



Educational Research Institute

IBE



EDUCATIONAL
RESEARCH
INSTITUTE



The “Quality and effectiveness of education – strengthening of institutional research capabilities” project is co-funded by the European Union under the European Social Fund.



HUMAN CAPITAL
NATIONAL COHESION STRATEGY

IBE



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Dear Readers,

The future of Poland, its position internationally and the quality of life for future generations depends in a broad sense, on outcomes from education. Effective education is education which embraces increasingly rapid changes in our environment and drives desirable transformations. Reconciling the need for stability with the need for change is not only an important challenge faced by Polish

education. In order to tackle social inequality, we need to harmonise the education of all with that of the elite to obtain flexible approaches and educational paths. This is a challenge for today's democratic societies.

The Educational Research Institute strives to support the initiative to raise the quality of Polish education by sharing its in-depth knowledge about the system and the learning environment. Our diverse research activities, sometimes pioneering, focus on development of research guidelines for subject teaching, in-depth studies of the teaching community and monitoring careers of school leavers, the most powerful proof of educational outcomes. Capitalising on research results, we design tools to support the work of professionals in the field. We are doing our best to make scientifically proven facts the solid reference point for continuing debate about the state of education in Poland.

We want in-depth analysis and fact-based reflection to supplant stereotypes and superficial views. We are also determined to create a space to foster cooperation between those who are dedicated to high quality education, where we respect mutual autonomy but accept accountability for the education provided to the rising generations and their potential to build a lifetime portfolio of growing competencies. This is the key to the future.

The Institute is active in investigating a wide variety of issues. This brochure will give you an insight into our activities. I hope that it will encourage you to find out more about what we do and perhaps to work together with us.

Michał Federowicz
Director of the Educational Research Institute

EDUCATION ENTHUSIASTS

Education Enthusiasts is the epigram and sentiment behind the *Quality and effectiveness of education – strengthening of institutional research capabilities* project, managed and carried out by the Educational Research Institute since April 2009. Education Enthusiasts is a project aimed to improve quality of education in Poland. Of approximately 60 studies conducted since 2010, some have now been concluded. Reports in electronic form are available at www.eduentuzjasci.pl on the "Research" pages. Numerous studies are long-term or multi-phase projects to be completed by 2014 or 2015. Information gathered and conclusions will be used to formulate recommendations for teachers, school principals, local governments and politicians responsible for education.

Thanks to activities initiated as part of the project, IBE is determined to:

- broaden knowledge about the education system and its current transformation;
- design tools for classroom work;
- improve the quality of educational research;
- facilitate access to information about the education system.

Outcomes of the project benefit:

- teachers, school principals;
- pupils and their parents;
- local government authorities and state administration;
- education-oriented non-government organisations;
- academic community involved with education issues.

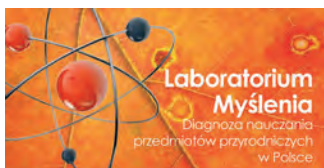
RESEARCH

In line with the lifelong learning perspective, this research investigates all stages of education from preschool and school up to entry into the labour market and adult learning. Research may be classified into five distinct areas:

- core curriculum and development of subject teaching methods;
- psychological and pedagogical determinants of school achievement;
- sociological and legal aspects of education policy;
- education economics: public and private expenditure and education-related markets;
- education and the labour market.

CORE CURRICULUM AND DEVELOPMENT OF SUBJECT TEACHING METHODS – SELECTED STUDIES

Laboratory of Thinking



Laboratory of Thinking – is the research project with a practical objective to reinforce development of pupils' reasoning skills. The *Laboratory* is addressed to first-classes in upper secondary schools – general and vocational. It contributes to a diagnosis of strengths and weaknesses in all four science subjects (biology, chemistry, physics and geography). In addition, it will help to streamline subject teaching to develop critical and logical thinking skills both at the lower secondary and the upper secondary levels. The *Laboratory* analyses are conducted by direct contact with teachers in the schools selected and are later distributed throughout teaching community.

More information about subject research and reports, including reports about foreign language teaching are available at www.eduentuzjasci.pl on the “Research” pages.

Assessment of Lower Secondary School Students Competences



Assessment of pupils attending lower secondary schools in the *Assessment of Lower Secondary School Students Competences* survey on a sample drawn from grade three, aims to deliver an in-depth analysis of skills in all subjects tested by the external examination system: Polish, maths, science,

history and civics. This is not to establish a grade however, but to provide a due for teachers about how well their students are prepared.

Teachers are able to analyse the results, task by task, to plan individual study for each pupil. IBE is collecting and analysing the results obtained at 80 randomly selected schools. Deliverables include subject reports to draw teachers' attention to specific issues with reasoning and pinpoint skills where pupils show their strengths and weaknesses. This will provide teachers with practical guidelines for the years to come. Teachers will also share their insights with IBE experts. The research project includes workshops about the structure of the examination papers, tasks they contain and discussions on pupil performance. Reports on the *Assessment* are also vital to the development of the guidelines for the examination system.

Conclusions from the *Assessment* will be helpful in planning the tasks, which are regularly entered into IBE's Teaching Tools Database (www.bnd.edu.pl).

Good practice in non-formal science education



This study was undertaken in 2012 to identify how the range of science classes available in the non-formal learning environment could support schools in shaping and nurturing the skill of scientific reasoning. Such classes are offered by non-

government organisations, natural history museums, research centres of the Polish Academy of Science, scientific institutions, industrial centres with research units or educational divisions and institutions operated by private individuals, e.g., private museums. Research results have contributed to identifying useful practices and suggestions for schools and organisations offering science classes to schools. The report may be downloaded from www.eduentuzjasci.pl, "Research" pages.

In addition, the Science Section of the Institute has developed a "manual" for teachers and school principals that highlights science as a new subject introduced by the new curriculum to general secondary and technical secondary schools. To download the manual featuring sample lesson scenarios, please visit [ebis.ibe.edu.pl/nowa przyroda](http://ebis.ibe.edu.pl/nowa_przyroda)

SOCIOLOGICAL AND LEGAL ASPECTS OF EDUCATION POLICY – SELECTED STUDIES

Time and Working Conditions of Teachers

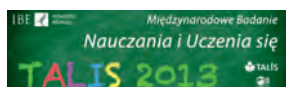


A study conducted by IBE provides data about teachers' working conditions. It offers insight into the structure of work time and identifies the range of activities performed by teachers.

The goal of the study was to identify time allocated by teachers within a typical timetabled school week to performance of work activities and factors for their variability, and also describe the complexity of teachers' working day and highlight different approaches to the teaching profession. The quantitative survey involved the use of two techniques. The first involved the respondent recalling the course of a randomly selected day and the time spent on work related activities on that day. (The second web interview focussed on time allocated by respondents to performance of individual work related activities in a typical week, frequency of various activities from the activity list and the time spent on that particular occasion.

A report of the study in electronic version is available on www.eduentuzjasci.pl

Teaching and Learning International Survey (TALIS)



IBE is managing the Polish component of the OECD-designed study, which aims to provide comprehensive information about teachers' and school principals' attitudes and opinions about their careers, work methods, conditions and determinants of professional development.

Results of a study completed in 2008 are available at www.eduentuzjasci.pl. The next report from the study, continuing as an on-line delivered questionnaire, will be available in 2014.

PSYCHOLOGICAL AND PEDAGOGICAL DETERMINANTS OF SCHOOL ACHIEVEMENT – SELECTED STUDIES

School determinants of teaching effectiveness



The study was started in 2010 at 176 primary schools across Poland. To-date, it has covered 306 classes and 5,572 pupils who entered third-grade in autumn, 2010. Subsequent study will follow up their school careers until 2015. Researchers are monitoring the children to identify factors driving their academic achievement. The study also identifies school-specific determinants and factors related to individual characteristics plus other major drivers in the environment. The study included questionnaire surveys of parents, teachers and principals of primary schools.



Six and seven-year olds entering school

The study aims to estimate the level of knowledge, cognitive, social and emotional competences of six and seven-year old children, evolution of their skills during the school year and differences that can be attributed to educational path (first or second grade in primary school, preschool at primary school, kindergarten). Skills Test at School Start is an important element of the study. It is a tablet-delivered adaptive test which itself selects new tasks according to previous responses.

It is the first use of such a test in Poland and a pioneering study on an international scale. The first phase of the study covered 3,100 children. The second phase, on the same sample of respondents is scheduled for the end of school year 2012/2013. In this way, the study hopes to identify which learning environment is the more effective, either school or preschool.

EDUCATION ECONOMICS: PUBLIC AND PRIVATE EXPENDITURE AND EDUCATION-RELATED MARKETS – SELECTED STUDIES

Economic Determinants for Objectives and Guidelines on Allocation of Private and Public Education Spending in Poland (BECKER)



The study aims to identify the nature of education spending from various sources, including budgetary subsidies, EU funding, the funds of local governments and parents themselves. What are the economic, social and institutional determinants and the contributions from different sources to specific institutions and children?

The study also covers time investment and the use of tangible and intangible assets. This fragmented knowledge will now be collated to serve as a reference point for development of funding policy for the education system. To learn more about the study, visit the “Research” pages at www.eduentuzjasci.pl.

EDUCATION AND THE LABOUR MARKET – SELECTED STUDIES

Higher Education Graduate Tracer Study



This pioneering study aims to provide a comprehensive overview of education and career paths of university graduates to evaluate the impact of their educational choices on their professional and career achievement. Previous research was mainly limited to the circumstances of graduate first employment. The IBE study capitalises on university data about the education of former students and collates them with records from Social Insurance Institution (ZUS). A report on the study will be available at www.eduentuzjasci.pl.

Competence Management in Lifelong Learning



This project has provided information about the use of human resource management tools and processes by employers to optimise employee competence. It investigated the role of employers in development of their human capital. The study and its results are closely linked to the National Qualifications Framework, development of which is the goal of the second European Social Fund project carried out by IBE. The survey covered medium-sized and large enterprises and consulting firms. Reports and the results are available on pages at www.eduentuzjasci.pl in the „Research” section.

The Programme for the International Assessment of Adult Competencies (PIAAC)



This long-term international research study was designed by the OECD. The assessment in Poland was coordinated by the Educational Research Institute.

The competencies measured by PIAAC are a prerequisite to function in the modern world and to attain new knowledge and skills. PIAAC provides information on, among other issues, the relationship between competencies, education and the labour market situation. The data obtained during the study enables an assessment of the quality of human capital resources. Based on this, an evaluation of the economic potential, social cohesion and identification of groups at risk of social exclusion due to their low level of skills are possible.

On 8th October 2013 the Organization for Economic Cooperation and Development (OECD) announced the results of the *Programme for the International Assessment of Adult Competencies* (PIAAC). The study, which was conducted in 2011-2012 in 24 countries, measured the competencies of adults in literacy, numeracy and problem solving in technology-rich environments.

Determinants of Educational Decisions



One of the biggest and most complex research projects is investigating 90,000 households. The study aims to discover educational and career paths of household members whose individual biographies will create a unique and comprehensive picture of transformation in Polish society, placing great emphasis on educational paths. The project will provide information about the impact of socio-economic and regional determinants on views and behaviour of Polish citizens at school and in lifelong learning, in terms of labour market mobility and knowledge transfer. Two phases of the project are scheduled between 2013 and 2015.

TEACHING TOOLS DATABASE



Teaching Tools Database is a website which contains tasks for diagnosis and improvement of student skills in various subjects (Polish, maths, history, science). Each task is tied to specific elements of the core curriculum along with commentary to explain its diagnostic value. The pool of tasks consists mainly of items at lower secondary school level. The database is regularly supple-

mented with new tools and its extension to cover new educational levels is planned in the near future. The sister *Database of Good Practice*, currently under construction, will contain lesson scripts, instructional articles, reports, presentations, instructions for science experiments, videos and useful links to foreign websites. The database already contains almost 600 tasks for seven subjects.

www.bnd.ibe.edu.pl

SEMINARS, CONFERENCES, COURSES

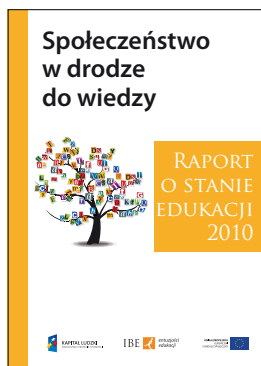


IBE's seminars and conferences aim to deliver results, tools and good practice emerging from the research. The meetings are often supplemented with workshops to avail participants of better insight and to let them gain hands-on experience of the tools offered. To see the calendar of events and conference materials visit the website www.eduentuzjasci.pl, "Seminars and conferences" pages.

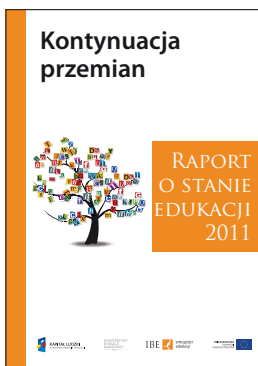
The Institute offers post-graduate and doctoral courses in educational research methodology.

REPORTS ON THE STATE OF EDUCATION

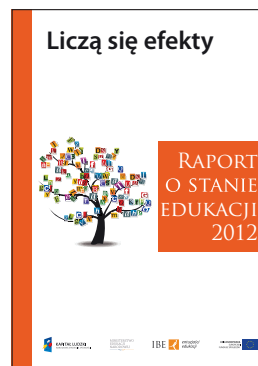
The Institute has been publishing annual reports on the state of education since 2011. These comprehensive documents contain analysis of data from research at IBE and from other sources. The main body of the report describes key trends reflected by generally available data about the education and current changes to legislation.



2010 Report on the state of education
A Society on the Road to Knowledge



2011 Report on the state of education
Continuing Change



2012 Report on the state of education
Outcomes Matter

In addition to regular modules, every report features specific issues in education. The main topics range from improving mathematics skills and vocational education to the qualifications' system.

DATABASE OF EDUCATIONAL RESEARCH



The Institute's Database of Educational Research records educational research in Poland from the past two decades. Research registered in the database covers different educational levels and ways of teaching from various scientific disciplines – psychology, pedagogy, economics, law and political sciences. The database is an excellent guide for everyone wanting to exploit the deliverables from educational research in their work – in particular, academics, state and local government authorities and non-government organisations.

www.bibe.ibe.edu.pl

POLISH EDUCATION CONGRESS



IBE is the organiser of the biennial Polish Education Congress. This event is an opportunity to glimpse all perspectives of education – from new opportunities for preschool and school children to develop, transformation in higher education, to educational needs of employees and employers. The biennial congress, attended by almost two thousand participants is a meeting venue for representatives of all communities engaged with education. It serves as a platform for fact-based debate and constructive exchange about the quality of education, social cohesion and the impact of education on innovation in the economy. The first congress was convened in 2011, followed the second in June in 2013. The third will be held in 2015.

www.kongres.ibe.edu.pl

IBE LIBRARY

Founded in 1950, the collection of IBE's library holds about 80,000 books and over 10,000 volumes of journals, including publications in English, French, German and Russian. Most publications focus on educational theory and practice but extend to other education-related disciplines such as philosophy, psychology, social science and science.

A separate collection contains Polish and foreign primers and textbooks for various subjects.

INTERNATIONAL COOPERATION

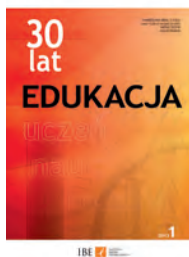
International cooperation is an important aspect of the activities of the Educational Research Institute. As a leading educational research institution, the Institute is responsible for implementation of the Polish contributions to international research projects, including:

- the *Survey of Health, Ageing and Retirement in Europe* (SHARE),
- the *Programme for the International Assessment of Adult Competencies* (PIACC),
- the *Teaching and Learning International Survey* (TALIS),
- the *European Survey on Language Competences and the Polish version of PISA* after 2014.

The Institute is a member of numerous international associations, including Euroclio (an association of history teachers, institutions and organisations engaged in history education) and the International Association for the Evaluation of Educational Achievement. IBE has also achieved the status of mandated body under the Twinning Initiative (institutional support for states covered by the European Neighbourhood Policy).

SCIENTIFIC QUARTERLIES

EDUKACJA (Education)



This quarterly is the leading Polish scientific journal dedicated to education and its related scientific disciplines. **Edukacja**, the editor-in-chief of which is Michał Federowicz, has been presenting the deliverables from Polish and international research for thirty years. Monitoring outcomes, system changes, scientific achievements in teaching and educational research – are just a few areas covered by the magazine. **Edukacja** promotes knowledge of the education system and the efforts of Polish and foreign researchers at all levels. In 2007, the quarterly was listed in the European Reference Index for the Humanities (ERIH) magazine.

“Edukacja” quarterly is available by annual subscription. An English language version will be released in 2013–2014 – three issues will include the most interesting articles from previous years.



Special editions will be available free-of-charge in electronic form.

www.edukacja.ibe.edu.pl

Edukacja biologiczna i środowiskowa (Biology and Environmental Education)



The quarterly is mainly addressed to science teachers and is a credible source of knowledge for pupils, students and academics involved with the development of subject education. “*Science*” is a section where articles mainly focus on biology, biochemistry and other topics in science. Contents of the “*School*” section point towards good sources of information, discuss teaching, classroom methods, lesson plans and scripts developed by experts from the Institute’s Science Unit. The quarterly is available by annual subscription. The title will be available in electronic form from 2013.



www.ebis.ibe.edu.pl

EDUCATIONAL VALUE ADDED (EVA)

IBE



EDUKACYJNA
WARTOŚĆ
DODANA

Research on methods supporting estimation of the educational value added indicator (EVA) is an element of the project *The development of Educational Value-Added method for enhancing the evaluation function of national examinations*. The project aims to develop methods for using external exam results in the assessment of teaching effectiveness. The educational value added methodology takes into account results obtained by students during the final exam as well as their performance at their previous level of education. A comparison of both measures yields the EVA indicator – a measure of school effectiveness validated by an external exam.

EVA is a distinctive feature of a school as it measures its contribution to achievement of its students. EVA is a relative measure which allows us to identify whether or not effectiveness of a given school was higher (positive EVA) or lower (negative EVA) than the average for a given school type (zero EVA). EVA is used to communicate exam results to schools.

Who benefits from EVA measures and how?

- teachers and principals in internal evaluation;
- students and their teachers in their choice of post-lower secondary school;
- supervisory bodies conducting external evaluation;
- governing bodies, as an educational measure.

EVA measures provide valuable information about performance. An analysis of this information combined with additional contextual data reliably helps schools to plan endeavours to support their development and assists governing entities and supervisory bodies in the evaluation of the performance of a school.

www.ewd.edu.pl

NATIONWIDE TESTING OF THIRD GRADER SKILLS

IBE



BADANIA
UMIĘTNOŚCI
TRZECIOKLASISTÓW

The fundamental objective of the *Nationwide Testing of Third Grader Skills* is to support schools (principals and teachers) in obtaining additional, reliable and comparable data reflecting the level of knowledge and skills of students graduating from the third grade – after completion of the first stage of education (grades 1-3) and before entering the second stage (grades 4-6). Schools which voluntarily enrol for the program receive a detailed report describing performance of their students plus expert recommendations concerning teaching.

Recommendations may be used as guidelines (for teacher teams) to plan customised efforts with students in grades 1-3 and at the beginning of grade 4. The study is part of a project running since 2007 and conducted by IBE since September 2012. To-date, the project has delivered:

- four editions of tests verifying language and mathematics skills of those completing the 1st stage of education;
- two editions of tests of skills for pupils starting grade 4;
- supplementary studies in the context of learning outcomes – questionnaire surveys on a sample of school principals, teachers parents and students, including research into student motivation to learn;
- three rounds of the national voluntary *Nationwide Testing of Third Grader Skills*.

Experience gained from the research has been presented in publications and reports which deliver recommendations about using research results in the career development of early education teachers. To read more about the study and view publications in electronic form, visit: www.obut.edu.pl, www.trzecioklasista.edu.pl

NATIONAL QUALIFICATIONS FRAMEWORK

IBE



kwalfikacje
po europejsku

The Educational Research Institute conducts the project *"The development of terms of reference for the implementation of the National Qualifications Framework and the National Qualifications Register for lifelong learning"*. The project is prolonged until 30 June, 2015. Basic aims of the project are:

- to systematise qualifications, understood as learning outcomes confirmed by an examination,
- to describe the Polish Qualifications Framework in relation to the European Qualifications Framework in a Referencing report, which was presented and accepted at the European forum in May, 2013,
- to develop the basic foundation of the national qualifications system and an institution to manage the national qualifications system.

The project is accompanied by two supplementary projects entitled:

- *"National Qualifications Framework – preparation before implementation of National Qualifications Register for lifelong learning"* which aims are to:
 - prepare procedures before the implementation of the National Qualifications Register and regulations in the field of validation, quality assurance and certification in non-formal, vocational and higher education,
 - increase the consciousness and knowledge among the stakeholders.
- *"National Qualifications Framework – pilot implementation of national qualifications system and its advertising campaign"* – within this project a partnership agreement between the IBE and the Regional Labour Office in Cracow was signed in December, 2013, establishing cooperation concerning the procedures, tools and channels of communication and legal restrictions necessary to ensure a well-functioning register.

www.kwalifikacje.edu.pl

THE EDUCATIONAL RESEARCH INSTITUTE

The Institute conducts basic and applied research in education. The mission of the Institute is to strengthen the evidence-based education policy and practice in Poland.

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 in scientific research teaching, public administration and non-governmental organisations.

The Institute conducts in Poland major large-scale international assessments including the *PIAAC*, *PISA*, *TALIS*, *ESLC*, *SHARE*, *TIMSS* and *PIRLS* and projects co-financed by the European Union under the European Social Fund.