

Musical Compositions by Schoolchildren

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One of the emerging themes in music research is that children's capabilities and knowledge have been vastly underestimated. For example, infants are born with the ability to perceive and process basic musical sounds and patterns (MRN, " [The Musical Infant](#) ", Spring 1994). So it is with composing music. Studies have shown not only that children do compose but that by the age of nine they use the same processes as those employed by professional composers.

When we think about child composers Mozart usually springs to mind. While not the only child prodigy in musical composition, he certainly is the best known. But there are many other children who can compose music. Who are they? Probably every child!

The coin of compositional fame has two sides. We all focus on the accomplishments and products of composition; this engenders awe and wonderment. "How" we ask ourselves "... can they do that?!!" Fine -- there is nothing wrong with recognizing and appreciating the extraordinary, the products of true creative mastery and genius. But the flip side of the coin is that we implicitly draw a distinct line, indeed an unbroachable chasm, between composers and the rest of us. They can do it, we can't.

But this deeply held, yet seldom voiced, belief is only true within limits. It focuses on the *product* of composing, the end result, the "piece" we hear and to which we react. But behind every compositional product, there is the *process* of composing music. Because we know that each of us can't write great music, we assume that we can't compose music. That's really pretty strange because children routinely and spontaneously compose music.

An account of The Pillsbury Foundation School in Santa Barbara, California yields an instructive and fascinating example. The school was actually established to discover children's "...natural forms of musical expression and to determine means of developing their musical capacities, particularly in the field of spontaneous creation." Gladys Moorhead and Donald Pond have provided many details of children's explorations in music during the period of approximately 1937 - 1940, in "Music of Young Children".(1) A large variety of musical materials and instruments from various cultures was freely available to the students, 1.5 to 8.5 years of age. Normal toys also were present. Musical exploration and invention was abundantly exhibited even in the absence of formal musical training. The authors provide examples of musical behavior and counted their occurrence, including activities such as the composition of chants, the use of different instruments, the types of rhythms employed, the verbal content of songs, the degree of involvement of physical movement and the occasions during which various degrees of composition occurred. Their naturalistic set of observations certainly supports the view that children need little encouragement to create music. But this is not quite composition.

A more systematic series of investigations was carried out in 1941-42 by Dorothea Doig in the Saturday Morning Music Classes at the Cleveland Museum of Art.(2) The goal of these studies was to not to provide technical training in music but rather "... to discover what elements children use before receiving definite training in musical composition". In these studies, the students in a class worked together to compose music at increasing levels of difficulty: (a) composing music for a given text, (b) composing music on a given subject and (c) composing music to illustrate given musical problems, e.g., original compositions that illustrated a certain rhythmic or structural problem. Various classes consisted of children six, eight, nine and twelve - sixteen years of age. The teacher or an aid recorded the score as

the composition emerged because the students lacked the necessary skills.

The findings revealed a great interest and enthusiasm for composing as well as excellent group cooperation and interactions at all ages. For example, the children readily accepted the ideas of their peers, e.g., for a different or "more complete" ending to a piece. Some interesting facts emerged. Students felt the need to sing the composition before judging it completed. Compositions by older children and by many younger children exhibited a definite feeling for cadence and for the use of repetition and contrast. They also showed relationships among phrases and thus the music produced had definite form. There was a preference for major keys. Students could write original compositions based on a complicated rhythmic figure, the dotted eighth and sixteenth note combination. They composed marches and waltzes and had an excellent grasp of the defining characteristics, although not the technical vocabulary. Ten year olds even decided to compose a series of pieces to accompany a play. Overall, the children exhibited developed concepts of tonality, melodic contour, rhythmic figure and meter.

After a long period of general neglect, there has been renewed interest in compositional abilities of young children. For example, Rena Uptis of Queen's University in Canada has been a leader in bringing compositional activities into the classroom(3) and other have strongly advocated the importance of actively engaging children in this highly creative activity(4) (see also " [Creating Creativity with Music](#) ", *MRN* , Spring 1998).

However, not much has been known about the actual processes used by children in composing. In 1989, John Kratus performed a quantitative study of individual composition in children of seven, nine or eleven years of age.(5) Kratus analyzed more formal aspects of composition, specifically its three stages: exploration, development and repetition. Repetition was taken as an indication that the musical idea was being retained and ultimately repetition of the entire piece signified completion of the composition.

Each student was given 10 minutes to compose an original piece on a keyboard, after having become familiar with the instrument. To simplify matters, all compositions started on middle C and used only white keys. The students in the sample had little or no formal music training but had received general music classes as part of the standard grade school curriculum. Judges rated tape recordings of the compositions at a later date. They tallied the amount of time spent in exploration, development of musical ideas and phrases, and in repetition of material (plus periods of silence).

There were no differences in sex but there were systematic differences in age. Seven year olds spent most of the time in exploration but they also showed some development of the material they produced and by the end of ten minutes several were able to achieve repetition of a completed composition. Nine year olds started out with a high level of exploration also but this quickly dropped as they spent more time in development and in repeating their musical ideas. This trend was even greater for eleven year olds. The students showed great enthusiasm and pleasure in composing.

This study has both practical and theoretical importance. On the practical side, Kratus suggests that seven year olds be encouraged to improvise rather than to write complete compositions. On the theoretical side, the author points out that nine and eleven year olds adequately use the three process of exploration, development and repetition that are known to be characteristic of professional, successful composers. Here then, we have clear evidence of presumably mature compositional processes in children as young as nine years old.

In a follow-up study, Kratus investigated the relationship of *audiation* to the process and

quality of compositions in nine year olds.(6) Audiation is hearing and feeling music when no sound is actually present, i.e., "hearing it in one's head". Forty children who were not musically trained were first tested on the Intermediate Measures of Music Audiation test, which measures how well they can mentally hold tonal or rhythmic information. Later, they were given ten minutes to compose an original piece. The ability to audiate was compared to the amount of time spent in exploration, development and repetition. The quality of the compositions was also evaluated by judges.

The relevance of audiation to creativity in musical composition is that if children can mentally rehearse or develop musical ideas, then their period of overt exploration would be shortened and more time could be spent in development and repetition. Indeed, this was the result. Also, importantly, the greater the ability to audiate, the higher was the quality of the composition. Thus, practice in audiation might enhance creative abilities in musical composition. Kratus concludes that "... 9-year-olds can be regarded as genuine composers...".

In summary, studies of musical composition in schoolchildren reveal several things. First, children like to compose and will do so enthusiastically given a bit of guidance and opportunity. Second, by the age of nine, children can produce original compositions, and they use the same processes as do professional composers. Third, development of the ability to retain sound patterns facilitates composition. Fourth, and most importantly, musical composition is a truly creative process that is subject to study and understanding.

Creativity is a commodity in short supply. It is and should be valued by all segments of society. The composition of music by schoolchildren has at least two major benefits. It provides a way to understand how children create. At the same time, it enables them to develop their creative potential. So, don't worry about whether or not your children, grandchildren or students can be the next Mozart. They already have the basic ability to compose. Just give them a chance to experience and enjoy creating music.

-- N. M. Weinberger

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