion of vocational skills.

Strengths and weaknesses

The main problem of the Polish labour market is the absence of a system of vocational education and development of qualifications and training of employees matched to the needs of the labour market. Poland does not have a continuing education system ensuring quick adaptation of qualifications and competences of employees to the needs of the labour market; in its absence, it is difficult to cope with structural unemployment and ensure competitiveness and innovation of Polish companies. Such a system is a precondition of building employment security on the labour market by strengthening the position of employees, and it is also a necessary condition of improving the competitiveness of the Polish economy. The universality of a continuing education system means that it should be open to provision of services to all participants: the unemployed, employees, and employers. The development of such a system on the basis of the current fees charged from employers (2.45% contribution to the Labour Fund) is a task for the administration in co-operation with economic operators.

The status quo in vocational education in Poland is as follows:

- Traditional vocational education at the post-lower secondary level is not matched to the requirements of a knowledge-based economy;
- The existing model of vocational education insufficiently accommodates the actual expectations of the labour market;
- The educational offer of vocational schools, CKP and CKU must be more attractive and correlated with the needs of the labour market;
- Many students do not have sufficiently well developed learning skills and the habit of continuing education and vocational development;
- Existing legal regulations provide a basis for implementation of modular curricula of education for occupations;
- Poland has not implemented modular curricula of vocational education widely in school practice;

- Actions aimed at implementation of modular curricula in school practice are taken by the most active school headmasters who look for innovative solutions;
- Lack of methodological and organisational support as a continuous process enabling schools and educational institutions to effectively prepare for implementation of modular curricula of education for occupations;
- No integrated information system is currently in operation, which would give access to a database of modular curricula and education packages as well as information on vocational education, in particular education based on modular curricula.

The following actions should be taken in the area of vocational education:

- Disseminate a model of vocational education, more effective than the traditional model, among educational institutions and local governments;
- Provide support as a continuous process enabling schools and educational institutions to effectively prepare for implementation of modular curricula of education for occupations;
- Acquire specialists and experts to support vocational schools and educational institutions in implementing modular curricula;
- Inspire and activate schools and institutions for implementation of modular curricula and education packages;
- Provide support to vocational teachers including methodologies of modular education, activating education methodologies, teaching output measurement, development of education packages;
- Fill the information gap concerning approved modular curricula of education for occupations and education packages.

Example 1. System of support for schools and educational institutions implementing modular curricula of vocational education

It is a system project of the Ministry of National Education implemented under Human Capital Operational Programme Priority III: “High quality of the education system”, Measure 3.3: “Improvement of the quality of education”, Submeasure 3.3.3: “Modernisation of curricula and methodologies of education” by the National Centre for Supporting Vocational and Continuing Education (KOWEziU) in 2009-2013.

The objectives of the project are:

- To develop a system of support for vocational schools, teachers, local governments, supervisory authorities preparing for widespread implementation of modular curricula according to the new directions of change in vocational education;
- To develop an integrated information technology system giving access to a database of modular curricula and education packages as well as information on vocational education, in particular education based on modular curricula.

The specific objectives:

- To train experts - human resources for the system of support for schools and institutions implementing modular curricula of vocational education;
- To develop manuals “How to implement modular curricula of vocational education” for managers of vocational schools and educational institutions, teachers, representatives of the managing and supervising authorities;
- To perform consultations of experts with faculty responsible for vocational education in schools and educational institutions implementing modular curricula of vocational education;
- To provide faculty of vocational schools and educational institutions with access to the integrated information technology system in the area of vocational education, in particular modular education;

- To promote the output of the project among teachers of vocational schools, representatives of managing and supervising authorities of schools, by organising conferences, publishing information in the Internet, publishing press articles;
- To verify tools and solutions necessary to develop a modular curriculum offer;
- To identify best practice of modular education.

The project is at an early stage of implementation.

It should be stressed that the project is a response to reported organisational, substantive and methodological problems encountered by vocational schools and educational institutions which provide vocational education using modular curricula in the context of a shortage of methodology consultants in vocational education. The project will develop a system of support for vocational schools, teachers, local governments and supervising authorities preparing for widespread implementation of modular curricula according to the new directions of change in vocational education.

Organisational support will be provided through consultations of headmasters of schools and directors of institutions, representatives of managing and supervising authorities with experts who will offer assistance in seeking optimum organisational solutions in implementation of modular education. Headmasters and representatives of managing and supervising authorities will find guidelines in the manuals "How to implement modular curricula of vocational education". Substantive support will consist in consultations of teachers of vocational education with experts and provision of manuals for 16 occupational groups. Information technology support is related with the implementation of an integrated information technology system in the area of modular education.

The implementation of the project will provide system support for schools and institutions in implementing modular curricula. The effectiveness of the implementation of innovative curricula will improve. In addition, conditions will be created for use of modular curricula developed in the project "Development of innovative curricula of vocational education" implemented under HRD SOP Measure 2.2 in 2006-2008. The project developed 131 modular curricula for education in occupations and 3,438 education packages. The curricula and packages on electronic media were distributed to 400 institutions.

The development of the model of organisational, substantive, methodological and information technology support for schools and educational institutions will help to increase the number of vocational schools and educational institutions implementing modular curricula of vocational education, facilitating the preparation of graduates for the labour market.

9. PROGRESS IN MODERNISING EUROPEAN VET SYSTEMS IN THE COPENHAGEN PROCESS AND PRIORITIES FOR FUTURE COOPERATION

9.1. Impact of European cooperation in VET on development of national VET policies

Impact of European cooperation on changes in the vocational education and training system

The main tool of financing and programming changes in vocational education and training as a result of implementation of the Copenhagen process is the Human Capital Operational Programme. The Programme has allocated 83% of Community funds, i.e., EUR 8.1 billion, for the implementation of the Lisbon Strategy in 2007 - 2013, including the Copenhagen process.⁸⁶

The goals of the Lisbon Strategy in education and training, including more investment in human capital through better education and skills, are reflected in the EU programme "Education and Training 2010". The Programme covers education and training at all levels and in all types of schools (including higher schools) and all non-formal and informal education and training. The Programme has the following strategic objectives:

1. Improving the quality and effectiveness of education.
2. Facilitating the access of all to education systems.
3. Opening-up education and training systems to the wider world.

The objectives of the programme "Education and Training 2010" are pursued by implementing one of the main objectives of HC OP: "Dissemination of education in society at every level of education while improving the quality of education services and their stronger links with the needs of a knowledge-based economy". The objective is pursued under Priorities III, IV and IX of the Human Capital Operational Programme.

Priority III: "High quality of the education system" has four specific objectives consistent with the objectives of the programme "Education and Training 2010":

1. Enhancing the education system in monitoring, evaluation and educational research and its use in the educational policy and education management.
2. Increasing quality of the initial and in-service teacher training system.
3. Strengthening the link between the education and training offer and the needs of the labour market, in particular by adjusting curricula and teaching materials (including textbooks) and introducing new forms of in-service teacher training at enterprises.
4. Development and implementation of the National Qualifications Framework and the National Qualification System and dissemination of the lifelong learning.

Specific objective 1 is implemented through preparing and implementing the concept of institutional research background of education. Research focuses on the effectiveness of education, including adjusting its content to labour market needs, in particular social groups at the risk of marginalisation. The Education Information System and the system of analysing the external examinations scores will be upgraded. The effectiveness of the pedagogical supervision system will be researched.

⁸⁶ Ministerstwo Rozwoju Regionalnego: Polska. Raport strategiczny 2009. Narodowe Strategiczne Ramy Odniesienia. (Ministry of Regional Development: Poland. 2009 Strategic Report. National Strategic Reference Framework), Warsaw, 2009.

Specific objective 2 is implemented through modernising existing forms of teacher education, including teachers of vocational and practical education, and supporting the accreditation system of teacher education and in-service training institutions.

Specific objective 3 is implemented through improvement of the core curricula of education for an occupation, development of innovative vocational education curricula, in particular modular curricula, transregional programmes of increasing key competences, development of education and vocational counselling services, development of in-service vocational teacher education programmes at enterprises, development of the education portal Solaris.

Specific objective 4 is implemented through supporting the dissemination of the lifelong learning model, including the development and implementation of the National Qualifications Framework and the National Qualification System.

Support envisaged under HC OP **Priority IV** applies to higher education and is consistent with the strategic objectives of the Copenhagen process and the Lisbon Strategy. Support covers the following specific objectives:

1. Adjusting education at the tertiary level to the needs of the economy and the labour market.
2. Improving the quality of educational offer of tertiary educational institutions.
3. Enhancing the attractiveness of education at the tertiary level in the field of mathematical, natural and technical sciences.
4. Improving the qualifications of the R&D system staff in the management of scientific research and commercial application of the results of research and development.

The first two specific objectives are implemented in projects concerning university development programmes, covering support increasing the quality of education for students, improving qualifications of the academic staff and management of the university. The project selection criteria result in actions which link higher education with the needs of the labour market and the economy. The third specific objective is implemented by commissioning education in mathematics, natural science and technical faculties. As a result, higher education addresses the needs of the economy for graduates of occupations in short supply.

Priority IX: "Development of education and competences in the regions" mainly includes objectives consistent with the objectives of the EU programme "Education and Training 2010". Most actions are aimed at dissemination of education at all levels. The specific objectives are:

1. Diminishing disparities in access to education, in particular between rural and urban areas.
2. Diminishing the disproportion in the quality of education services (concerning general education), in particular between urban and rural areas
3. Increasing the attractiveness and quality of vocational education.
4. Strengthening the professional development and improving the qualification of teachers, in particular in rural areas.

Specific objective 1 is implemented through projects developing pre-primary education. In addition, there are regional scholarship programmes for particularly gifted students (especially as regards mathematics, natural sciences, and technology) from the poorest families. Actions in the area of formal continuing education of adults enable supplementing or improving formal qualifications (general and vocational) and use of

education and vocational counselling services. Projects also cover measures counteracting marginalisation of the population of rural areas.

Specific objective 2 is implemented through programmes aimed at reducing the educational disproportions among students, enhancing the effectiveness of education concerning key competences (in particular: mathematics, natural and technical sciences, linguistic competences, ICT, entrepreneurship), and enhancing the quality of education.

Specific objective 3 is implemented through implementation of vocational schools development projects focused on the increase of the quality of vocational education, enriching the offer of education and vocational counselling, modernisation of the vocational learning offer and its adjustment to the needs of local and regional labour market, and equipping schools and other vocational training institutions with modern teaching materials. Other implemented projects diagnose the educational needs of local and regional labour market.

Specific objective 4 is implemented among others through projects covering post-graduate studies, courses and training for teachers, employees of school continuing education institutions, school employees, and school administration employees in accordance with the regional education policy. Other implemented programmes are aimed at adjustment of teachers' qualifications to the changing needs of the school system.

The National Reform Programme (KPR) 2005-2008 provides for support for the implementation of the Copenhagen process by means of defining strategic directions of the education system in dissemination of the lifelong learning model, improving the quality of education of teachers and trainers, development of e-learning, development of a vocational counselling system, closer cooperation between educational institutions and employers, implementation of the National Qualification System and the National Qualifications Framework, and elimination of barriers in access to education due to poverty and disability.

The main objective of the current National Reform Programme 2008-2011 is to create in Poland the best conditions for business activity in Europe while providing the opportunity for development and high standard of living to the citizens. The KPR 2008-2011 reforms comprise three priority areas:

1. Active society (including Measure 1: Development of education in society and in knowledge-based economy);
2. Innovative economy;
3. Efficient institutions.

Priority 1 "Active society", Measure 1: "Development of education in society and in knowledge-based economy" will include the following activities:

- elaboration of the draft assumptions of a reform of the higher school system in the area of operation and financing of higher schools and the university career model;
- elaboration of a draft cross-sector lifelong learning strategy by the year 2015;
- initiation of implementation of the programme "New Technologies in Education";
- implementation of legislative changes modernising the pedagogic supervision system.

Example 1. Consultations of the Ministry of National Education concerning special education needs of students and changes in vocational education

In January 2010, the Ministry of National Education initiated consultations concerning education of students with special education needs and changes in vocational education.

The consultations include among others regional conferences and will continue until the end of April 2010. The Ministry website presents four information papers outlining the proposed changes:⁸⁷

- “What you need to know about directions of changes in education to effectively implement projects under the European Social Fund.”
- “How to organise education of students with special education needs.”
- “Students with special education needs: Outline of proposed changes.”
- “Vocational and continuing education: Outline of proposed changes.”

With regard to vocational education and training, the changes will support the acquisition of knowledge and skills in the process of education necessary to find a job on the labour market in line with confirmed qualifications and according to the needs of employers. Vocational schools should become schools of choice, combining general education with vocational education. The goals of modernisation of vocational education are as follows:

- to match the education offer to the needs of the evolving labour market;
- to ensure flexibility of offered faculties;
- to improve the quality of education and the success rate at vocational examinations;
- to open up the system to the needs of students with disabilities.

The model of occupation will change. Partial qualifications confirmed in external examinations will be separated within occupations. As a result, education will be more flexible and better adjusted to the needs of the labour market because separate qualifications should comprise a set of skills required for employability on the basis of confirmed qualifications. In addition, every separate qualification can be confirmed irrespective of the form of its acquisition (school or out-of-school, formal, informal or non-formal).

Vocational qualification confirmation centres will be developed on the basis of co-operation among employers organisations, professional associations, local governments, and individual employers willing to train employees according to their needs. Education in a vocational school will integrate general education and vocational education by completing general education initiated in the lower secondary school and initiating practical education at the enterprise. Technical secondary students will be prepared for written matriculation examinations at the advanced level for at least two subjects. It is assumed that practical education will cover at least 50% of vocational education time in technical secondary schools and at least 60% of vocational education time in basic vocational schools.

The new core curriculum of vocational education will be equivalent to the standard examination requirements, whereas previously these were two separate documents, resulting in differences of requirements. Curricula will be either subject-based or modular. In particular, modular education will effectively integrate theory with practice.

Example 2. External examinations confirming vocational qualifications

External examinations in vocational education were introduced as a tool improving the quality of vocational education by generating and disseminating objective and comparable outputs of vocational education nationally. The introduction of external vocational examinations was also a result of the national policy of developing external examinations

⁸⁷ <http://www.men.gov.pl/>

at all levels of education (final test in primary schools, final examination in lower secondary schools, matriculation examination in upper secondary schools). In the nearest future, vocational examinations will become an instrument improving access to vocational education and training as the basis of recognition of formal and non-formal qualifications.

An examination confirming vocational qualifications for a given occupation is a form of evaluation of the degree of acquisition of knowledge and skills for the given occupation defined in the standard requirements used as the basis for the examination; examination scores presented on the diploma and the supplement to the diploma confirming vocational qualifications provide employers with important information on the graduate's aptitude for work. In developing the standard examination requirements and the form of examinations, the Central Examination Board co-operates with representatives of employers and with ministers responsible for given occupations. The national organisation and implementation of examinations confirming vocational qualifications is a responsibility of vocational examination divisions appointed within each of the eight Regional Examination Boards.

The first external examinations confirming vocational qualifications were held for the graduates of two-year basic vocational schools in 2004 and for graduates of three-year basic vocational schools in 2005. The first examinations for graduates of schools providing vocational education at the level of technician degree were held in 2006. Vocational examinations covered graduates of all types of vocational schools in 2007, and the number of participants increased almost ten-fold compared to 2004 (when the first vocational examinations were held) and totalled around 230 thousand. In 2007, examinations for graduates of basic vocational schools were held for 59 occupations (65 occupations in 2009) and examinations for technical secondary and post-upper secondary schools for 97 occupations (101 occupations in 2009). The success rate of graduates of basic vocational schools was 81.3% in 2007 and 87% in 2009; the success rate of graduates of technical secondary and post-upper secondary schools was 50.9% in 2007 and 56.3% in 2009 (Central Examination Board, 2007 and 2009). Currently a nation-wide debate is in progress concerning the low success rate of vocational secondary school graduates.

Projects financed by the European Social Fund in 2007-2013 will develop examinations for individuals who acquire qualifications in non-formal and informal education systems. As a target, examinations confirming vocational qualifications will be widely accessible to all interested persons and held several times a year by examination centres; the written part of examinations confirming vocational qualifications will be performed on-line using computers.

Legal changes aimed at implementation of the priorities of the Copenhagen process

The main legislative and programmatic measures aimed at practical implementation of the priorities of the Copenhagen process in the broad sense include:

- **Amendment of the Law on the principles of implementation of the Development Policy Implementation Act of 6 December 2006.**⁸⁸

The Act defines entities which implement the development policy, the mode of co-operation among them, and the main instruments of implementation of the development policy. The 2008 amendment of the Act was aimed at:

- more effective national management of the development policy and co-ordination of national implementing instruments (strategies and programmes);
- stronger emphasis on the goals and problems of regional development;

⁸⁸ Dz. U. No. 84, item 712.

- integration of spatial elements to the development strategy and programmes;
 - adequate development of national and regional programme documents necessary to obtain European funds and to define a system and rules of their effective use.
- **The document “Assumptions of a Development Management System for Poland”**.⁸⁹
The document presents a model of the development management system aimed at more effective programming and implementation of the development policy and improved quality of public institutions. It is assumed that the model will be operational after 2010. The document needed to be drawn up in the absence of a comprehensive national development management system.
 - **The document “Plan of reorganisation of the development strategy”**⁹⁰ – a proposal of reducing the number of existing development strategies and identifying the main strategic areas of national development. It proposes to reduce the number of development strategies from 42 strategies currently to 9 new comprehensive development strategies. The Council of Ministers approved the document on 24 November 2009. The reduction of the number of existing and prepared strategic documents will help to systematise and improve the transparency of the strategic programming process and effective implementation of the national development goals in the mid- and long-term.
 - **Long-term national development strategy** – the drafting of the long-term national development strategy was based on a diagnostic report “Poland 2030. Challenges to Development”⁹¹ prepared by the Office of the Prime Minister.
 - **Update of the National Development Strategy 2007-2015** – the Council of Ministers decided to update the existing mid-term national development strategy⁹² and to extend the time horizon of the strategy by 2020.
 - **National Regional Development Strategy 2010-2020** – the draft identifies the strategic objective of regional development as enabling regions to unlock their development potential in order to create growth, employment and territorial cohesion in Poland in the long time horizon.
 - **Amendment of public finance legislation** – the Public Finance Act of 27 August 2009 enters into force as of 1 January 2010 and implements fundamental changes in the system of implementation of operational programmes co-financed from structural funds and the Cohesion Fund.⁹³ The new system separates EU funds from the state budget and establishes a European fund budget designated for financing operational programmes. Money from the European funds budget will be transferred to beneficiaries in the form of payments made by the Payer (Bank Gospodarstwa Krajowego) without the intermediation of an institution which executed the co-financing agreement with the beneficiary.

⁸⁹ Założenia systemu zarządzania rozwojem Polski (**Assumptions of a Development Management System for Poland**) approved by the Council of Ministers on 27 April 2009.

⁹⁰ Plan uporządkowania strategii rozwoju (**Plan of reorganisation of the development strategy**) approved by the Council of Ministers on 24 November 2009.

⁹¹ Polska 2030. Wyzwania rozwojowe (**Poland 2030. Challenges to Development**), report published by the Government on 17 June 2009.

⁹² The Council of Ministers decided to update the National Development Strategy on 30 December 2008 by approving the Ministry of Regional Development document “Założenia aktualizacji Strategii Rozwoju Kraju 2007-2015” (**Assumptions for an update of the National Development Strategy 2007-2015**).

⁹³ Ustawa z dnia 27 sierpnia 2009 r. o finansach publicznych (Public Finance Act of 27 August 2009), Dz. U. No. 157, item 1240, replacing the Public Finance Act of 30 June 2005 (Dz. U. No. 249, item 2104, as amended).

- The **Promotion of Employment and Labour Market Institutions Act of 20 April 2004** was amended effective as of December 2008. The amendment broadened the scope of vocational activation of the unemployed, among others by separating vocational activation centres within labour offices and establishing local information and consultation points at the gmina (municipal) level. As a result, the contribution of labour offices to vocational activation will increase. A strong emphasis was put on support for persons at the age of 50+. This includes among others higher rates of financial assistance for participation in training financed from the Labour Fund and exemption from the obligation to pay contributions to the Labour Fund and the Fund of Guaranteed Employee Benefits for employers which employ persons at the age of 50+. Changes were implemented to facilitate the process of continuing education and investment in human capital. A new labour market instrument was implemented: vocational training of adults. The solution opened the opportunity for the unemployed to acquire new vocational qualifications confirmed with a certificate of a vocational title.
- The **Lifelong Learning Strategy** is in drafting since early 2009; it will be the main document of Poland's education strategy covering formal, non-formal and informal education at all stages.
- On 17 October 2008, the Council of Ministers approved implementation of the programme **"Intergenerational Solidarity. Measures of vocational activation of persons at the age of 50+"** which supports vocational activation of persons at the age of 50+. Support includes instruments addressed to employees and persons at the risk of unemployment as well as the unemployed.

9.2. Governance, cooperation and ownership of the different actors in the Copenhagen process at European level

Participation in European initiatives of vocational education and training

The section below summarises actions taken by Poland within European initiatives key to vocational education and training.

LEONARDO DA VINCI Programme

The Leonardo da Vinci Programme is part of the European Union Lifelong Learning Programme. It is implemented between 1 January 2007 and 31 December 2013.⁹⁴ The Programme promotes the mobility of employees on the European labour market and innovative education solutions improving vocational qualifications, in particular improving the transparency and recognition of vocational qualifications in European countries (among others, the European Credit System for Vocational Education and Training ECVET, EUROPASS tools), as well as actions enhancing the quality of vocational and continuing education (e.g., national qualifications framework, quality assessment systems). Development of innovation and modernisation of continuing education systems are implemented in thematic projects while support for mobility on the European labour market is implemented in exchange and placement projects. New parts of the programme include Leonardo partnership projects (since 2008) and Certificate for Mobility (since 2009). Applications may be filed by vocational schools, continuing education institutions, training providers, enterprises, social partners and their organisations, sector organisations, craft associations, chambers of industry and trade, providers of vocational

⁹⁴ Decision No. 1720/2006/EC of the European Parliament and of the Council of 15 November 2006 establishing an action programme in the field of lifelong learning.

counselling services, research centres, non-profit organisations, and non-governmental organisations (NGOs).⁹⁵

For example, 733 project applications were filed in 2009, including 570 mobility projects, 120 partnership projects, and 43 innovation transfer projects. Of those, 149 exchange and internship projects, 15 innovation transfer projects, and 58 partnership projects were approved, including 18 projects co-ordinated by Polish institutions. The co-financing available for the projects in 2009 totalled EUR 15,948,957. This amount does not include the budget for financing preparatory visits. The highest number of projects was implemented by institutions from the regions of Śląskie (40), Mazowieckie (35), and Małopolskie (30). The biggest group of beneficiaries of **mobility projects** in 2009 were vocational education centres and vocational schools (jointly representing 63% of the beneficiaries) and regional governments (12%). The budget of mobility projects approved in 2009 totalled EUR 10,612,395, of which a vast majority (almost EUR 7 million) was assigned to placement projects of persons in initial vocational training. In total, 4,081 participants will take part in exchange and placement projects approved in the 2009 competition, including 2,702 students, 556 employees and job seekers, and 823 vocational education and training professionals. The biggest group of Polish participants in **partnership projects** are vocational education centres and organisations (13), vocational and technical secondary schools (9), non-governmental organisations (9), higher schools (8), and small and medium-sized enterprises (7). The total co-financing for partnership projects in 2009 was EUR 1,187,000. The 2009 competition granted co-financing to 64 Polish organisations implementing partnership projects. The total co-financing for **innovation transfer projects** approved in the 2009 competition was EUR 4,149,560 (on average over EUR 270 thousand per project). The main beneficiaries of the 2009 competition were associations and foundations, higher schools, and private enterprises. Institutions implementing innovation transfer projects selected foreign partners mainly from the United Kingdom, Spain, Bulgaria, Germany, Slovakia, and Italy.⁹⁶

EUROPEAN AND NATIONAL QUALIFICATIONS FRAMEWORK (EQF/NQF)

The European and National Qualifications Framework is the main tool of comparing qualifications acquired in different education systems and forms at a different place and time. The Recommendation of the European Parliament and of the Council of 23 April 2008 recommends the implementation of the European and National Qualifications Framework and states that the “EQF is a common European reference framework which links countries’ qualifications systems together ... to make qualifications more readable and understandable across different countries and systems in Europe. It has two principal aims: to promote citizens’ mobility between countries and to facilitate their lifelong learning.”

Development of the Polish National Qualifications Framework (KRK) started with the draft document of the Ministry of National Education “Stocktaking of qualifications and competences available on the labour market in Poland and development of the National Qualifications Framework (KRK)” under the Human Capital Operational Programme in the autumn of 2008. The first stage of the process was closed in December 2009 with the publication of a preliminary KRK model and a vision of the National Qualifications System including validation of competences acquired in informal and non-formal education and transfer of credits in vocational education and training (ECVET).⁹⁷

⁹⁵ On the basis of <http://leonardo.org.pl>.

⁹⁶ Leonardo da Vinci Projects Library 2009. National Agency of the Leonardo da Vinci Programme, Fundacja Rozwoju Systemu Edukacji (**Foundation for the Development of the Education System**), Warsaw, 2009.

⁹⁷ Chmielecka E. (Ed.) Od europejskich do krajowych ram kwalifikacji. (**From the European to the National Qualifications Framework**), Fundacja „Fundusz Współpracy” (Cooperation Fund Foundation), Warsaw, 2009.

European Credit System for Vocational Education and Training (ECVET)

One of the priorities of European co-operation in vocational education and training is to develop and implement a European Credit System for Vocational Education and Training in order to enable individuals to use learning outcomes achieved in the education process when moving from one vocational education and training system to another (from one country to another). These efforts led to the adoption of the Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET).⁹⁸ The Recommendation calls for the initiation of work facilitating the transfer, recognition and accumulation of learning outcomes of individuals aiming to acquire a qualification in different countries.

Development of the ECVET system in Poland started with the draft document of the Ministry of National Education "Stocktaking of qualifications and competences available on the labour market in Poland and development of the National Qualifications Framework (KRK)" under the Human Capital Operational Programme.⁹⁹ Efforts were made to combine two achievement credit systems: the European Credit Transfer System in higher education (ECTS) and European Credit System for Vocational Education and Training (ECVET).

New Skills for New Jobs

The joint initiative proposed by the European Commission in cooperation with the EU Member States "New Skills for New Jobs", initiated in December 2008 at the EU level, refers to the fact that fast economic transition is accompanied by a shortage of employees with skills necessary in the key sectors of the economy and occupations while at the same time unemployment increases because qualifications are not matched with needs.

In the spring of 2009, the European Commission appointed a group of EU experts on training, qualifications and employment from around the EU to provide independent advice on the further development of the initiative in the context of the EU's future economic reform strategy (Europe 2020).

The experts' report "New Skills for New Jobs: Action Now" published on 4 February 2010 stresses the need to provide the right incentives for people to upgrade their skills, to better link education, training and work, to develop the right mix of skills necessary in the economy, and to better anticipate skills related to new technologies and social processes.

The Ministry of National Education takes note of the EU initiative as mentioned in its 2010 brochure "Assumptions for Planned Changes. Vocational and Continuing Education". However, it should be noted that anticipation of new vocational skills requires the development of a system of forecasting demand for work and vocational qualifications in Poland.

OECD Programme for International Student Assessment, OECD PISA

The third OECD Programme for International Student Assessment PISA was carried out in 2006. The survey assessed scientific literacy of students. The average score of Polish students (498 points) was close to the OECD average. The key conclusion to the Polish school system is that "after lower secondary education, further development of students' skills facilitating their participation in social and professional life only takes place in upper secondary schools. Development of such skills in all other post-lower secondary schools is

⁹⁸ Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET), 2009/C 155/02.

⁹⁹ Chmielecka E. (Ed.) *Od europejskich do krajowych ram kwalifikacji. (From the European to the National Qualifications Framework)*, Fundacja „Fundusz Współpracy” (Cooperation Fund Foundation), Warsaw, 2009.

negligible. However, their graduates will soon need such skills on the labour market which today requires flexible acquisition of new qualifications.”¹⁰⁰

9.3. External dimension of European cooperation in VET

Cooperation with non-EU countries in vocational education and training

Poland is currently developing its own vocational education and training system, mainly on the basis of funds and models from the European Union. Consequently, the exchange of relevant experience is mainly limited to the EU countries. There are some bilateral agreements with non-EU countries, but they are oriented at cooperation in the area of general education and culture (e.g., Polish-Israeli youth exchange). There are few cases of cooperation in vocational education and training. However, cooperation with EU candidate countries takes place within the Leonardo da Vinci programme, for instance cooperation with Turkey in pilot and partner projects (16 projects with the participation of Turkish institutions were implemented in 2009).

Example 1. Cooperation with Turkey in the “European i-Lab Competence Development Programme”¹⁰¹

The Institute for Sustainable Technologies - National Research Institute in Radom participated in the 2008 Leonardo da Vinci project “European i-Lab Competence Development Programme” aimed at dissemination of knowledge on innovation laboratories (i-Lab) in the project partner countries: the United Kingdom (University of Essex and Cambridge Professional Development), Romania (Executive Agency for Higher Education and Research Funding), Turkey (Kavrakoglu Consulting and Business Consulting & Development), Greece (IDEC SA).

The i-Lab concept was developed by Royal Mail in Rugby in 1998 in order to create an environment of innovative problem solving and creative decision making. The first i-Lab was set up in cooperation with the University of Essex. The methodology of work is based on team decision making and brainstorming supported by special software FacilitatePro. With each new i-Lab, the tool becomes more popular and finds new applications.

The goal of the project was to develop and disseminate the concept of innovation laboratory (i-Lab). Project outputs include: development of standard competences of i-Lab moderators, development of the i-Lab International User Network, development of a specification of minimum technical requirements for the development and operation of an i-Lab, establishment of new i-Labs in three partner countries (Poland, Romania, Turkey), identification and testing of new i-Lab applications.

¹⁰⁰ Program Międzynarodowej Oceny Umiejętności Uczniów (**Programme for International Student Assessment**), OECD PISA, Wyniki badania 2006 w Polsce (**2006 Poland Score**). Ministerstwo Edukacji Narodowej (**Ministry of National Education**), http://www.ifispan.waw.pl/files/gfx/PISA/PISA_2006_071130.pdf

¹⁰¹ Laboratorium innowacji – przewodnik dobrych praktyk (**Innovation Laboratory: Guide of Best Practice**). Instytut Technologii Eksploatacji – Państwowy Instytut Badawczy (Institute for Sustainable Technologies – National Research Institute), Radom, 2008.

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Acronyms

MEN - Ministerstwo Edukacji Narodowej (**Ministry of National Education**)

MNiSW - Ministerstwo Nauki i Szkolnictwa Wyższego (**Ministry of Science and Higher Education**)

MPiPS - Ministerstwo Pracy i Polityki Społecznej (**Ministry of Labour and Social Policy**)

MRR - Ministerstwo Rozwoju Regionalnego (**Ministry of Regional Development**)

MSZ - Ministerstwo Spraw Zagranicznych (**Ministry of Foreign Affairs**)

MŚ - Ministerstwo Środowiska (**Ministry of the Environment**)

GUS - Główny Urząd Statystyczny (**Central Statistical Office**)

KPR - Krajowy Program Reform (**National Reform Programme**)
EFS - Europejski Fundusz Społeczny (**ESF - European Social Fund**)
ICT - Information and Communication Technology
WSSE - Wyższa Szkoła Społeczno-Ekonomiczna (**Warsaw School of Social and Economic Studies**)
ATVN - Akademicka Telewizja Naukowa (**Academic Science Television**)
KOWEZIU - Krajowy Ośrodek Wspierania Edukacji Zawodowej i Ustawicznej (**National Centre for Supporting Vocational and Continuing Education**)
PO KL - Program Operacyjny kapitał Ludzki (HC OP - **Human Capital Operational Programme**)

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<http://www.nauka.gov.pl/> - Ministerstwo Nauki i Szkolnictwa Wyższego (**Ministry of Science and Higher Education**)

Acronyms

UE - Unia Europejska (**UE - European Union**)

Dz.U. - Dziennik Ustaw (**Polish Official Journal**)

PKB - Produkt Krajowy Brutto (**GDP - Gross Domestic Product**)

SFP - Sektor Finansów Publicznych (**Public Finance Sector**)

BP - Budżet Państwa (State Budget)

EFS - Europejski Fundusz Społeczny (ESF - European Social Fund)

PO KL - Program Operacyjny kapitał Ludzki (HC OP - Human Capital Operational Programme)

MŚP - Małe i Średnie Przedsiębiorstwa (SME - Small and Medium-sized Enterprises)

PARP - Polska Agencja Rozwoju Przedsiębiorczości (Polish Agency for Enterprise Development)

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Acronyms

MEN - Ministerstwo Edukacji Narodowej (**Ministry of National Education**)
UE - Unia Europejska (**EU - European Union**)
EQF - Europejskie Ramy Kwalifikacji (**European Qualifications Framework**)
ECVET - Europejski System Transferu i Akumulacji Punktów dla celów Kształcenia i Szkolenia Zawodowego (**European Credit System for Vocational Education and Training**)
OECD - Organizacja Współpracy Gospodarczej i Rozwoju (**Organisation for Economic Cooperation and Development**)
KRK - Krajowe Ramy Kwalifikacji (**National Qualifications Framework**)
WE - Wspólnota Europejska (**EC - European Community**)
Dz.U. - Dziennik Ustaw (**Polish Official Journal**)
ECTS - Europejski System Punktów Kredytowych (**European Credit Transfer and Accumulation System**)
PRK - Polska Rama Kwalifikacji (**Polish Qualifications Framework**)
KSK - Krajowy System Kwalifikacji (**National Qualifications System**)
ERK - Europejska Rama Kwalifikacji (**European Qualifications Framework**)
ERMP - Europejski Rok Mobilności Pracowników (**European Year of Workers' Mobility**)
VET - Vocational Education and Training

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<http://www.pfron.org.pl> - Państwowy Fundusz Rehabilitacji Osób Niepełnosprawnych (**National Rehabilitation Fund for the Disabled**)

Acronyms

BKKK - Biuro Koordynacji Kształcenia Kadr, Fundacja „Fundusz Współpracy”(Task Force for Training and Human Resources, Cooperation Fund Foundation)
CBOP - Centralna Baza Ofert Pracy (**Central Base for Job Vacancies**)
CKE - Centralna Komisja Egzaminacyjna (**Central Examination Board**)
ENIC/NARIC - europejska sieć ośrodków informacji o systemach edukacji oraz uznawaniu świadectw, dyplomów i kwalifikacji zawodowych (**European Network of Information Centres on academic recognition and mobility**)
ERK - Europejskie Ramy Kwalifikacji (**European Qualifications Framework**)
ETF - **European Training Foundation**
EURES - Europejskie Służby Zatrudnienia (**European Employment Services**)
GUS - Główny Urząd Statystyczny (**Central Statistical Office**)
KOWEZiU - Krajowy Ośrodek Wspierania Edukacji Zawodowej i Ustawicznej (**National Centre for Supporting Vocational and Continuing Education**)
KPDZ - Krajowy Plan Działań na rzecz Zatrudnienia (**National Action Plan for Employment**)
KRK - Krajowe Ramy Kwalifikacji (**National Qualifications Framework**)
KSK - Krajowy System Kwalifikacji (**National Qualifications System**)
KSKZ - Krajowe Standardy Kwalifikacji Zawodowych (**National Vocational Qualifications Standards**)
KSMRP - Krajowy System Monitoringu Rynku Pracy (**National System for Labour Market Monitoring**)
MEN - Ministerstwo Edukacji Narodowej (**Ministry of National Education**)
MG - Ministerstwo Gospodarki (**Ministry of the Economy**)
MPiPS - Ministerstwo Pracy i Polityki Społecznej (**Ministry of Labour and Social Policy**)
MRR - Ministerstwo Rozwoju Regionalnego (**Ministry of Regional Development**)
PHARE - assistance programme **Poland and Hungary: Assistance for Restructuring their Economies**
POKL - Program Operacyjny Kapitał Ludzki (HC OP - **Human Capital Operational Programme**)
PULS - system informatyczny Publicznych Służb Zatrudnienia (**Public Employment Services IT System**)
RP - Rzeczpospolita Polska (**Republic of Poland**)
SPO RZL - Sektorowy Program Operacyjny Rozwój Zasobów Ludzkich (**HRD SOP - Human Resources Development Sectoral Operational Programme**)

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Acronyms

MSP - małe i średnie przedsiębiorstwa (**SME - Small and Medium-sized Enterprises**)
GUS - Główny Urząd Statystyczny (**Central Statistical Office**)
MEN - Ministerstwo Edukacji Narodowej (**Ministry of National Education**)
MPiPS - Ministerstwo Pracy i Polityki Społecznej (**Ministry of Labour and Social Policy**)
CIS - Centrum Integracji Społecznej (**Social Integration Centre**)
PAN - Polska Akademia Nauk (**Polish Academy of Sciences**)
EFS - Europejski Fundusz Społeczny (**ESF - European Social Fund**)
EQUAL - Program Inicjatywy Wspólnotowej EQUAL (**EQUAL Community Initiative Programme**)
ZPORR - Zintegrowany Program Operacyjny Rozwoju Regionalnego (**Regional Development Integrated Operational Programme**)
SPO RZL - Sektorowy Program Operacyjny Rozwój Zasobów Ludzkich (**HRD SOP - Human Resources Development Sectoral Operational Programme**)
KPR - Krajowy Program Reform (**National Reform Programme**)
SWRSO - Strategia Wspierania Rozwoju Społeczeństwa Obywatelskiego (**Strategy for Supporting Development of Civil Society**)
POKL - Program Operacyjny Kapitał Ludzki (**HC OP - Human Capital Operational Programme**)
PO FIO - Program Operacyjny Fundusz Inicjatyw Obywatelskich (**Civil Initiative Fund Operational Programme**)

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Acronyms

RM - Rada Ministrów (**Council of Ministers**)

MG - Ministerstwo Gospodarki (**Ministry of the Economy**)

CKP - Centra Kształcenia Praktycznego (**Practical Education Centres**)

CKU - Centra Kształcenia Ustawicznego (**Continuing Education Centres**)

PWSZ - Państwowe Wyższe Szkoły Zawodowe (**State Vocational Higher Schools**)

PSKM - Polska Sieć Kształcenia Modułowego (**Polish Network of Modular Education**)

PISA - Program Międzynarodowej Oceny Umiejętności Uczniów (**Programme for International Student Assessment**)

PARP - Polska Agencja Rozwoju Przedsiębiorczości (**Polish Agency for Enterprise Development**)

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Acronyms

7PR - 7 Program Ramowy w zakresie badań i rozwoju technologicznego (**FP7 - Seventh Framework Programme for Research and Technological Development**)

PO-IG - Program Operacyjny Innowacyjna Gospodarka (**IE OP - Innovative Economy Operational Programme**)

SzOK - Szkolne Ośrodki Kariery (**School Career Centres**)

ABK - Akademickie Biura Karier (**Academic Career Offices**)

CKE - Centralna Komisja Egzaminacyjna (**Central Examination Board**)

OKE - Okręgowe Komisje Egzaminacyjne (**Regional Examination Boards**)

ICT - **Information and Communication Technology**

KSI - Krajowa Sieć Innowacji (**National Innovation Network**)

KSU - Krajowy System Usług dla MŚP (**National Services Network for SMEs**)

Chapter 8

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Acronyms

CRZL - Centrum Rozwoju Zasobów Ludzkich (**Human Resources Development Centre**)

FRSE - Fundacja Rozwoju Systemu Edukacji (**Foundation for the Development of the Education System**)

Chapter 9

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Acronyms

EFS - Europejski Fundusz Społeczny (**European Social Fund**)

ERK - Europejskie Ramy Kwalifikacji (**European Qualifications Framework**)

GUS - Główny Urząd Statystyczny (**Central Statistical Office**)

KOWEziU - Krajowy Ośrodek Wspierania Edukacji Zawodowej i Ustawicznej (**National Centre for Supporting Vocational and Continuing Education**)

KPR - Krajowy Program Reform (**National Reform Programme**)

KRK - Krajowe Ramy Kwalifikacji (**National Qualifications Framework**)

KSK - Krajowy System Kwalifikacji (**National Qualification System**)

KSKZ - Krajowe Standardy Kwalifikacji Zawodowych (**National Vocational Qualifications Standards**)

MEN - Ministerstwo Edukacji Narodowej (**Ministry of National Education**)

MG - Ministerstwo Gospodarki (**Ministry of the Economy**)

MPiPS - Ministerstwo Pracy i Polityki Społecznej (**Ministry of Labour and Social Policy**)

PHARE - assistance programme **Poland and Hungary: Assistance for Restructuring their Economies**

POKL - Program Operacyjny Kapitał Ludzki (**HC OP - Human Capital Operational Programme**)

SPO RZL - Sektorowy Program Operacyjny Rozwój Zasobów Ludzkich (**HRD SOP - Human Resources Development Sectoral Operational Programme**)

ET - Education & Training

R + D - Research & Development

ICT- Information and Communication Technologies

NGO - Non-governmental Organisations

ECVET - Europejski Transfer Punktów Kredytowych dla celów Kształcenia i Szkolenia Zawodowego (**European Credit System for Vocational Education and Training**)

EUROPASS - European skills and competences passport

ECTS - Europejski System Punktów Kredytowych (**European Credit Transfer System**)

PISA - Programu Międzynarodowej Oceny Umiejętności Uczniów (**Programme for International Student Assessment**)

OECD - Organizacja Współpracy Gospodarczej i Rozwoju (**Organisation for Economic Co-operation and Development**)

i-Lab - laboratorium innowacji (**innovation laboratory**)