The issues discussed in this thesis are the problematics of making use of web casting systems in education. The aim of this research is the identification and analysis of web casting systems as a contemporary kind of audiovisual or multi-medial directed instructional media. A wide spectrum of properties and characteristics of web casting systems are subject to exploitation with the aim to understand their didactical specifics and possibilities of the functional use within the frame of innovation methods and techniques in education. The results of theoretical and empirical exploitation provide a solution for a model design of a web casting system. By detailing the theory of this specific area of didactical instruments, this thesis attempts to contribute to the development of information and technical education didactics and conscious of the growing importance of technologies for the support of education in the society, of knowledge and pedagogical science generally.