

This thesis focuses on teaching the latest scientific knowledge in high school biology. It develops the new concept of cloning and stem cells and their teaching according to the general educational programme of "Gymnazias". The concept results from the three-stage teaching model and cooperative learning. It contains different types of learning tasks to support development of key competencies and the recommended methodologies as forms of teaching. The proposed concept was recently evaluated at two Prague high schools. Part of the thesis is an analysis of international and Czech websites which offer educational resources to teach biology.