

ICT in the Educational System of the Caucasus and Central Asian Countries

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During the Soviet period the flow of information with respect to science and education to the Central Asian and Southern Caucasian countries mainly came through the Russian Federation where there was comparatively very little information content allowed from the world outside into the former Soviet Union system. The situation worsened after the event, perestroika because the quality of the Russian educational system as well as science and technology rapidly declined due to a lack of political will and financial support.

This situation has not changed radically since then, and has lead to a very serious decline in the educational and science/technology research systems: Whilst currently Russian materials are becoming less important there is only a small financial base for the acquisition of world standard literature and periodicals for the libraries in the Central Asian and Southern Caucasian countries. The educational systems however still largely relies on outdated Russian curriculum, teaching materials and elderly teachers from the Soviet times. This is totally inadequate to be able to supply effective production of education of a world-standard for the younger generation, which is required to enable them to lead the Central Asian and Southern Caucasian countries into a future of competitive sustainable economic growth.

Developing countries in South-East Asia which started from comparable conditions at present try to solve the problem by sending tens of thousand students abroad for an up-to-date education. This is also not either a short or long term suitable option for the Central Asian and Southern Caucasian countries due to a lack of financial resources devoted to education by all of the countries.

In this situation perhaps the only speedy viable solution to solve the increasingly complex problems in the educational systems, could be achieved by a massive programme of well-organized use of ICT technologies using fast Internet providing the following :-

- world wide scientific and educational information systems.
- fast and efficient contact with the educational and training systems abroad.
- participation in international distance education systems.
- Self generating development and dissemination.

This approach could simultaneously assist in resolving several fundamental problems :-

- It is quickly within reach for a very large number of people to be connected to the world wide educational and training systems.
- It is possible for a large number of people to quickly access world wide information and educational libraries.
- It can principally be used at any geographical location connected to the internet, including provincial locations far away from the capitals.
- It provides efficient global interactivity within the country and with the wider world.

On the other hand, to make the system fully effective there are strong demands and requirements in the use of the Internet systems :-

- Fast inexpensive high-speed internet access required throughout the participating countries, institutions and population.

- Thousands of computer working places are necessary, spread across through the respective countries.
- Efficient large scale training programmes required in computer skills capacity building and English and possibly other languages.
- Psychological mind set change and political will to embrace the need for change and produce the encouragement of the wider use of these facilities.

There is without question no doubt that this infrastructure requires a substantial financial effort which may supersede the capabilities of many countries, so a concerted effort including international external aid organizations/sponsors is required. In the personal view of the speaker there is currently not an effective alternative to the ICT solution, other possible approaches will require an even higher financial effort and take more time for successful implementation results.

In his presentation the author will report on his ten-year experience in the realization of the first steps to create a system along the guidelines described above.