Field-Testing a Digital Music Notebook

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Abstract : The success of one-on-one music study relies heavily on the ability of the teacher to provide sufficient direction to students during weekly lessons so that they can successfully practice from one lesson to the next. Traditionally, these instructions are given in a paper notebook, where the teacher makes notes for the students after describing a task or demonstrating a technique. The ability of students to make sense of these notes varies according to their understanding of the teacher's directions, their motivation to practice, their memory of the lesson, and their abilities to self-regulate. At best, the notes enable the student to progress successfully. At worst, the student is left rudderless until the next lesson takes place. Digital notebooks have the potential to provide a more interactive and effective bridge between music lessons than traditional pen-and-paper notebooks. One such digital notebook, Cadenza, was designed to streamline and improve teachers' instruction, to enhance student practicing, and to provide the means for teachers and students to communicate between lessons. For example, Cadenza contains a video annotator, where teachers can offer real-time guidance on uploaded student performances. Using the checklist feature, teachers and students negotiate the frequency and type of practice during the lesson, which the student can then access during subsequent practice sessions. Following the tenets of self-regulated learning, goal setting and reflection are also featured. Accordingly, the present paper addressed the following research questions: (1) How does the use of the Cadenza digital music notebook engage students and their teachers?, (2) Which features of Cadenza are most successful?, (3) Which features could be improved?, and (4) Is student learning and motivation enhanced with the use of the Cadenza digital music notebook? The paper describes the results 10 months of field-testing of Cadenza, structured around the four research questions outlined. Six teachers and 65 students took part in the study. Data were collected through video-recorded lesson observations, digital screen captures, surveys, and interviews. Standard qualitative protocols for coding results and identifying themes were employed to analyze the results. The results consistently indicated that teachers and students embraced the digital platform offered by Cadenza. The practice log and timer, the real-time annotation tool, the checklists, the lesson summaries, and the commenting features were found to be the most valuable functions, by students and teachers alike. Teachers also reported that students progressed more quickly with Cadenza, and received higher results in examinations than those students who were not using Cadenza. Teachers identified modifications to Cadenza that would make it an even more powerful way to support student learning. These modifications, once implemented, will move the tool well past its traditional notebook uses to new ways of motivating students to practise between lessons and to communicate with teachers about their learning. Improvements to the tool called for by the teachers included the ability to duplicate archived lessons, allowing for split screen viewing, and adding goal setting to the teacher window. In the concluding section, proposed modifications and their implications for self-regulated learning are discussed.