

COMPUTER FEEDBACK AND LEARNING OF EXPRESSIVE SKILLS IN MUSIC: A PILOT STUDY

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Background

Empirical findings from questionnaire research and interviews suggest that musicians regard expressive skills as being of primary importance in music performance. Yet expressive skills are often neglected in music education, perhaps because musical expression involves implicit knowledge that is difficult to convey from teacher to student. Indeed, there is some indication that traditional strategies for teaching expressivity rarely provide informative feedback to the performer. To address this issue, we have created a computer program that aims to improve a student's expression of emotion by providing feedback that allows the student to compare his or her performance strategy with an optimal performance strategy.

Aims

The aim of this study was to evaluate the new computer program in close collaboration with music teachers and performers. The study evaluated both the prospects of computer-assisted teaching in general and the benefits and drawbacks of the new program in particular.

Method

The study combined methods from experimental psychology with usability evaluation. Data were collected through observation, video recording, acoustic measurement (supplied by the program), and structured interview. Three kinds of measures

were used to index the usability of the program: (a) performance measures (e.g., did the program really improve the student's communication?), (b) subjective measures (e.g., did the student like using the program?), and (c) knowledge measures (e.g., did the student understand the functions of the program?).

Results

The analysis is still in progress. Preliminary findings suggest that the program is effective in improving music students' communication of emotions, although the usability measures also show that certain aspects of the program can be improved. Students' reactions to the program seem to be partly mediated by their overall attitudes towards computer-assisted teaching.

Conclusions

The proposed program for performer feedback may potentially help to elucidate the elusive relations between the performer's intentions, acoustic variables in the performance, and the listener's impression. Computer-assisted teaching could therefore serve as a complement to traditional teaching, allowing performers to experiment freely with interpretative ideas.