Development of resources in Latvian to support learners with special educational needs

The context for the use of ICT for Inclusion

ICT, in the form of interactive whiteboards, laptops and iPads, is actively used by teachers in mainstream classrooms where learners with special educational needs (SEN) are included to individualise tasks depending on their skills, level of development and kind of disability. There are very few interactive materials in Latvian that can be used in the classroom, except for the materials that were developed during the European Social Fund project 'Mathematics and Natural Sciences' (www.dzm.lu.lv). These materials can be used by teachers and learners according to learners' needs, but they are for learners at lower and higher secondary level. The website includes sections for teachers and for learners where teaching and learning materials can be found.

One of the learning materials publishing houses, 'Lielvārds' (www.lielvards.lv), provides technical equipment for interactive classrooms with basic software that helps teachers to make their own materials for learners' different needs.

The municipalities support the implementation of new technologies in schools and they are very interested in involving teachers in in-service training on ICT use.

One of the main stimuli for using ICT in the learning process is the attitude of parents, who demand that materials be provided electronically so that they can help their children learn, follow their progress more easily and access materials and assessment results from their homes.

There are companies that are very interested in developing new materials for education for different data carriers. One such company is EForma Ltd. They have developed an alphabet that can be downloaded to smartphones so that children can learn the letters and sounds. Latvian, Russian and English alphabets are available and children can use them when learning their native language and foreign languages. They can be used by children both with and without SEN.

The policy context

The policy documents do not restrict or limit the use of ICT in the classroom and there are no strict regulations as to what materials teachers should use. This gives them the opportunity to create materials that are appropriate for each and every learner.

The Ministry of Education and Science has a programme for provision of up-to-date hardware for schools.

The use of ICT

Experience has shown that the most effective option for learners with SEN in any inclusive learning environment is the use of iPads with learning software. This is especially effective for children with severe disabilities when they are unable to use pens and have difficulty paying attention to text or oral language. They learn how to use the iPad very easily and they can be involved in the learning experience for longer periods of time. The software on iPads is also easy to use at home together with parents and siblings. Many of the programs can be installed on smartphones so they can also be used outside the classroom.

Programs: GoTalk, AbraHD, Abece HD, Intro To Letters, Intro To Math.

Key outcomes and benefits

The main outcomes of using up-to-date ICT are that learners are more motivated to learn, they are interested in using something on a higher level, they become more confident and parents can follow their children's achievements more easily. Another aspect is that when many teachers see their learners' development, they are motivated to learn more about ICT use and the development of learning materials.

Main challenges and obstacles

The main challenges are:

- The attitude of many teachers who want to keep to very traditional teaching methods, as they believe that ICT only spoils children and consider all modern technology as a threat to the learning process;

- The availability of materials suitable for different age groups and different levels of development;

- Insufficient funds for modernising hardware in schools. It is very difficult to make officials in municipalities understand that hardware bought for the school in 2005 is too old for present ICT needs.

Additional information

www.dzm.lu.lv – The Natural Science and Mathematics Education Centre, head Dace Namsone; dace.namsone@lu.lv;

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