

## DOES ARTISTIC CREATIVITY DECLINE DURING ELEMENTARY SCHOOL?<sup>1</sup>

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*Summary.*—Some psychologists have argued that artistic creativity declines during the elementary school years. This hypothesis was tested by having 108 students in kindergarten and Grades 3, 4, and 5 produce collages which were then judged for creativity using a consensual assessment technique. Contrary to the hypothesis of a creative decline, artistic creativity on this collage-making task as rated by 18 undergraduate art education students was higher among older elementary school students.

“Once I drew like Raphael, but it has taken me a whole lifetime to learn how to draw like children,” so claimed Picasso (de Meredieu, 1974, p. 13). The work of other great artists such as Klee and Miró has also been compared (sometimes with comic intent but often as a sincere compliment) with the drawings of young children. When an artist speaks of “drawing like a child,” the image conjured is of a refreshing originality and of a creativity unmarred by excessive effort, repetitive practice, or studied technique. “Seeing the world through the eyes of a child” is a romantic notion perhaps but not uncommon.

Are young children truly creative artists whose “genius” ends or lapses into a period of latency sometime shortly after entry into elementary school? Rosenblatt and Winner (1989) argued that there is a “real loss of aesthetic sensibility” (p. 6) during the elementary school years. Gardner (1980) suggested that artistic (and perhaps other) creativity follows what might be termed a “U-shaped” developmental curve. According to this model, artistic creativity starts high (in early childhood), sinks into the “doldrums of *literalism*” (Gardner, 1980, p. 148; original italics) during the elementary and middle school years and then recovers its earlier originality sometime after puberty (at least among some artists).

Gardner (1980, 1982, 1983, 1989) argued there is a lessening of artistic creativity in the elementary school years. He provided several series of drawings in which “the age of artistic expressiveness, or at least its original flowering, seemed at an end” (1980, p. 128) sometime around age seven or eight.

Although various theories have been offered to explain this decline in

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artistic creativity during the elementary school years, e.g., changes in the developing child's nervous system and the indirect effects of being in the Freudian "latency" period, the most common explanations have focused on the effects of schooling. Schools reward correct answers, not interesting ones; sameness is valued in school, and originality is discouraged.

These are heavy charges against our schools and although there is no doubt some truth in them, the claim that schools produce an over-all decrease in artistic creativity is strong. For the most part developmental changes lead either to an increase in ability or at worst to a plateau. Developmental changes that result in decreased performance are highly unusual.

The study reported below was an attempt to put the belief that artistic creativity dips between the ages of 6 and 12 to an empirical test. Elementary school students ages 6 through 11 were given a set of materials and asked to make collages which were later rated for creativity. Collage-making, using an assortment of precut shapes, was used as the artistic task because the technical skill involved in the task did not put younger students at a disadvantage. This collage-making task has been used with success in the past in studies of creativity involving students at various ages (Amabile, 1982, 1983; Baer, 1991, 1993).

#### METHOD

##### *Subjects*

A total of 108 students in kindergarten and Grades 3, 4, and 5 participated. There were 43 kindergarten students, 20 in Grade 3, 20 in Grade 4, and 25 in Grade 5 from the same school district, a suburban, middle-class district in the Middle Atlantic region. The fourth-grade class was a homogeneously grouped class of academically gifted students. The other four classes were heterogeneously mixed.

##### *Materials and Procedure*

As a classroom art activity, students were given a 14-in. × 22-in. piece of white tagboard, a container of glue, and a set of more than 120 precut construction paper designs, e.g., hearts, butterflies, squares, circles, and triangles, and asked to make an "interesting, silly design" (following the procedure developed by Amabile, 1982, 1983). The students received identical materials.

The collages were later rated for creativity by 18 undergraduate art education students who did not know either the students who made the collages, the student teachers who conducted the collage-making activity, or the purpose of the study. This collage-making activity, the manner in which the collages were judged, and the statistical procedures used for assessing interrater reliability followed procedures developed and tested by Amabile (1982,

1983) and refined by Baer (1991, 1992, 1993). Judges were asked to rate the collages only for their creativity. Judges worked independently, using a scale of 1.0 to 5.0. The interrater reliability among the judges was measured as coefficient alpha (.92). See Baer (1993) for specific instructions given to judges.

#### RESULTS

The over-all mean creativity rating was 3.0 ( $SD=.9$ ). The mean rating of the kindergarten students' collages was 2.4 ( $SD=.7$ ); the third-grade group mean was 3.1 ( $SD=.9$ ); the fourth-grade group mean was 3.6 ( $SD=.7$ ); and the mean of the fifth-grade group was 3.5 ( $SD=.8$ ).

Fig. 1, in which is plotted the line of best fit using a least-squares regression, shows a clear association of higher ratings of creativity for higher grades. (In Fig. 1, Grade 0=Kindergarten.) An analysis of variance using grade in school to predict creativity ratings confirmed the statistical significance of this relationship ( $F_{1,107}=51.64, p<.0001$ ). The Pearson product-moment correlation of grade in school and creativity ratings of collages was .58.

These results do not support the hypothesis that artistic creativity de-

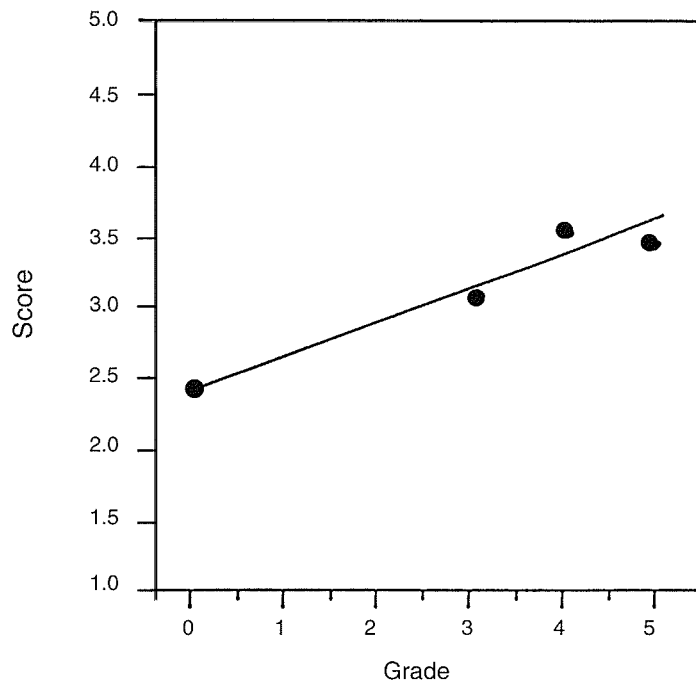


FIG. 1. Mean creativity ratings on a collage task by grade and least squares regression

clines in elementary school but show an increase across age groups in ratings of creativity on this collage-making task.

Several studies (e.g., Baer, 1991, 1992, 1993, 1994; Runco, 1987) have suggested that creativity is not a general trait but in many instances is very task specific, even within a given domain such as art. This study involved only one task—collage-making—so further research would be required to assess whether the trend observed for creativity in making collages holds for other artistic media. The picture is probably not as bleak as Gardner (1980) and others have suggested. Rated artistic creativity does not decline across the elementary school years through Grade 5. In at least one area creativity appears to increase although the bases for this were not assessed.

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