CHAMSA: Five Languages that Citizens of an Increasingly Technological World Should Acquire

Avi Cohen  
*The Ministry of Education, Israel*  
Avi@CSIT.org.il

Bruria Haberman  
*Computer Science Dept., Holon Institute of Technology, and Davidson Institute of Science Education, The Weizmann Institute of Science, Rehovot, Israel*  
bruria.haberman@weizmann.ac.il

**Abstract**

The increasingly dynamic technological world, which recently has encouraged globalization in many domains, poses new educational challenges regarding preparing individuals to become well-educated and beneficial citizens who are capable of simultaneously functioning on personal, national, and global levels. One main goal of an educational system is to promote an environment in which youngsters can acquire and develop their ability to communicate meaningfully with others. We suggest that youngsters acquire five basic languages as tools for communication: a mother-tongue, an elective international foreign language, a language of science, a language of art and body, and a language of technology, each of which is used to express themes and ideas or feelings associated with specific domains and contexts. We believe that long-term study of these languages, along with intelligent practice and utilizing communication skills, is highly useful for citizens to successfully function on personal, national, and global levels.

**NOTE**

This will be a discussion of a paper written by these authors and recently published in ACM Inroads (December 2010, Vol. 1, No. 4, pp 54-57).