Continuation of Change

Report on the State of Education 2011

Information booklet

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On the Road to Knowledge. Continuation of Change

We wish to present the second report entitled "Continuation of Change" from a series of reports on the state of education prepared by the Educational Research Institute. In the first report, we entered the debate on the state of Polish education. We presented the results of our research during the Congress of Polish Education, a series of seminars organised by the Institute and at other conferences adding a new quality to the discussion. Continuing our task, the second part of this report's title is especially pertinent. The key-phrase of the first report, "a society on the road to knowledge" is still valid and emphasises the need to push ahead.

We have introduced a new regular part to the report, in which we are going to update the information on trends in education from different sources. We have supplemented this part of the report with a chapter devoted to changes in law which were introduced in the year prior to the publication of this report – 2011.

In the Report on the State of Education 2010 we gathered information concerning changes in education over the last 15 years with a focus on general education. Numerous people's opinions were that the report only whetted their appetite for knowledge in some fields. Vocational education and higher education were among the subjects which the readers missed most. We have decided that in the Report 2011 more attention should be paid to these sectors of education. For both vocational and higher education it was a year of significant changes in law.

The need for change in vocational education has long been widely recognised. In the past, vocational education was dependent on the needs a different type of economy and was negatively influenced by its dysfunction. In the 1990s, the establishment of market economy institutions, changes to the economy and labour market were not accompanied by the institutional or programme adaptation of vocational education. Sufficient links between schools or other institutions providing vocational training and businesses were not established. Successive governments sought solutions in different ways. At some point even the possibility of dissolving vocational schools at secondary level was discussed. The end of school year 2011/2012 was followed by significant changes in vocational schools with the introduction of the new, long-anticipated core curriculum for vocational education. This is, therefore, the right moment to paint a picture of the initial state of vocational education and present an overview of the changes. These changes have been mostly spontaneous since the beginning of the political transformation.

Changes in higher education were introduced on 1 October 2011 by virtue of the amendment of the law as of March 2011. They reflected not only the effects of young Poles' drive to study at universities, a phenomenon present since the early 1990s, but also the change in the world approach to education – a move towards a learning outcome based approach instead of controlling the learning process.

Thanks to National Qualification Frameworks in Higher Education, which have been in preparation since 2006, universities have gained more autonomy in the development of their curricula. They can plan the courses they offer independently, determining the name and curriculum as well as the expected learning effect, i.e. what study outcome they promise students and how they ensure that students achieve this outcome. These changes occur at a crucial moment for universities as they have to cope with the effects of population decline and consider their offer and strategies for development. It is a great opportunity but also a major challenge to find alternative solutions for working with students and building the "competences portfolio".

Michał Federowicz
Director of Educational Research Institute

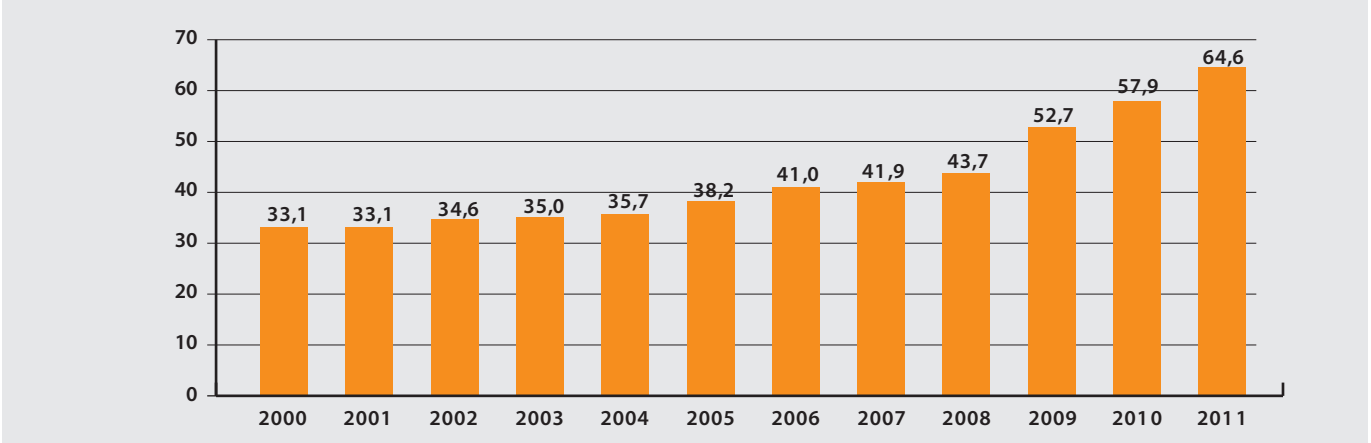
1. Trends of change in Polish education

Participation in education

Change occurring in the education system varies throughout the system. In early childhood education an increasing proportion of children are attending pre-school (64.6% in 2011). This can be explained by an increase in the number of pre-school places and a declining population of children aged 3-5. The proportion of children who are provided with early childhood care has been increasing steadily since 2000. However, a significant increase has only been observed since 2009. In Poland, pre-school uptake is still much lower than in other EU member states. On average, 75% of children in the EU are provided with different forms of early childhood care. If six-year-olds were to attend school, there would be more places available for 3-year-olds in pre-schools.

A rationalisation of the pre-school network is also taking place – resources are being rebuilt and pre-school units in schools dissolved, with the costs of running such units being reduced. Rural areas suffer most as pre-school provision is still limited. Here, instead of pre-school units in schools, pre-school points or groups for early childhood care are being established. They offer a few hours a day, which is shorter than pre-schools, but ensure that children from rural areas have access to professional care and education.

Chart 1. Enrollment of children aged 3-5, 2000-2011



Source: Report on the State of Education 2010, Educational Research Institute, Education in the School Year 2010/2011, Central Statistical Office, p.59

In recent years local government activity related to the dissolution of primary schools and the establishment of lower secondary schools has diminished. Thus, it seems that the stage of adjusting schools to the number of students and to the financial capabilities of local governments has been completed. A considerable reduction in the number of primary and lower secondary schools is related to demographic change, i.e. fewer children.

The number of teachers in these schools has also been decreasing, but this decrease has been less marked. The fact that the pupil-teacher ratio is decreasing has not contributed, for example, to more classes. Local governments search for savings and try to reduce employment and limit wage costs.

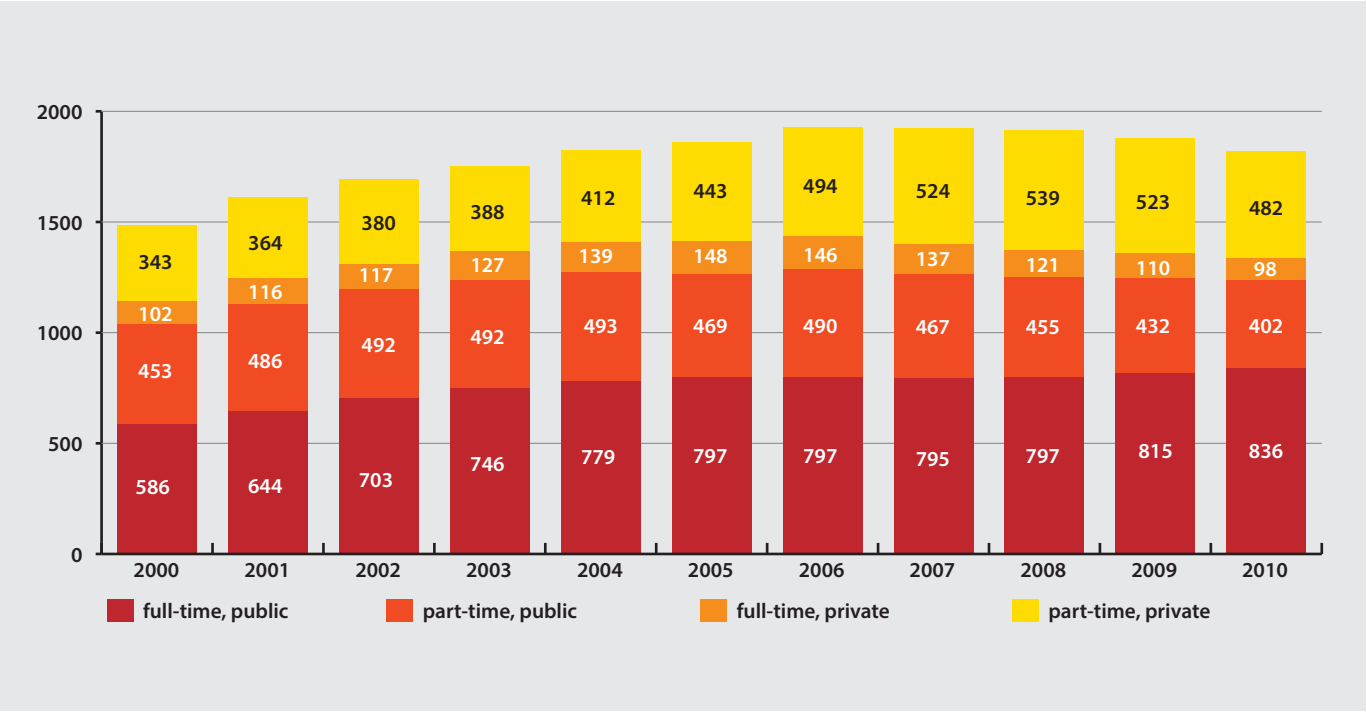
Despite fewer children in primary and lower secondary schools, the enrollment rate is decreasing. In 2010, the percentage of children of primary school age who did not attend school was 3.5%. There were more children of lower secondary school age who did not attend any school. This is probably a result of parental economic migration and this problem requires in-depth research.

In lower secondary schools numbers have diminished. The changes between 2005 and 2012 did not affect vocational education. The biggest reduction in these schools occurred earlier, between 2000 and 2005. The introduction of specialised upper secondary school resulted in failure, as graduates of these schools appeared unprepared to start studies or work. The reason was a lack of consistency in their first years of implementation.

At the upper secondary level of education, the vast majority of students attend schools providing access to the Matura examination and further study in higher education. The fact that as many as 10% of young people aged 16-18 do not attend upper secondary schools is alarming.

The number of students in education peaked in 2005. Student numbers then started to decline, affected by demographic changes.

Chart 2. Student numbers in Highter Education by type of institution 2000-2005 (thousands)



Source: ERI on the basis of data from the Central Statistical Office

So far a decrease in the number of students has been relatively minor, without influence on the network of higher education institutions. However, private institutions may soon face this problem. The number of institutions providing higher education is increasing while their capacity is decreasing.

The structure of programmes at Polish universities is becoming more evenly balanced. The biggest decrease in recent years was observed in the case of student demand for economic and administration programmes.

A significant decrease in the number of students has been also observed in social sciences and teacher training. Conversely, the number of students studying medicine and biology as well as architecture and construction has increased.

Financing of education

Local governments are nominally increasing their expenditure on education, mainly on salaries. But this cost as a proportion of overall expenditure is in fact slightly decreasing.

A reduction in the general subsidy from the State Budget in local government education expenditure shows that they are using more of their own funds for this purpose. As a result, expenditure on education depends heavily on the wealth of a particular local government.

Table 1. Percentage of general subsidy from the State Budget in the total expenditure on education of local government units (municipality and poviat) by voivodeship 2006-2010

Voivodeship	2006	2007	2008	2009	2010
dolnośląskie	63	61	59	60	60
kujawsko-pomorskie	68	67	69	69	69
lubelskie	70	67	69	69	67
lubuskie	66	66	65	64	63
łódzkie	67	66	66	66	63
małopolskie	70	68	69	70	67
mazowieckie	57	57	56	57	57
opolskie	64	64	65	65	64
podkarpackie	72	72	72	71	69
podlaskie	70	68	68	69	67
pomorskie	66	65	66	68	66
śląskie	61	61	62	62	60
świętokrzyskie	70	72	73	72	69
warmińsko-mazurskie	68	68	69	69	67
wielkopolskie	67	68	68	68	67
zachodniopomorskie	64	64	64	64	62

Source: ERI's calculations on the basis of data from the Ministry of Finance

Investment expenditure related to education increased significantly in 2010 as compared with the previous year – in land poviats (Polish second-level unit of local government) by 23%; in rural municipalities (the lowest tier of local government) by 10% and in urban-rural municipalities by 14%. Some of this expenditure is connected with EU funding and the construction of football fields in municipalities (so called "orliki").

From 2000 state expenditure on higher education rose from 0.72% to 0.88% of GNP. Related to GNP contributions per citizen per student are the lowest among EU member nations. Institutions receive very little by way of income from commercial sources that are not connected with education (6.5%).

Quality of education and educational attainment

The average results of external examinations conducted at the end of primary school and lower secondary school show that pupils from big cities and neighbouring poviats achieve better results. In 2011 the best results were obtained by pupils in south-eastern Poland where the average results of both examinations were the highest.

Due to an increasing number of students and a general trend to continue learning after finishing lower secondary school, the education level in Poland is changing. The number of people who have completed higher education is increasing, while the population of people who only graduated from lower secondary school or below is decreasing.

Thus, a major change occurred in a group of adults who are potentially active professionally. This group is unevenly distributed by gender. In 1997, the proportion of people who completed tertiary education was similar for women and men (10% and 10.2% respectively). However, in 2010 the proportion of women exceeded that of men by 7.2%. This gap is still widening.

People who have completed higher education maintain high professional activity (88%), whereas the proportion of people who finish their education after general upper secondary school is approximately 20% lower. Paradoxically, professional activity of people who entered the workforce after basic and upper secondary vocational schools is decreasing.

2. Review of legal acts of 2011 on education

The most important changes in the law in 2011 related to the adoption of three legal acts by the Sejm impacting the education sector:

- Act of 15 April 2011 on the Educational Information System for Schools;
- Act of 19 August 2011 amendment of The Education System Act and certain other acts;
- Act of 18 March 2011 amendment of the Law on Higher Education, on Academic Degrees and Titles as well as on the Degrees and the Titles within the scope of Art and certain other acts.

The first act listed above introduced changes to the information system used to collect data for the development of policy and rationalising education expenditure. With the new structure, the education minister will be provided with more reliable system data. This will be invaluable for the improvement of the efficiency of education management not only at national but also at regional and local levels. The creation of the Register of Schools and Educational Institutions should allow for the collation and maintenance of data relating to all organisational units of the education system.

The new system should be fully operational as of 9 April 2013.

The Act of 19 August 2011 amending the Act on the System of Education and certain other acts introduced changes in the field of vocational education and lifelong learning. The act introduces stepwise modernisation in accordance with the concept of lifelong learning. Thanks to these changes, vocational education and lifelong learning should better prepare students for the demands of the labour market. The provision of vocational education should also increase. Courses providing the opportunity for obtaining new qualifications should help to achieve this goal.

The introduction of a new way of describing occupations also constitutes an important change. Qualifications that will be separately validated in the system of external examinations have been identified for each occupation. Such a solution will make the learning process more flexible. Not only will it allow for adjustment to the needs of learners but will also facilitate a dynamic response to the changing labour market.

The amendment to the Law on Higher Education and other acts concerning higher education should improve deficient aspects of Polish higher education which include a lack of quality assurance mechanisms in the financing system, a low percentage of international students in universities, an inappropriate educational structure (insufficient science, technology and healthcare graduates), a complicated professional career path, a university management system that does not promote a strong international position and weak links between universities and the social and economic environment.

Changes should be made possible by the introduction of subsidies for the best organisational units of public and non-public universities. Universities will also be allowed to independently prepare and launch new study programmes. (This change will not affect regulated professions). Texts and criticisms of doctoral dissertations will be published on websites and the habilitation (a post-doctoral qualification required for higher posts) will be shortened and simplified.

Apart from amending the three most important acts, in 2011 certain articles concerning education in other acts were amended and 81 regulations were implemented. In general, amendments were made to 87 legal acts.

3. Higher education

As a result of the political system transformation in 1989, Poland today enjoys the highest level of public access to higher education. Simultaneously, the wide availability of higher education triggered a devaluation of university diplomas on the labour market, which after the period of educational boom, led to an increase in competition between diploma holders.

The percentage of women among people studying within higher education is constantly growing. In the academic year 2010/2011 women constituted 59% of all students (in the 1990s the proportion of women was 50%). However, women more often choose part-time study. Consequently, they obtain education of lower quality and their chances in the labour market are reduced.

Higher education is now facing new challenges associated with the European educational reform – the Bologna Process.

A two- or three-level structure (graduate, master's and doctoral programmes) compatible with these requirements has been introduced to the majority of faculties. However, the goal of such a structure has not been fully achieved. Often its introduction relies mainly on a mechanical division of cycles of study. After graduating, the majority of students further pursue education at master's level. This is because of the generally strong belief that the first-level degree is not equivalent to a completed higher education. This undermines the value of the graduate diploma.

Framework for Higher Education Qualifications

Universities have begun the implementation of the Framework for Higher Education Qualifications. The Framework is an element of the Bologna reform and describes the qualifications obtained in the Polish system of higher education through the effects of learning. The introduction of the qualification framework and instruments associated with it will increase the transparency of the qualifications held by university graduates in national and international contexts. This will promote the mobility of citizens and will improve their situation in the labour market.

In all study programmes, with the exception of doctoral studies, the so called ECTS points (European Credit Transfer and Accumulation System) are tied to the effects of learning.

The State Accreditation Committee currently evaluates whether the effects of learning specified by a given university for a given programme are compatible with the requirements for a given level included in the Framework for Higher Education Qualifications. It also examines whether the educational process truly leads to achieving these effects and the manner in which the effects of learning are verified.

Under the amended Law on Higher Education, universities are given broader autonomy concerning their programmes. This allows for diversification of programmes in accordance with social needs, labour market requirements and students' preferences, as well as with the type of a university and its mission.

The concept of lifelong learning provides an opportunity but also a challenge to Polish universities. Universities should appeal not only to students who passed the Matura exam, but also to those active in the labour market and who wish to develop, supplement or change their qualifications.

The model of quality assurance at the higher level still needs to be developed. Such a solution according to which universities alone will be responsible for the quality of the programmes and the key task of the external quality assurance (SAC) will be to verify the internal systems of quality assurance and assess their credibility. This will constitute a fundamental change.

Increasing the number of international students studying in Poland remains a challenge. Far more people leave Poland to study abroad than arrive to study. The proportion of international students in Poland is only 0.8%.

4. Vocational education

From 1 September 2012 fundamental changes in the structure of schooling and education at upper secondary level were introduced. A substantial portion of these changes will concern vocational education institutions.

The process of dissolution of specialised upper secondary schools has begun and in 2012 enrolment for the first year in these institutions stops.

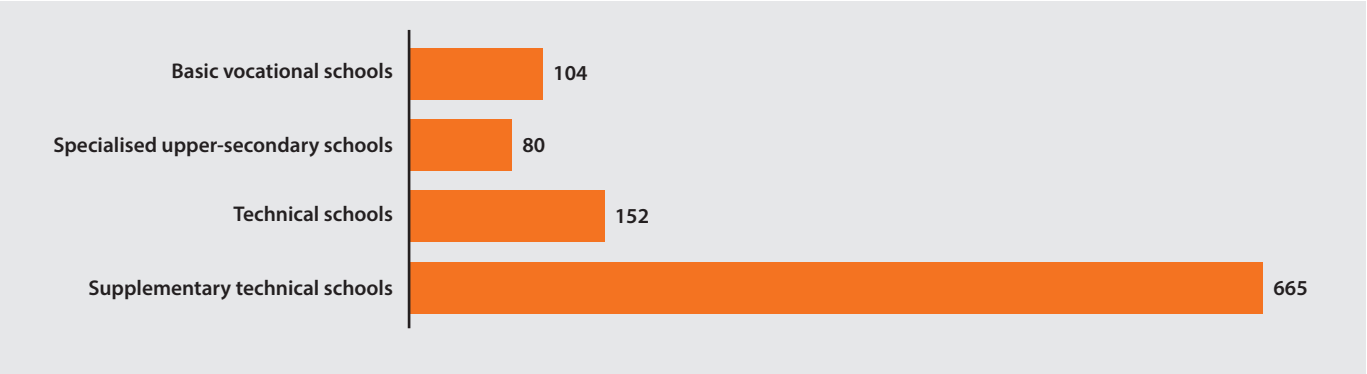
In accordance with the Education System Act, basic vocational and technical schools for adults will be dissolved. Adults will be able to supplement their qualifications through participation in courses offered by schools and other institutions, but not as students in the traditional sense.

In 2013, the process of dissolution of three-year supplementary technical schools in which graduates of basic vocational schools would supplement their education, will also begin.

A new classification of occupations, which is applicable as of 1 September 2012, constitutes another key change. It includes 200 occupations, for which 251 qualifications will be identified. Qualification courses – a new form of non-school education – will be introduced.

A diploma, being a confirmation of qualifications and completion of studies, will be issued on the basis of certificates that validate all qualifications specified for an occupation.

Chart 3. The number of schools for adults



Source: "Oświata i wychowanie 2009/2010", GUS, Warszawa 2010 r. ["Education in 2009/2010 School Year", Central Statistical Office, Warsaw 2010 r.]

Financing of vocational education

The current algorithm used to divide the educational subsidy between local government units does not reflect the actual costs of the educational reform. It fails to account for differences between individual schools and specific aspects of training for different professions, which encourages the development of low cost educational institutions over the development of the necessary schools that would prepare students for work in professions required by the labour market.

The Polish legal system lacks provisions that can specify the detailed objectives which should dominate policy of local governments in financing a network of schools, including the types of vocational schools which would best serve the labour market.

Companies rarely use their training fund to finance or co-finance lifelong learning for their employees. Only 4.2% of companies used their training fund in 2006. In 2009, the proportion of such companies was not significantly higher.

In 2010, about half of employers surveyed failed to provide in-service training.

In 2011, in the European Union 8.9% of people aged 25-64 received in-service training–in Denmark over 32%, in Sweden 25% and in Finland almost 24% as compared with about 5% in Poland.

Specialities in vocational training

In Poland the social and economic status of parents has a strong influence on the educational plans of children. Students in basic vocational schools usually come from families where parents have primary or an incomplete primary level of education.

One of the reasons for the low popularity of vocational education is association with negative stereotypes.

Vocational education of adults is unpopular whether formal or informal. In 2010 the participation of adults in vocational education was 5.33%. This number has not changed significantly within the last decade.

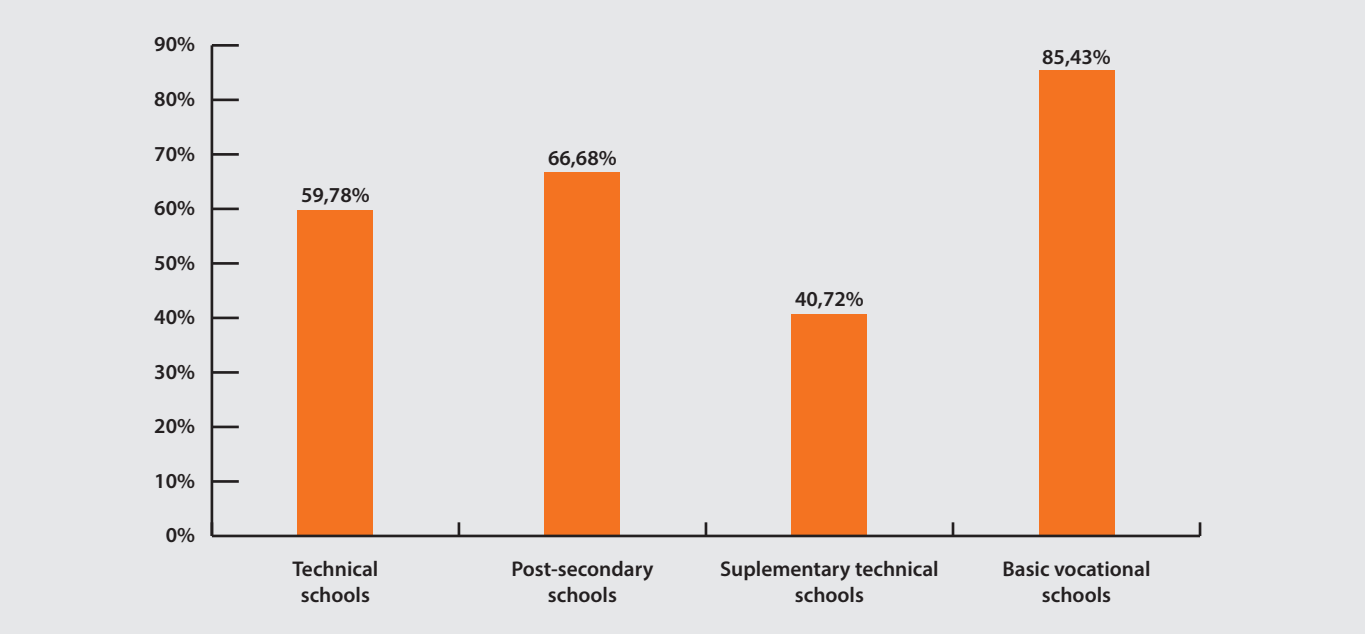
All types of vocational schools are dominated by three groups of occupations: engineering and technical, economic and administrative as well as the service sector. Within these groups, there is increased participation within the service sector but with a simultaneous decrease in the economic and administrative group.

When developing courses to be offered by vocational schools, it is pertinent to consider the tendencies of the labour market and make predictions about future requirements. Such an analysis is not conducted in a coherent manner in Poland. It is important to involve employers in the process of developing study programmes and in the education process itself. Vocational school graduates often

wish to combine professional activity with further education. To discover whether these intentions are followed up with future participation, it is necessary to monitor the educational and vocational choices of young people.

Of students taking vocational exams, the proportion of students from technical schools that obtained diplomas was relatively low. They performed significantly better in written than practical exams. Vocational school students show an opposite tendency – their performance in practical examinations is significantly better. Considering all types of schools, women sit written examinations more often than practical ones.

Chart 4. Percentage of students who were awarded diplomas, taking examinations that confirmed vocational qualifications, in 2010



Source: Own study based on CEC data

According to employers, vocational examinations do not allow for sufficient evaluation of practical knowledge. Due to changes in legislation, they may become a better tool for assessment of students' competence. In accordance with these changes, the new core curriculum will become the basis for specifying examination requirements.

Currently, the system itself and legal provisions make it impossible for individuals who gained their competence via autonomous learning to take exams that confirm their occupational qualifications.

Teaching staff and infrastructure of vocational schools

The teaching staff in vocational schools is ageing and diminishing in number. As many as 69% of poviats report difficulties in finding and retaining good teachers. People who have adequate experience and preparation are not interested in teaching, whereas younger teachers are reluctant to teach vocational subjects. Moreover, school principals do not realise that they may employ instructors for practical vocational training, i.e. representatives of a profession who do not have to be qualified teachers.

Infrastructure is another problem. 80% of school principals and directors of Practical Training Centres claim that the school buildings need renovation. Equipment available in workrooms and workshops, i.e. the rooms that are essential for practical vocational training constitutes a significant problem. In almost 28% of schools, these facilities are missing, whereas in one in four schools and VTCs they are not used.

Sporadic cooperation between schools and employers may be the reason why new technologies used in industry are not available to students and teachers.

The most difficult conditions for developing information technology competence are experienced by basic vocational schools. Only one in three schools possesses computers which are used for teaching.

In the case of four occupational branches (energy, construction, textile and computer science), for which it was possible to perform an analysis concerning the adaptation of curricula to the demands of the labour market, it has been revealed that the education process contains too many theoretical subjects and too few subjects that form practical vocational skills. These problems are especially severe in technical schools.

These problems may be partially solved through the introduction of modular education which will result from the new core curriculum. In addition, study programmes should be flexible, so that they correlate with the demands of the dynamically changing labour market. Their constant monitoring is also essential.

Graduates and students in vocational schools

A comparison of indicators of professional and educational activity and employment at different educational attainment levels has been stable for many years. The highest rates concern those who have higher education, the lowest – those with lower secondary education and lower. At the same time, it is necessary to account for students who choose given educational paths, including negative selection in the case of basic vocational schools.

Table 2. Level of education and the risk of unemployment and educational and professional inactivity among persons aged 18-30 years, in 2010

	Lower secondary and lower	Basic vocational	General secondary	Technical and post-secondary	Higher
Relation of unemployed to working,%	**44**	**23**	**22**	**19**	**11**
Relation of not in education, employment, or training (NEET) to working,%	**114**	**48**	**32**	**33**	**16**

Attention: Alternative figures relating to the magnitude of unemployment and the NEET to the number of the whole population could have a lower significance in the 18-30 years age group owing to the large number of learners. Source: own study based on BABEL data

Graduates from basic vocational schools perform worse in the labour market than those with general secondary education. The rate of unemployment in this group is significantly higher that among graduates of general upper secondary schools. Graduates from technical schools and

post-secondary schools are also more prone to unemployment within 2 years of completion of their education than their peers from general upper secondary schools.

Schools should prepare students for occupations which are in demand from the local labour market. They should also account for the number of graduates that will be in demand for a given occupation in the future. Schools should prepare their students for lifelong learning and the acquisition of new qualifications in the future.

Current data and demographic predictions indicate that the number of people at post-lower secondary age in Poland has decreased. This will continue to decrease. Vocational schools are strongly affected by this trend. Between the years 2000 and 2010, the number of students in the vocational education system decreased by 38%. The decrease in the number of students in the general secondary education system was 9% over this period.

Demographic changes result in a reduction of the labour force. Therefore, vocational education and labour market policy both in Poland and in Europe should facilitate fast entry into the labour market and maintain a high level of employment. It is also necessary to maintain professional activity of personnel at different vocational qualification levels, including more mature workers.

Educational Research Institute

The main task of the Institute is to conduct basic and applied research in education. Most importantly, research, analyses and development work are carried out for implementation into the national education policy and practice.

The Institute employs more than 150 researchers specialising in education: sociologists, psychologists, educationalists, economists, political scientists and representatives of other scientific disciplines – outstanding specialists in their respective fields who have a wide spectrum of experience, including scientific research as well as teaching, public administration and non- profit organisations.

The Educational Research Institute's present projects include "The development of terms of reference for the implementation of the National Qualifications Framework and the National Qualifications Register for lifelong learning", "Quality and effectiveness of education – strengthening research capabilities", "Development of methodology for education value-added assessment" (EVA), "Conditions for differentiation of external examinations results".

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