CASE STUDY

Uses of assessment information to support student learning in Poland

MACIEJ JAKUBOWSKI, OECD

ESCHBORN, GERMANY – OCTOBER 25, 2011
POLAND

**Population:** 38 mln (34th)
38.7% under 29 yrs; 12.5% in schools

**GDP PPP:** $19 752 per capita (40th)

**EU member** since 2004

**School system:**
- 98% public sector
- Compulsory until the age of 18
- Funded mainly from state budget through grants to local governments
- Autonomy of school principals and teachers regarding curriculum, textbooks, teaching methods and internal assessment
- **BUT:** strict laws regulating teacher employment and salaries
- Education boom: more than 50% in higher education
Overview of Student Assessment Activities in POLAND

- **National examination since 2002:**
  - Obligatory at the end of primary (12-year-olds) and lower-secondary school (15-year-olds) since 2002
  - Since 2005 replaced old Matura exam in upper secondary schools with new standardized Matura exam (majority of 18/19-year-olds)

- **OECD PISA:** representative sample of 15-year-olds
  - Poland showed one of the largest improvements among all countries since 2000; This is probably associated with the reform of 1999
  - Additional testing of 16- and 17-year-olds in 2006 and 2009 to see how upper-secondary students perform comparing to lower-secondary

- **PIRLS 2006:** representative sample of 3rd graders

- CIVED

- Additional student surveys including longitudinal studies in primary and secondary schools
How different assessments are used?

- National exams provide very detailed data on performance of whole population of students
  - Possible to compare regions or even single schools
  - Not comparable with other countries or even between student cohorts
  - Can be used for analysis relating other institutional or policy-relevant factors at the school, local government or regional level

- PISA/PIRLS
  - Gives international perspective on performance of polish 15-year-olds
  - PISA provides picture of overall trends since 2000; provides means of evaluating the 1999 reform
  - Can’t be used to compare regions or schools
  - PISA sample of 16- and 17-years-old was merged with national exams providing useful tool to analyze student progress over time (from lower- to upper-secondary school)

- Additional surveys provide more detailed information on student progress to address policy questions
National examination system in POLAND

- **National exams are conducted by examination boards**
  - eight regional boards (OKE) are supervised by the central examination board (CKE); CKE and OKE are quasi-independent with their directors appointed by the Minister of Education

- **National exams were introduced in 2002**
  - **Primary school exit test**
    - One general test to evaluate students - cannot be used for selection
  - **Lower-secondary school exit test**
    - Math-science, Humanities, Foreign language (since 2008)
    - Used to select students to upper-secondary schools

- **New Matura at the end of upper secondary school**
  - Standardized exam since 2005 in more than 10 subjects and several foreign languages
  - Mathematics, Polish language and foreign language are obligatory
  - To obtain Matura certificate
  - Serve also as an entrance exam for higher education
<table>
<thead>
<tr>
<th>age</th>
<th>grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>I</td>
</tr>
<tr>
<td>8</td>
<td>II</td>
</tr>
<tr>
<td>9</td>
<td>III</td>
</tr>
<tr>
<td>10</td>
<td>IV</td>
</tr>
<tr>
<td>11</td>
<td>V</td>
</tr>
<tr>
<td>12</td>
<td>VI</td>
</tr>
</tbody>
</table>

**Zero class (primary schools or kindergartens)**

Comprehensive primary schools

<table>
<thead>
<tr>
<th>age</th>
<th>grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>I</td>
</tr>
<tr>
<td>14</td>
<td>II</td>
</tr>
<tr>
<td>15</td>
<td>III</td>
</tr>
</tbody>
</table>

**Final standardised test – NO SELECTION**

Comprehensive lower secondary schools (*gimnazjum*) ISCED 2A

<table>
<thead>
<tr>
<th>age</th>
<th>grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>I</td>
</tr>
<tr>
<td>17</td>
<td>II</td>
</tr>
<tr>
<td>18</td>
<td>III</td>
</tr>
<tr>
<td>19</td>
<td>IV</td>
</tr>
</tbody>
</table>

**Final standardised exam - SELECTION**

ISCED 3A  ISCED 3B  ISCED 3B  ISCED 3C

Vocational exam → labour market

NEW Matura → higher education/labour market

(62% after ISCED 3A)
Overview of Student Assessment Activities in POLAND

- National examination system was introduced by the reform of 1999 to monitor student achievement after further decentralization of management and finances to local government and increased school autonomy regarding curriculum, textbooks and teaching methods.
- Since 2002, results of assessments are extensively used by:
  - students and parents
  - local governments
  - schools/teachers
- Limited use by teachers, but increasing over time.
- Although situation is slowly improving, national exams were usually often ignored by school inspectors; this should change if newly proposed school evaluation agencies will replace school inspectorates.
How are national exams used to support student learning in Poland

- National exams provide objective assessment of student skills
  - Between primary and lower-secondary school this has purely informative value
  - Lower-secondary exam tells students which school they can choose
  - External evaluation is usually appreciated by lower performing students who are not sure their skills and are often stigmatized or undervalued by teachers

- External exam results are usually too limited to provide detailed evaluation on strengths and weaknesses of teaching practice

- Moreover, it is usually impossible to disentangle the effects of single teachers, because
  - Exams are multidisciplinary
  - Students are taught by different teachers in different subjects and in different years
How have the uses changed over time?

- In the beginning, raw unadjusted scores were compared between schools or regions.
- Obviously, such comparisons have little value for improving teaching practice or for accountability.
- Raw comparisons do not take into account student and school background.
  - Two schools/teachers of equal quality can perform very differently on final exams just because they have students with very different family background.
- Comparisons over time are also invalid as exam scores are published on different scales.
How have the uses changed over time?

- The value-added system was gradually introduced since 2008
- In this system, schools are compared taking into account student intake scores and other basic characteristics
- Value-added gives much better evidence on school effectiveness or teaching quality when comparing to raw exam scores
- Value-added information is now widely used with scores assigned to each lower- and upper-secondary school in Poland
- Methods are well documented and transparent
- Each year hundreds of teachers, school principals, inspectors or representatives of local governments are trained to better understand and use information from valued-added system
- Information from value-added system is now widely used and in many places replaced comparisons based on raw unadjusted exam results
Basic idea behind value added assessment
What were the mechanisms and drivers that allowed for those changes?

- Dissatisfaction with raw comparisons
  - Unfair for schools
  - Misleading for accountability
  - Providing little guidance for schools and teachers on how they perform comparing to other schools
- Increasing amount of data and expertise
- Overall critique of the assessment system
  - Teaching-to-the test
  - Little value for teaching
- To address this criticism other changes were also proposed:
  - Extending range of test subjects or reported skills
  - Improving quality of test instruments
  - Providing more helpful information for teachers and schools
Summary: national exams

- National exams provide objective assessments of student knowledge and skills
  - They create incentives and give students and schools valuable feedback
  - They are necessary to monitor decentralized school system
- The system evolved over time by introducing more exam subjects, providing value-added scores and additional tools to understand results
- Main challenges:
  - Provide more useful information for teachers
  - Provide more detailed and more reliable results
Summary: international surveys

- Surveys like PISA and PIRLS place polish results in international perspective.
- PISA demonstrated positive impact of the 1999 reform, while it also shows there is large room for further improvements, especially in mathematics.
- Main challenges:
  - Further use of the available data.
  - Increase investment not only in data collection but also in data analysis – further investment in analytical capacities.
  - Combining information from several surveys to address crucial policy questions.
Recommendations and lessons learned for other countries

- Introduction of national exams and data collection is a first necessary step to collect objectively measured and reliable information on student performance.

- Further investments are crucial, however, to use collected information for policy purposes and to improve teaching practice.

- Poland, similarly to many other countries, lack research capacity to fully explore potential of collected data.