

VISUALIZATION OF EDUCATION IN DENTAL MEDICINE AT FACULTY OF MEDICINE IN KOSICE

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D1.5 MULTIMEDIA SUPPORT OF PRESENT AND DISTANCE EDUCATION

Development of modern education tools based on information and communication technologies effects also education processes in dental medicine. To make education in this area more effective, illustrative as well as progressive, we have been realized a project where audio and visual techniques were used together with the network infrastructure to bring students more detailed and illustrative explanations of clinical cases. Visualization of education was realized at the Department of Stomatology and Maxilofacial Surgery, where the network infrastructure was built as first. LAN was increased by fifty new connection places and the communication is operated by three fully manageable 1Gb switches. Ten HD video cameras and projection equipment with large screen displays were installed to interconnect surgery halls, ordinations and consulting rooms. All the realized interventions can be easily recorded, stored and accessed using high performance storage server. Other ten intraoral cameras with LCD displays were installed directly on the dental chairs. To see the details of any patient/clinician from any dental chair these are interconnected and the data can be saved on separate file storage server. Preclinical education is supported by visualization of models the students work on in phantom rooms. Specialized 3D scanner was installed and interconnected with 10 computers the students can use to evaluate their works. All the installed technologies allow us to communicate and to see the patients and/or interventions in real time. Individual processes can be also recorded, processed and archived to be useable for present and also for distance learning. Using of such multimedia tools help teachers to explain practical problems in dental medicine in more efficient way. This work was supported by the grant of national agency KEGA 3/7134/09 "Rozvoj kreativity vzdelávania v multifunkčnom biomedicínskom laboratóriu klinických odborov".