

This dissertation pursues the possibility of increasing quality of teaching students in medical fields using LMS Moodle.

It is based on years of experience with designing of e-learning courses at the Charles University. LMS Moodle uses knowledge of computer-aided or computer-controlled teaching at universities. According to an analysis of the changing situation at universities that is characterized by increasing number of students, also by creation of bachelor degree courses and unideal teaching financial security on the one hand and the significant development of ICT on the other. As part of this work the usability of ICT in medical study fields was solved in subjects "Medical Informatics", "Prosthetic materials and technology" and "Gnathology". In the last year (2010) LMS Moodle was started for a whole network of medical faculties that cooperate on the creation and access to electronic learning materials MEFANET (Medical faculty's network since 2007). Analysis of the central installation operation of Charles University's LMS Moodle for teaching from 2004 to 2010 gives a good picture of the aspects associated with the operation LMS Moodle, which would help assisting in management of LMS Moodle Mefanet. The tracking of an e-learning course's development within the central Moodle installation at the Charles University has supported the legitimacy of efforts for development of e-learning courses. Besides the necessary technical background is also crucial an effort to facilitate the work of authors of the courses, who are responsible for the quality and effectiveness of courses.

Results: the benefits of e-learning were confirmed for teaching of theoretical and professional medical subjects. The creation of the evaluation model, which is designed for the authors from medical faculties, who create the e-learning courses.