## The Role of the Arts in Waldorf Education: *Remarks on an Exhibition of Children's Work By Eugene Schwartz*

The students whose artwork appears in this exhibit might be surprised to see their creations framed or on pedestals. Very little of this incontestably artistic work was done by children intending to create "works of art." Virtually everything on display here was made in the course of a normal school day, and valued the same as any other class work or homework. In a Waldorf school, the ability to create something artistic is regarded as a perfectly natural endowment, not the exceptional fate of a chosen few. The teacher is convinced that every child can draw, paint, sculpt, knit, sing and dance, in the same sense that most schools expect children to be able to read, write and work with numbers. And it is just because artistic activity is ordinary in a Waldorf school that it is able to permeate every subject. A remarkable synergy occurs when academic or technical subjects are approached with an aesthetic sensibility. When a child must sketch a physics demonstration beautifully as well as accurately, or when students learn to make felted wool handbags with an eye for color and form as well as function, "ordinary" artistic capacity can produce extraordinary art.

Although a Waldorf student may develop a keen sense for the aesthetic, she is never in danger of becoming an aesthete who separates art from life. The recitation of poetry, for example, not only instills appreciation for the beauty of language, meter and alliteration; it is also a powerful means of strengthening the memory. So students hear and read the words of great poets, but the teacher may also write poems to introduce the multiplication tables, or the wonders of botany. First graders' delight in drawing straight lines that turn into curves will slowly ripen into their capacity to understand embryonic metamorphosis in high school. Or the dexterity gained through knitting on three needles or learning to cross-stitch may help a young man to think more nimbly and analytically when he studies calculus.

Some examples may help to indicate how the Waldorf approach integrates the arts with the rest of the curriculum:

Conventional textbooks and educational software are used sparingly in the high school, and not at all in the elementary grades. They are replaced by Main Lesson Books, created by the children themselves. The books are issued blank, and the students fill them with compositions and illustration drawn from, or inspired by, classroom work.

In the first grade, children hear fairy tales and folk tales told by their teacher, who also draws a representative illustration on the blackboard. Over the next day or two, the children learn how this picture, reduced to its essential elements, turns into a letter of the alphabet. By learning to write in this manner, children are involved in a subtle recapitulation of the development of the alphabet, from its origins in the oral tradition, through its hieroglyphic/ideographic stage, to its present printed form. On a cognitive level, this progression from the concrete to the abstract will be repeated often through the grades.

The teacher may draw upon the dramatic as well as visual arts to introduce the "four operations" of arithmetic. King Addition is an aggrandizing monarch who grows huge with wealth, while Lord Subtraction is generous to a fault, giving so much to others that he becomes thin as a line. My Lady Multiplier wields a magic wand that rapidly increases everything it touches, and Sir Divider is a bold knight who brandishes a sword that can cut most anything to pieces. As the children role-play these parts, or draw or model the characters, they bring the four operations to life.

From their earliest years in a Waldorf school, children become familiar with colors and tones through painting, drawing, singing and playing simple instruments. In the sixth grade these experiences are raised to a new level with the study of optics and acoustics. Now the children work with prisms and projectors, create color wheels and colored shadows, and learn the physical properties of colors they had previously known in the purely aesthetic manner. As they continue to play instruments, they learn the physical laws that underlie the tones. The single-stringed monochord demonstrates the correspondence of fractions and intervals; the shifting patterns of lycopodium powder on a Chladni plate illustrate the relationship of tones and geometrical forms. Every student is challenged to illustrate and write about these new insights with such clarity that the Main Lesson Book could serve as an introduction to the subject.

In eighth grade, students learn about the Industrial Revolution and the effect that inventions such as the "Spinning Jenny" had on English society. Even as they study this historic transformation, the students, who have been knitting and sewing by hand for seven years, are learning how to operate sewing machines in handwork class. Where once they fashioned an entire project from one skein of yarn, they now learn how to piece together shirts and jackets using commercial patterns. Just as they recapitulated the history of the alphabet from fable to letter, they can experience first-hand the impact of changing from a manual to a machine-based culture.

The Main Lesson books and portfolios created by high school-age students often interweave several subjects and/or artistic modes. For example, studying the Fibonacci Series (a progression of numbers that begins, 1, 1, 2, 3, 5, 8, 13, 21...) leads to findings that apply to mathematics (no two successive numbers in the series have any common factors; the sum of any ten consecutive numbers is evenly divisible by 11), geometry (in the Golden Section and logarithmic spirals) and the life sciences (in skeletal structures and the growth patterns of plants). In History Through Art, students discover the influence of all these parallels in the work of the great masters.

By placing the "Artist" on a pedestal and artistry in some arcane province beyond our reach, we could discourage all but the most talented children from developing their inherent artistic gifts. If the social and environmental problems that face us today really do need "creative" solutions, what better starting point can we provide for our children than the experience of artistic creativity? It is to be hoped that the work in this exhibit -- produced by average children taught by average teachers -- gives credence to the idea that the creation of art is as fundamental a right as learning to read.