

Most children think they're highly creative; most adults think they're not.  
Sir Ken Robinson

All children paint like geniuses, what do we do to them?  
attributed to Pablo Picasso

The implication of these two quotes is that the larger society, including our schools, tends to undermine children's creativity. By adulthood, we have lost confidence in our creative abilities. Sir Robinson goes a step further in making a distinction between imagination and creativity: the former is about envisioning while the latter is about doing.

Articles in this issue of the *Journal for Learning through the Arts* report on the efforts of researchers and teachers to understand the components and outcomes of effective arts programs. The authors are "envisioning and doing," that is, pursuing the overall goal of improving arts education for all children and youth and, in the process, helping them to employ their imagination and creativity throughout their lives.

In their exploration of ideas about arts education and the integration of arts methods across disciplines, these authors begin with kindergarten and advance through middle school, post-secondary education, and teacher professional development. A window on international developments is provided through two studies. One provides a comparison of the Canadian and Finnish systems of arts education and the other makes observations on how Howard Gardner's theory on multiple intelligences has influenced music learning in Cyprus.

This issue begins with "Music Learning in the Early Years: Interdisciplinary Approaches based on Multiple Intelligences," in which authors Stavrou, Chrysostomou, and Socratous describe an arts integration project in Cyprus. They examined kindergarten students' response to music when enhanced by other subject areas. They found enthusiastic responses to arts integration and better understanding when children can employ their own ways of learning.

Blatt-Gross examines the nature of the art-making process and its impact on the cognitive development of a group of kindergarten students in "Understanding Artful Behavior as a Human Proclivity." Her cross-disciplinary study explores the possibility that artful behaviors represent an inherent part of human nature. Therefore, it is suggested that arts integration should be supported in the schools.

Lorimer's article addresses a long-standing issue in middle school education: the disparate developmental and learning needs of students in this age range. To explore this issue, she provides a review of the literature and reports findings from interviews and observations in five middle school classrooms. By employing the visual and performing arts to address the diverse learning needs of middle school students, learning in other disciplines, including language arts, math, science, and history/social studies was enhanced.

Pool, Dittrich, and Pool describe a project within an educational psychology course in which pre-service teachers used arts-based techniques, including photography, to illustrate their understanding of geometry. These students found it difficult to integrate arts-based pedagogy into their lesson planning, but their reflective responses indicated an

appreciation for arts-based pedagogy and its potential for improving understanding in other disciplines.

In Quinn's article, it is asserted that teaching prepositional phrases is challenging, but critically important. He employed pre-service intermediate and middle school teachers in an art-making experience using illustration, linoleum block printmaking, and bookmaking to produce an alphabet book of illustrations. This unit of instruction enhanced students' visual literacy and, in the process, familiarized them with the use of prepositions in richly descriptive sentences.

"Unknowing in Circles" describes how MacKenzie and Wolf employed an art-making process, the creation of a mandala, to engage students in a Social Foundations of Education course. The project helped the students to reach a better understanding of core concepts and develop a sense of community, while also showing the power of shared art-making experiences to draw students into critical engagement with content.

Cawthon, Dawson, and Ihorn describe how they employed drama-based activities in a professional development program whose focus was on examining changes in teacher understanding of what is meant by student engagement. Leveraging the power of imagery, role-play, improvisation, and dialog, improved the students' connection to the curricular content and expanded the teachers' perspectives on effective pedagogy.

Ketovuori describes how a program developed by a Canadian art partnership was integrated into the Finnish education system. He compares the Canadian emphasis on arts education partnerships, which often employ an artist in the classroom, with Finland's national curriculum, where the arts are taught at all levels and often used to teach other disciplines. The synergy of teacher/educator partnerships and the value of multidisciplinary approaches are explored.

A section on the Medical Humanities, edited and introduced by Johanna Shapiro, reports on a study accomplished by Van Winkle, Robson, Chandar, Green, Viselli, and Donovan exploring the potential of using poetry to instill the critical reflection needed to animate humanistic values in teams of students taking a medical biochemistry course.

A book review entitled "Using Simple Eye Exercises to Explore How Sight and Insight Interact to Shape What We See" expands this discussion in another direction by examining the neurobiology behind the phenomenon of sight.

All of these projects are based on theories about learning in and through the arts. They advance our understanding of how best to apply such theories in educational contexts and show the pedagogical possibility of providing various paths for reaching understanding and meeting student learning needs. The work of these authors demonstrates the transformative power of the arts and shows that schools can nurture creativity.

Robinson, Ken. (2011). Out of our minds: Learning to be creative. Mankato, MN: Capstone.