

Digital versions to replace printed editions

Those who fail to use multimedia textbooks will lose out

By Denis Pimenov

There is no doubt that classical paper textbooks' days are numbered. With this in mind, the Education Ministry's initiative is welcome, giving the opportunity to experiment with electronic tablet devices for educational purposes. Initially, pupils at the Belarusian State University's Lyceum will be the first to receive their own personal e-books, loaded with digital copies of ordinary school textbooks and additional materials for independent work. The feasibility of expanding the project will be decided in two years' time, when it may also be decided to produce such computers domestically.

Some question whether we should waste money and time on creating simple digital copies of printed textbooks when we could enhance the quality of education by including multimedia sound, video, slide shows, search systems

and interactive functions. There could also be an Internet version of each textbook, with lecturers simply downloading additional materials as required. In fact, Sakrament IT — a High-Tech Park resident — has already developed prototypes of such textbooks in the Republic, as part of a UNESCO project (compiling software to synthesise Belarusian language for those with sight

Valery Yegorov, Sakrament IT: 'Technically and intellectually, schoolchildren are ready to work with multimedia textbooks. Our polls show that they enjoy working in this way and learn better using software'

disabilities). It has prepared a set of multimedia audio textbooks, used for the past two years at Belarusian schools for the sight impaired. Transforming from an audio version to a visual text is an easy task, although the company asserts that it will take several months to develop a full set of textbooks for secondary schools. Over



Electronic 'books' inspire studies

160 books on the school curriculum will be cheaper when converted to a multimedia library, since costs are less than for creating printed versions. A whole library can be downloaded on a single CD for just \$10. Moreover, if additional

at the monitor (according to statistics, 40 percent of all teenagers suffer from sight problems by the time they leave school). Listening to teaching materials can be very useful and is a good use of travel time. In fact, the Belarusian mul-

ready to work with multimedia textbooks. Our polls show that they enjoy working in this way and learn better using software," explains the founder of Sakrament IT, Valery Yegorov. "As regards the cost to the state budget, our project foresees each schoolchild using their own phone or mobile computer device to download our textbooks. Only families on low incomes will need computers bought for them."

Mr. Yegorov agrees that reading texts on small smartphone screens is problematic but listening is possible. On coming home, or at school, a child can download a text to their computer, viewing it on a large screen. Sakrament IT has found that 95 percent of 9th-11th grade children and 70 percent of 7th-8th grade urban pupils already

have computers. Moreover, it's possible to buy second hand computers cheaply. Even new models can be purchased with low-cost credit. With this in mind, it seems likely that the education system will accept the proposal. If a state order is placed, the company will take out a bank loan to realise production or will ask the Belarusian Innovative Fund for financial support (which has already been offered).

Calculations show that the project will fully cover its costs in the first year of operation; moreover, a \$6m+ profit is expected. Sakrament IT now plans to develop multimedia textbooks for higher educational establishments, having found that almost 90 percent of students are ready to buy such devices.

Winged songs of spring

Sandpiper Festival in Gomel Region's Turov gathers increasing number of guests each year

By Anna Overianova

Turov residents are proud of the ancient status of their city, their history and their famous countrymen. Turov meadow is a chain of small islands, inaccessible to people or animals. It seems that nature takes care of birds there, with a huge quantity residing in the meadow: about 50,000 migrating geese, over 30,000 ducks and over 100,000 ruffs overwinter there. Meanwhile, about 3,000 wetland birds nest — almost the same number as the town's population.

Norbert Schäffer, from the British Royal Society for the Protection of Birds, notes that, fifteen years ago, he was virtually the only foreigner in

Turov who came to observe birds. Today, groups from the UK, Poland, Holland, Germany and elsewhere arrive. "Interestingly, this unique natural territory is situated near the town — not in the middle of nowhere," Mr. Schäffer smiles. "Fifteen years ago, it seemed that this habitat was in danger, since cities tend to expand into the countryside. Pleasingly, on returning here many years later, I've seen that Turov meadow has not been 'strangled'. Many birds remain."

Apart from 'green' tourism, the site attracts scientific tourists. A local 'laboratory' is available on the local river bridge. Moreover, the only Belarusian station for bird ringing is situated in

Turov. "The importance of preserving biological diversity has been much spoken of — by us and the whole world — for the past few years," asserts the Head of the Natural Resources and Environmental Protection Ministry's Department for Biological and Landscape Diversity, Natalia Minchenko. "We need to know more about the surrounding flora and fauna, doing our best to preserve them. In this respect, the Sandpiper Festival is a wonderful way to conduct educational work."

Like any other natural territory, Turov meadow has its own problems. "The meadow is severely overgrown, so we are cutting it back as best we can," explains the Director of

multimedia textbook can also operate with any mobile MP3 device, with the software able to download over 150 textbooks (with audio functions) to an i-phone, i-pad, laptop, notebook, netbook or personal computer. This unique innovative development is patented by the Belarusian company.

"Technically and intellectually, schoolchildren are



Rare birds living in Turov meadow

APB-BirdLife Belarus Public Association, Victor Fenchuk. "Nature is responding to our efforts, with new bird habitats emerging on cleared territories — of sandpipers, gulls and terns."

"Many issues arise regarding spring hunting," adds the Head of the Turov

Regional Inspectorate for the Protection of Flora and Fauna, Anatoly Markevich. "Many people wish to shoot, with even 'legal' hunters being undesirable. One shot disturbs meadow residents for a radius of several kilometres, causing stress to birds. This can stop them

from breeding, so we ask the Natural Resources and Environmental Protection Ministry to restrict spring hunting — as is enforced at other unique territories countrywide."

Ms. Minchenko assures us that the Ministry isn't indifferent to this problem.