recording them and also listening to good recordings concerning the material we are working with. They learn from memory, imitation (teacher, classmate or record), chords with melody, written music. Most of the material is chosen by me but I also give them the chance to bring music to the class.

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VEOMUS, VIRTUAL EUROPEAN MUSIC SCHOOL OR A YOUNG PERSON'S INTERACTIVE GUIDE TO MAKING MUSIC

Learning to play a musical instrument is a demanding task for a child. In the ongoing EU project VEOMUS (Virtual European Music School), ICT is used to develop interactive environments which will augment the traditional teaching practices for the most popular wind instruments, including the recorder, flute, clarinet, and saxophone. VEOMUS offers:

1) An interactive self-practicing environment based on a virtual assistant teacher concept for support and guidance when the student practices at home. VEOMUS listens as the student plays, gives praise based on an overall grading of the performance, points out a selection of pedagogically prioritized errors/mistakes, and gives high-level feedback on two levels on how to correct them. 2) New pedagogical tools for the teacher based on the use of digitally stored scores enhanced by teacher annotations (graphical and audio). The teacher can tailor the information that goes with the homework for each student by inserting symbols, emotions, sound clips, and written performance tips in the score. By inserting control annotations (not visible to the student) the teacher can focus VEOMUS performance evaluation on difficult passages in the melody. A fingering viewer is included in VEOMUS, which shows a 3D visualization of the correct fingering for a given music score. 3) Visualization of students' performances for explaining hard-to-teach concepts such as attacks and articulation by comparison with the teacher's performance. The sounding performance is visualised using graphic feedback curves aligned with the score. A set of curves are available for selection, including melodic pitch, deviation from expected pitch, pitch stability, articulation, dynamics and harmonic content. 4) Communication platforms for group teaching with VEOMUS in the class room, and for remote teaching and coaching of students in different music schools and countries which use VEOMUS.

One main aspect of VEOMUS is the ability of the user to communicate directly with other VEOMUS users, both teachers and students, by creating an ad-hoc computer network using the wireless capabilities of modern laptops and tablet PCs. Using this facility, a number of students within a classroom, guided by a teacher, may actively collaborate and interact. VEOMUS builds heavily on the active participation of music teachers. Regular face-to-face lessons with a teacher on a weekly basis is a foundation of the concept, and teachers' experience and expertise are embedded in the different modules of the system. The performance evaluation is based on a search for performance errors/mistakes using about 15 error categories, suggested by music teachers. The prioritized feedback to the student after each performance is based on music teachers' accumulated experience, collected through web surveys and analyses of recorded performances. Likewise, the databases for feedback messages in VEOMUS have been compiled in cooperation with music teachers, who have formulated the messages and grouped the feedback from a pedagogical point of view. By introducing ICT in established and well-proven teaching practices, VEOMUS has the potential of renewing and revitalizing music education, promoting practicing by making it more enjoyable and efficient, motivating students and speeding up the students' progress during the first 4-6 years of playing. VEOMUS features will be demonstrated and participants are invited to try out the environment.

Edward Asmus and Stephen Zdeinski, University of Miami (USA)

HOW TO READ A MUSIC EDUCATION RESEARCH ARTICLE FROM A TO Z

Two music education researchers with over 50 years of research experience will explain the basics of a music education research study, and how to read a music education research article. Topics will include: I. What is research, why do people do research, & who are these people? II. The dumb questions approach to reading research; III. Article Sections: What do they do? What should I look for when I read them? IV. Describing, Relating, & Comparing How to make sense of Statistics; V. When good ideas go bad. What is