In today's fast changing world, global development of information and communication technology significantly affects many fields of human activity including music and education. As a result, questions concerning effective using of modern technology in musical education have become a major topic within the pedagogical community. Presented dissertation thesis examines utilization of notation software as a modern teaching tool. The software was specifically used to further improve musical creativity of pupils at secondary school (grades 6 to 9 ). The very first part of the thesis focuses on research framework, contemporary musical technologies, and available notation software tools. A special attention was drawn to MuseScore software that was used in the research. Last but not least, this part of the thesis outlines vital facts connected with musical creativity field of knowledge. Second part of the thesis is dedicated to author's research and starts with determination of project scope, goals, and basic working hypothesis. The actual research was carried out in several phases with subsequent real-life verification of acquired results. Main research work included development of experimental musical teaching methodology for children in sixth grade. Here, the notation software was used as a tool for stimulated development of the pupils' musical- creativity abilities. Conclusions and results of the research will be used as a support tool for evaluation of musical technology in context of overall musical abilities of pupils. Final verifications tested results of the research in real-life school environment: two musical applications were successfully used in an actual music education run. Both research projects confirm importance of userfriendly and intuitive GUI of musical applications with the teacher acting as a key motivation guide. As such, the acquired results will provide a firm fundament for future research activities dedicated to using musical technology in musical- education practice.

