Alexander Y Vaninsky* (avaninsky@hostos.cuny.edu), 475 Grand Concourse, Room A-242a, Bronx, NY 10451. Teaching and learning mathematics in the AR/VR environment.

This presentation discusses teaching and learning mathematics in augmented (AR) or virtual (VR) reality created by a combination of goggles and earphones. It claims that interactive learning in such an environment is more attractive and efficient. It increases motivation and interest in the subject matter. The approach is underlain by the findings of educational neuroscience considering the learning process as the formation of domains in the brain forming mathematics knowledge centers. The teaching process provides sensory excitation and establishes connections among these and other domains. Hardware and software are available in the market. The suggested approach allows for practical implementation of different teaching techniques properly featuring the particularities of an individual student. It may be adopted to meet the needs of visually or hearing-impaired students, multiple intelligence, different learning styles, group learning, research-based teaching, etc. The choice may be made by a student himself. For example, virtual group participants and their style of behavior may be adjusted to provide a comfortable learning environment. Different aspects of the AR/VR approach are discussed, including implementation, curriculum, possible problems, and the ways to overcome them. (Received August 06, 2016)