

## PANEL DISCUSSION

# Teacher in a Pocket: Large-Scale Digital Education Technology

Steve Moss,  
 Strategic Director  
 for Information and  
 Communications  
 Technology (ICT),  
 Partnerships for  
 Schools (PFS) (2005–  
 2012):



“Mobile and online technologies have destroyed the usual educational system.” “School education will benefit from the use of mobile technologies only when the schools themselves become aware of the need for such technologies, and adapt the educational system.” “In the UK there are 6,000 teachers who use Twitter, and it helps share experience and views on teaching.”

“School is a social environment. When we asked students if they wanted to go to school or would prefer online learning without attending classes, they preferred school. There they communicate with friends and learning to be part of society.”

“Teacher is an expert, a facilitator, and a mentor, he manages educational content. It helps students advance to the next stage of the learning process.”

Yefim Rachevsky,  
 Director, Tsaritsyno  
 Education Center  
 # 548, Moscow:



“Teacher in a pocket is a convenient tool: there is no need to revise the salaries and seek a substitute teacher for the one who has gone on maternity leave. The transition to new technologies is inevitable: I remember the transition from fountain pens to ball-point ones. The latter were very expensive, but now the fountain pens are more expensive.”

“I still remember the days when it was a really big deal for a school principal to get a new computer, in order to do that a dozen of toilets had to be swapped for Intel 80286.”

“Today teachers don’t have the universal subject knowledge to deliver new, ever-changing content, but they should know where to find it.”

## Summary

## How digital education technologies are transforming the classical education system?

- Reducing the cost of educational services, as a result, education is becoming more popular and accessible to a wide range of social groups.
- Education is becoming more personalized and multi-format, and students can choose their own courses without leaving home.
- Active implementation of gamification techniques in the education process increases student’s interest in the learning process.
- Transition of the educational process to an online mode can enhance competition and become an incentive for professional development of teachers.
- Direct communication within an educational institution retains its significance as an important part of the process of students’ adaptation to the social environment: maximum effect of the successful application of this technology is possible only in conjunction with traditional teaching methods, face-to-face communication between a teacher and a student (e.g. blended learning).
- Risks of distance learning are a possible growth of low-quality courses, lectures, and low-skilled teachers.

## Russian Practice

### The Modern School project as an example of the school of the future

Modern School is a project implemented within the framework of the execution of the order of the President of the Russian Federation dated November 3, 2011 number Пп-3291. The project aims at creating a new learning environment which would be incentive, student-oriented, and would change the physical space of the school. As part of the implementation, four key directions of school modernization have been highlighted, these are: infrastructure, equipment, educational process, and health. The project demonstrates how you can turn traditional workshop classes into an innovative technical learning process, etc. Modern school assumes active use of distance learning technologies, diagnostic of learning quality, digital multimedia textbooks, and cognitive visualization tools. Modern school is an easy configuration of educational space and unified information and educational environment. The results can be seen already in the pilot schools in Moscow, Dubna, Tambov, and Ulyanovsk, which will open their doors in September 2015.



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“Massive open online course (free online courses projects such as Coursera) is one of the main examples of distance education. It is important to consider not only technological solutions, social and moral aspects of the development of distance education should also be considered, and they are very important and play a key role.”

“The medium is the message. Media, which you choose to transmit any content, are the essence of this content. The problem is that at the moment there is no such understanding in the online education.”

“The purpose of Massachusetts Institute of Technology (MIT) is to create a Ferrari of online education.”

“The main value of the new forms of education for the future, whether we are talking about MOOKs or one-on-one education program is to develop a personal teaching approach.”

“Within 18 months – or two years at most – we will see a surge of widespread penetration of the game learning processes.”

“I think that Russia is facing the same problems faced by the U.S.A and European countries. The main thing is a problem of sharp decline in young people’s interest in science, education, and good grades in school.”



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