

Project Year

2005

Project Team

Stephen Stone, Faculty, Music Theory, Peabody Institute; Mark Lackey, Graduate Student, Composition, Peabody Institute

Project Title

Online Music Theory Fundamentals Drill

Audience

Students in the Fundamentals Review course at Peabody and the Theory I classes at both the Peabody and Homewood campuses.

Pedagogical Issue

Beginning music theory students often lack facility with elementary musical materials, such as intervals, chords, and the like. This weakness hinders their ability to understand larger musical ideas. Although these students may be placed in a fundamentals review course, the class reinforces concepts but does not ensure speed. Also, many students who are exempt from the review course are not fluent; their abilities are comparable to those of the weaker students at the end of the course. Hard copy drills and homework are assigned in the class, but it is impossible to monitor the amount of time spent on assignments performed outside of class.

Solution

This project proposes the creation of a web-based, fundamentals drill that will send student results to the professor so as to monitor student progress and focus on those having difficulties. Students will be able to access the resource at all times. Since the questions will be randomly generated, the students will be able to practice as much as they like. The success of the program will be visible in two ways. Professors will see student results improve in both accuracy and speed, and faculty using the program will also see an improvement in the rate at which the class moves on to more sophisticated musical questions.

Technologies Used

Courseware (WebCT development), HTML/Web Design, JavaScript

Project Abstract

This team proposes to develop an online, timed, music fundamentals drill to improve student familiarity and speed with elementary musical materials. Since the program will be online and will randomly generate drills, students can use it at any time and repeat it as often as they like. The program will grade the drill, so the students will have instant feedback. Finally, since professors will receive results from the program, they can monitor participation and progress, and they can focus on students who are having difficulty. Ideally, we will be able to create this program within WebCT. Graduate student Mark Lackey

and faculty member Dr. Stephen Stone are applying for a summer grant; this project will not affect Mark's work during the academic year. The team will need to assess if WebCT will support the code for a random generator. If it does not, they will have to create an independent program, probably programming with HTML and JavaScript or developing an applet. Additional commercial software should not be needed. Mark and Dr. Stone both have web programming skills, but Mark will write most of the code. Given the scope of the project, we anticipate that Mark will approach the 340-hour budget. The program will be useful in Peabody's fundamentals review class and in Theory I classes at Peabody and Hopkins. All first year students at Peabody and approximately fifty Homewood students will encounter this program, every year. Our hope is that the program will be maintained in WebCT or on Peabody's server for ongoing use. Ultimately, the goal is to have students who can quickly identify the building blocks of music, so that they can begin to understand how those elements combine to create art.

A video of Steve and Mark's presentation (time=3:07) is available here:

http://mfile.akamai.com/7111/mov/streams1.nts.jhu.edu/~jhimedia/cer/tfvideos/13_music_drill Lec.mov