## Integrating Classroom Music Instruction: Its Effects in the Development of Spatial Skills of Kindergarten Pupils

Becy O. Cruz, Levy M. Fajanilan, Jewel B. Solidum, Nerilyn R. Beratio Adventist University of the Philippines

## Abstract

This study aimed to determine the effects of integrating classroom music instruction in the development of spatial skills of kindergarten pupils. In the Philippines, music education encounters many problems, too. There are difficulties related to the full implementation of the Music Law or the Republic Act 4723. There are issues on the quality of music teachers and trainings. There is shortage of music materials and assessment, and budget for music activities and many others (Borromeo, 2015). This study used a quasi-experimental design and employed the pretest-posttest nonequivalent group design. Four spatial tasks were used to assess the spatial skills of the respondents. Mann-Whitney U test and Wilcoxon Signed Ranks test were specifically used in analyzing the data. The findings of this study revealed that the baseline characteristics of the control and the experimental groups were comparable in four spatial tasks: jigsaw puzzle solving task, block building task, short term memory picture task, and children's mental transformation task CMTT. The control and experimental groups showed significant differences in their pretest-posttest scores in jigsaw puzzle solving task and in CMTT. There were 52 Kindergarten participants for this study from Laguna BelAir Science School (LBASS). The control group is composed of 27 and 25 for the experimental group. Moreover, the experimental group showed one significant difference in block building task. The two groups did not show significant difference in short term memory picture task. The experimental group demonstrated improvement in four spatial tasks as well as the control group except in block building task. The improvement manifested by the control and experimental group was found to be insignificant in four spatial tasks when gain scores between the two groups are considered. It was concluded that integrating classroom music was deemed to be effective in the development of spatial skills in terms of enhancing the problem-solving abilities of kindergarten pupils as revealed by significant improvement of the experimental group in jigsaw puzzle solving task, block building task, and CMTT.

**Keywords:** block building task, Carabo-Cone method, Dalcroze approach, Eclectic, Euryhthmic, Intelligence, Kodaly method, Orff-Schulwerk method, Short-term memory picture task, Spatial skills