

JSTOR: Journal of Research in Music Education, Vol. 52, No. 1 (Spring, 2004), pp. 6-15



This is the first page of the item you requested.

[- Hide full citation](#)



Predictors of Music Sight-Reading Ability in High School Wind Players

Joyce Eastlund Gromko

Journal of Research in Music Education, Vol. 52, No. 1 (Spring, 2004), pp. 6-15

(article consists of 10 pages)

Published by: [MENC: The National Association for Music Education](#)

Stable URL: <http://www.jstor.org/stable/3345521>



6 JRME, VOLUME 52, NUMBER 1, 6-15

The purpose of this study, grounded in near-transfer theory, was to investigate relationships among music sight-reading and tonal and rhythmic audiation, visual field articulation, spatial orientation and visualization, and achievement in math concepts and reading comprehension. A regression analysis with data from four high schools (N = 98) in the American Midwest yielded a 4-variable model that included reading comprehension, rhythmic audiation, visual field articulation, and spatial orientation, $F = 21.26$, $p < 0.001$, accounting for 48% of the variance on music sight-reading. The results support previous studies in music education, cognitive science, and neuroscience that have shown that music reading draws on a variety of cognitive skills that include reading comprehension, audiation, spatial-temporal reasoning, and visual perception of patterns rather than individual notes.

Joyce Eastlund Gromko, Bowling Green State University

Predictors of Music Sight-Reading Ability in High School Wind Players

In *Frames of Mind*, Gardner (1983) proposed that intelligence was not a single, monolithic property of mind. Instead, Gardner proposed multiple separate intelligences, each with its own unique symbol system. A variety of studies, however, have shown that near-transfer effects (e.g., training in one intelligence may enhance performance in another) occur, especially in the case of literacy-based music instruction (Gromko & Poorman, 1998; Hetland, 2000; Rauscher, Shaw, Levine, Wright, Dennis, & Newcomb, 1997). According to near-transfer theory (Salomon & Perkins, 1989), individuals who develop musically, for example, may draw on, and thereby develop, their spatial and kinesthetic intelligences as well. Because music sight-reading involves audiation of tonal and rhythmic patterns, comprehension of a graphic notation system with both spatial and textual qualities, and highly coordinated kinesthetic action in performance, the development of musical intelligence may encompass a

Joyce Eastlund Gromko is a professor of music education in the College of Musical Arts, Bowling Green State University, Bowling Green, OH 43403; e-mail: jgromko@bgsu.edu. Copyright © 2004 by MENC: The National Association for Music Education.

Predictors of Music Sight-Reading Ability in High School Wind Players, by Joyce Eastlund Gromko © 2004 MENC: The National Association for Music Education.

Abstract

The purpose of this study, grounded in near-transfer theory, was to investigate relationships among music sight-reading and tonal and rhythmic audiation, visual field articulation, spatial orientation and visualization, and achievement in math concepts and reading comprehension. A regression analysis with data from four high schools (N = 98) in the American Midwest yielded a 4-variable model that included reading comprehension, rhythmic audiation, visual field articulation, and spatial orientation, $F = 21.26$, $p < 0.001$, accounting for 48% of the variance on music sight-reading. The results support previous studies in music education, cognitive science, and neuroscience that have shown that music

reading draws on a variety of cognitive skills that include reading comprehension, audiation, spatial-temporal reasoning, and visual perception of patterns rather than individual notes.

Want the full article?

[Login](#) to access JSTOR, or check our [access options](#). You may have access for free through an institution.

Publisher Sales Service for \$19.00 USD.

[Enter your token or email](#) if you've already purchased this article.



JSTOR is part of ITHAKA, a not-for-profit organization helping the academic community use digital technologies to preserve the scholarly record and to advance research and teaching in sustainable ways.

||

©2000-2010 ITHAKA. All Rights Reserved. JSTOR®, the JSTOR logo, and ITHAKA® are registered trademarks of ITHAKA.