This document summarizes the results of a study which evaluated whether school instruction with Musical Instrument Digital Interface (MIDI) keyboards improves memory skill and whether school instruction with MIDI keyboards improves sentiments toward school and instructional media. Pupils in early elementary grades at five schools were evaluated using subtests of the Wide Range Assessment of Memory Learning (WRAML) and a School Sentiment Inventory. Students were interviewed at the beginning and end of a school year, and provided regularly scheduled music instruction for one half-hour per week throughout the school year. There were no discernible gains in memory skills that were clearly attributable to keyboard instruction. Overall, the various analyses of school sentiment data support music instruction with keyboards. The pupils' achieving competence in keyboard instruction contributed to their approval ratings of school and music instruction. The lack of differences in the effect on memory skills may be explained by the 30-minute per week interval of music instruction; it is unlikely this was enough time to develop memory skills that were observable beyond music performance. The favorable sentiment towards music and school may also be attributed to the short amount of instructional time. (Author/SWC)
Title:

MIDI Keyboards: Memory Skills and Building Values toward School

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Problem

MIDI keyboards are being introduced in school curricula. Their effects beyond music instruction are not known.

Questions

a. Does school instruction in MIDI keyboards improve memory skills?

b. Does school instruction in MIDI keyboards improve sentiment toward school?

Participants

Pupils in early elementary grade at five schools were evaluated. The pupils and the schools differed demographically. School 1 was in a poor, urban center. All the pupils were black African-Americans. School 2 was in a different poor urban center. The group of pupils was nearly evenly split racially between black and white. The third school was in a middle-class suburb. Nearly all of the pupils were white. The fourth and fifth schools were in the same large semi-rural school district. All of the children were black. The latter two schools were compared and those results are reported.

Variables

Memory skills and sentiment towards school were measured since these variables represented areas that were fundamental to learning and were therefore relevant for cross-curricula education and because of the likelihood that keyboard instruction could contribute to their development.

Instruments

Two assessment instruments were used. Subtests of the Wide Range Assessment of Memory Learning (WRAML) by Sheslow and Adams (1990) measured memory skills. A School Sentiment Inventory was a survey developed to gauge sentiment towards school and instructional media including the keyboard.

Procedures

Pupils were interviewed at the beginning and end of a school year for both measures. During the year comparison groups were provided regularly-scheduled music instruction for one half-hour per-week with the same instructor.

Analysis

Interview scores were compared for each group for the beginning and end of the school year. Scores were also compared between groups for both periods.

Results

There were no discernible gains in memory skills that were clearly attributable to keyboard instruction. Overall, the various analyses of school sentiment data favorably support the groups that conducted music instruction with keyboards.
Discussion

The School Sentiment Inventory results were encouraging regarding the integration of piano keyboards into an elementary school curriculum. We surmise that the pupils’ achieving competence in keyboard instruction contributed to their approval ratings of school and music instruction. The sentiment underlying the ratings may develop a value for keyboard instruction that may transfer to other learning or school work.

The lack of differences in terms of affecting memory skills can perhaps be explained by the fact that the pupils were engaged in about thirty minutes of music instruction per week. It is unlikely that this was enough time to develop memory skills that were observable beyond music performance. At the same time, the favorable sentiment towards music and school can be attributed to this short amount of instructional time.

References