Competence measurement system in public education

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Pedagogical research

• TOF-80
  – grades 4 and 8
  – various subject areas
  – reading, mathematics, science, IT and cognitive skills
  – various grades most featured 4 and 8
National Assessment of Basic Competencies

• Reasons for the implementation of the National ABC
  – change of paradigm in the concepts of knowledge on system level
  – placing more emphasis on developing competencies
  – to ease and speed the transition for schools
  – to inform schools of competences that each student should possess at a given grade level
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• Reasons for the implementation of the National ABC
  – to provide schools with a tool of a set of outgoing requirements
  – the accountability of schools and teachers
  – National ABC helps schools’ internal evaluation processes

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Aims of the National ABC

- to assess whether students are able to use their knowledge and skills in real life situations and gain further information

- the assessment tests
  - do not measure curricular requirements
  - measure how well students can activate what they have learned and can use them in problems relating to everyday situations
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• Target population of the National ABC
  – 2001: grades 5, 9
  – 2003: grades 6, 10
  – 2004-: grades 6, 8, 10

• Areas of student assessment
  – reading comprehension
  – mathematics
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• Criteria of the assessment
  – help create and form the internal evaluation practices of schools
  – help teachers familiarize themselves with the tools and methodology of the competence-based assessments,
  – provide schools with data and practices to carry out objective local, institute-level evaluations,
  – provide maintainers of schools with data that is reliably comparable with the National performance data.
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• Characteristics of the assessment
  – in all schools with the participation of all students
  – to provide schools with a data pool about the student body as well as individual data
  – central analyses are carried out based on
    • a given sample of students from every school until 2007
      – 20/30 student per school
    • the whole population of the grades measured from 2008
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• Linking performance data from 2008
  – the study assesses student populations every second year from grade 6 to grade 10
  – each student is provided with a unique assessment ID
  – helps added value to be measured
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• Test booklets
  – two versions
  – 60-60 mathematics and reading items
  – [http://www.kompetenciameres.hu](http://www.kompetenciameres.hu)
    downloadable (in Hungarian)
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• School Principal, School Site and Student Questionnaires
• for schools to get an accurate picture of student performance and rank themselves in the group of schools with similar attributes
• gathering basic information necessary to get a picture of characteristics of
  – the students’ family background and
  – the schools’ attributes
• to help conduct more in-depth analyses of student performance
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• Reporting the results
  – data gathering in May each school year
  – feedback on
    • school site,
    • schools and
    • school maintainers
  levels by the end of next February
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• Reporting the results
  – data about the distribution of student performance by
    • settlement and
    • school type, and
    • on a regional basis
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• Reporting the results
• the report shows
  – how the supposed performance relates to the students’ socio-economic, ‘family background index’, based on the Student Questionnaire.
• All schools receive all their school sites’ reports and a school level report.
• Maintainers get a maintainer level report and gain access to all their school and school site results.
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- Reporting the results
- schools learn
  - their average performance,
  - the student distribution on the scale and levels of competences from mathematics and reading.
  - whether the school shows a significant change compared to the pervious assessment
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• Reporting the results
• Each school receives its
  – school sites’ reports and a
  – school level report.
• Maintainers
  – get a maintainer level report and
  – gain access to all their school and school site results.
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Comparison of performance by school type

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Comparison by performance

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Comparison by the distribution of performance
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Comparison by the socio-economic status

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Dispersion of students amongst levels

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Comparison of dispersion amongst levels

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Comparison of performance year-by-year
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Comparison of performance of the classes

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- Results and tendencies
  - The scale and levels of competencies
    - the national average and standard deviation after transformations is 500 and 100 standard points in mathematics and reading
    - the Core test serves as a link between assessment years that help put previous results on the same scale and enable the creation of trend data
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• Results and tendencies
  – The scale and levels of competencies
    • levels help sort students into different categories based on their competencies
    • it is stated what the minimum of competencies is on a certain level
    • four levels of competencies in both domains
    • definition of the levels is based on methods used in the PISA 2000 study
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• Results and tendencies
  – Tendencies
    • the results have not changed considerably, though the differences are significant due to the large sample size
    • the biggest difference in 6th grade reading performance
    • the results in other grades and fields fluctuate slightly but not significantly year-on-year
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• Results and tendencies
  – Tendencies
    • reading results are better than those in mathematics
    • there are less students to reach the upper 3rd and 4th performance levels in mathematics, the number of students on level 1 and below level 1 is almost twice the size of that in reading
    • the number of students on the upper levels increases in mathematics as the grades progress, reading results get worse
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• Results and tendencies
  – Gender differences
    • boys perform better in mathematics
      – the difference is measurable but is not overwhelming
    • girls do better in reading
      – the girls’ lead is much bigger over the boys in reading
  – Geographical differences
    • the results more or less reflect the differences that the economic indices do following the highs and lows of socio-economic development
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• Results and tendencies
  – Differences according to settlement type
    • capital city, county capitals, cities and villages
      >3-10 >30 >30
difference in standard points
  – Differences according to the socio-economic status
    • the parents’ educational level, the number of books and social allowances have considerable influence
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• The results recycled
  – schools: regulations force schools to continually evaluate their scores
    • lower achieving schools must make provisions
    • the annual quality control documents must be based on the assessment data
  – policy decision makers:
    • national reports
  – researchers:
    • deeper relationships within the results
Thank you for your attention.

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