Developing online diagnostic assessment - Experiences of a large scale national case study in public education in Hungary

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A long-term project in Hungary aims to devise an online formative assessment system for the first six grades of primary school. The objective of the first phase is to adapt the system in 150 schools and study the related technological and methodological issues in detail.

In this workshop we (1) outline the formative (diagnostic) assessment system; (2) present the results of the first two years of the project, in which online testing was introduced and piloted in various age groups in different school subjects; (3) compare results on paper-and-pencil and online testing in order to identify domains and item formats where the two media may influence the achievements; and (4) present teachers' opinions and attitudes towards assessment and accountability and introducing computer-based assessment in national high stakes testing.

In most of the developed countries international and national assessment programs regularly provide comprehensive feedback on the achievement trends of students. However, they are not suitable for tracking students' individual development, diagnosing learning difficulties or identifying causes for failure, or supporting different solutions. Fostering students' learning processes and facilitating their development require other types of information as well as frequent personal feedback that are more accurate and detailed.

These requirements have resulted in the launch of the "Diagnostic assessments" research and development program of the Center for Research on Learning and Instruction, University of Szeged that can only be adequately conducted with the help of modern information technology devices, keeping the required frequency and accuracy. The activities of the project – launched in 2009 – are organized into seven work packages: (1) Devising assessment frameworks for reading, mathematics and science for the first six grades of primary school; (2) Exploring diagnostic assessments at further cognitive and affective domains; (3) Developing item banks in reading, mathematics and science (ca. 3 x 600 items); (4) Creating a platform for online testing by adapting TAO; (5) In-service training of teachers to prepare them to use the system; (6) Devising diagnostic assessment instruments for SEN students and developing special computer interfaces for SEN students; (7) Meta-analysis of the data of national and international assessments.

The research design of the project makes possible to devise a large number of items both on paper and on computer, namely to build PP and CB item banks as well, and to carry out researches on comparing the achievements and item parameters on the tests using different media. On behalf of the workshop we present the results of the first TBA data collections carried out in the schools equipped well enough in spring 2010.

The Diagnostic Assessments Project is supported by Hungarian Development Agency (TÁMOP 3.1.9). Gyongyver Molnár was having Bolyai Janos Research Scholarship at the time of presenting the paper.