Abstract

The diploma thesis focuses on creating educational materials (educational text and educational animation) for secondary schools emerging topic of digestion in human body. The thesis consists of theoretical and practical part. In the theoretical part the following terms are defined: interdisciplinarity, visualization and animation. Moreover, the presence of the topic in the RVP G and analysis of accessible videos and animations, made in relation with the topic, are investigated. Results of both form a base to create educational materials within the practical part. Finally, a chapter about quantitative research method - questionnaire is incorporated. In the practical part of the diploma thesis, the results of realised questionnaire research are discussed. This questionnaire investigated the state of teaching of digestion in human body at secondary schools. The next chapter is dedicated to a manual for educational animation, the introduction of the programme Adobe Flash Professional CS6 and an educational text. The educational text is devoted to teachers at the first place and consists of basic as well as wider information gathering chemical and biological knowledge, which are related to the topic of the educational animation. The animation itself is put as the attachment on CD-ROM. Both of the educational materials were created in order to make the teaching of chemistry and biology at secondary schools more effective and to link them up by interdisciplinary connections.