

**An investigation into children's ability to  
recognise pitch and/or rhythmic sequence  
patterns.**

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## Introduction

Two aspects of good potential in the data from the NEMP music tasks concerned musical perception and sightreading. It was while working on the study of aspects of children's sightreading, that it became apparent in the singing tasks, that some who failed to sing in tune or in time, or who sang wrong notes and/or wrong rhythms, nevertheless recognised and sang repeated patterns more or less accurately. The keyboard sightreading tasks revealed the same feature. So it was decided to examine this more closely, using data obtained from viewing samples of four different tasks.

It was also found that, within the focus, there was other, related information that could be usefully examined. This is given in the three following supplementary sections.

Researchers have for long been interested in the way in which musical information is received, processed and interpreted. It could be, and has been argued that many of the musical tasks in the NEMP music project were perceptual/cognitive rather than musical. It can be counter-argued that the teacher's role is to sharpen the child's perceptual skills, and as a result make it possible for aural percepts to take on musical meaning.

Harold Fiske (1992) states that "Music cognition is about pattern management and organization; ... The emphasis here is on the word "pattern", and although such emphasis is not new to psychological theory (the Gestalt school comes quickly to mind), the idea that music cognitive processes begin with patterns of perceived tonal-rhythmic material rather than discrete, isolated tones is, from the point of view of many contemporary theorists, long overdue."

The ages of the children in the samples, preclude any claims that this study tests "the idea that music cognitive processes begin with patterns ...", but it does reveal various aspects of perceptive patterning that are of interest to the teacher.

Related to pattern management is the theory that musical perception is a particular form of symbolising, and that for symbols to take on meaning they must have a context within which that meaning can be recognised.

One of the more difficult tasks is the isolating of the various elements that make up the musical experience. Theorists generally agree that our perception of music is under the control of Gestalt principles. Rhythm and pitch especially are closely linked in drawing musical meaning from a melody, and many studies have been carried out on the perceptual relationships of pitch and rhythm. The removal, or non-recognition of one of these basic elements will easily destroy recognition of a previously familiar melody. Consequently, many of the NEMP tasks, such as the pitch exercises in Keyboard, despite their intentions, may not have been perceived by the children who did them, as musical, even though, from a teacher's angle they are important means to musical ends.

A number of studies, in particular those of Fiske (1985) and Dowling (1982), show that pitch contour is crucial in melody recognition and recall. Dowling's study revealed that a melody pattern is most easily recalled when both contour and interval are the same on replaying, but that recognition still remains when the contour is the same but with different intervals. The study of results in the Sing Song tasks especially, confirms this.