Introduction to Artistically and Musically Talented Students

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recent newspaper article about a college student, Kathleen, who received a Rhodes Scholarship to attend Oxford University to complete a master's degree in biochemistry (Denny, 2003), highlighted some of the choices facing talented students. Her long-term goal was to become a medical doctor and conduct research as well as practice medicine. As a very young child, her math skills were outstanding and at age six she played tunes on a piano without ever having taken lessons. By eighth grade she was doing eleventh-grade mathematics and, at age eleven, she was accepted into the Indiana University (IU) School of music to study with a world-renowned pianist. In high school, she practiced the piano four hours a day, studied French, and took biology courses at IU. Her scores on standardized examinations were in the upper one tenth of one percent. Kathleen will graduate with majors in biology, biochemistry, and music, with a minor in French. A professor at IU introduced her to the world of medical research and one summer she spent nine weeks in New York City studying in the field of molecular pharmacology. When asked about her successes, she attributed her success to many people including her parents who offered her support and encouragement. Her mother made sure lessons and experiences she needed were accessible to her, and her father, a mathematics

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professor, transported her to different activities. A high school guidance counselor and two IU professors "played significant roles in shaping her life" (Denny, 2003, p. A2). She said, "I felt things deeply, and became upset by human suffering that's occurred throughout history. . . . I expressed my thoughts and feelings in journals, and poems, and I decided that I really wanted to make a difference in this world" (Denny, 2003, p. 7).

This student's story reflected some of the issues raised in the articles published in the series. Her many talents, support from teachers and parents, a burning desire to master several academic and arts areas in school curriculum, and her dedication and desire to make a difference in the world are all indications of her gifts and talents. The eight articles about talent development in the visual and performing arts are both qualitative and quantitative and include three about music, one about dance and music, three about visual art talent, and one about spatial, kinesthetic, expressive, and music talent development. Major themes that appear in the eight articles include perceptions by parents, students, and teachers that often focus on concerns related to nature versus nurture in arts talent development; research about crystallizing experiences experienced by artistically talented students; collaboration between school and community members about identification of talented art students from diverse backgrounds; and leadership issues related to empowering teachers of talented arts students.

A SUMMARY OF THE CONTENT OF THE ARTICLES

In the first article, "Decisions Regarding Music Training: Parental Beliefs and Values", Dai and Schader (2002) discussed beliefs and values that motivated parents to support their children's music education. A questionnaire was used to access parents' expectancy and value beliefs in areas of music, academics, and athletics, and perceptions of their children's abilities and talent, motivation, and effort and the importance of success. Participants were parents of students between the ages of six and eighteen who were attending programs at four prestigious music institutions in large cities across the United States. This was not a typical population, as almost half these parents had played musical instruments, a majority of them were well educated, and many were first-generation Americans from diverse backgrounds.

Results indicated a high correlation between age and years of music lessons; with advancing age and more years of training, parents are more likely to coordinate their aspirations with perceptions of their children's strengths and motivation. Parents believed in the potential of their children in both music and academic areas, but seemed to value music and academic achievement more than athletic achievement. With increasing years of music training, the more parents become single-minded in their achievement aspirations for their children. Parents' perceptions of music success for their children (including ability and motivation) appeared to be crucial for continuing support of their

children's music development. Parents sent their children for music training, not for music talent development; however, after some advanced training was completed, parent support for sustained engagement in music training became increasingly important.

Evans, Bickel, and Pendarvis (2000) also focused on perceptions of music talent, and the nature versus nurture controversy that is a salient issue in arts talent development. This study compared students' attributions regarding the source of their music accomplishments with their parents' and teachers' attribution patterns. The study was conducted in a music camp and the vast majority of students were white, from middle and upper middle-class backgrounds, and had well-educated parents. Student, parent, and teacher questionnaires were developed to solicit information about identifying similarities in attribution patterns about the nature versus nurture issue. Findings suggest that students were convinced they had innate music talent and thought their teachers and friends shared this point of view, but some viewed their teachers and friends as discouraging their music talent development. They reported experiencing early exposure and music involvement, worked long and hard on their musical growth, and received in-school encouragement. Some parents believed that hard work might lead to disappointment, frustration and self-defeat. Parents also believed that early exposure and encouragement offered by family and friends, along with students' own disposition to work, accounted for the music development in spite of a lack in innate ability. Teachers attributed music accomplishments to innate talent, interest, exposure, involvement, and hard work but did not include the influence of family and friends. Interestingly, all attributions tended to be self-serving. Parents regarded their own contributions through encouragement and providing opportunities for involvement in music as crucial to their children's music development. Teachers regarded schoolwork and rewards garnered in school as important influences in their students' music talent development. Students regarded their own ability and hard work as sources of success.

Many different opinions exist in the arts talent development literature about precocity and how it is manifested in student development. Freeman (1999) focused on sudden insights that set a person's life on course and dramatically effect that person's view of his or her ability within a given domain. She tried to investigate whether crystallizing experiences were a common occurrence in musically precocious boys and to explore the nature of those experiences. Student interviews, focus groups, and parental discussions were conducted at a choir school for boys in New York City. The majority were White students from upper-middle-class families with strong academic backgrounds and demonstrated talent in voice and instrumental domains. Freeman determined that crystallizing experiences were common phenomena among these musically precocious students. In this study, it appears that parental support and early instruction are more important than innate talent and that talent is necessary but not sufficient for exceptional achievement in music. Others (Haroutounian, 2002) also have found that innate ability, practice, and hard work, along with support and encouragement of parents who

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themselves have musical backgrounds are important ingredients for art talent to flow. If crystallizing experiences can lead to attaining personal goals, Freeman (1999) poses a critical question about whether such experiences help music talents to be actualized.

Baum, Owen, and Oreck (1996) studied urban students who are economically disadvantaged or do not do well on written tests and are not often identified as having outstanding dance or music talents. The researchers explained that auditions have little predictive validity for students who have little opportunity for, or exposure to formal training in the arts. They attempted to adapt means for reducing cultural and socio-economic biases to identify third-graders from diverse populations in two New York City schools with a substantial percentage of bilingual and special education students. Based on Renzulli's (1977) Three Ring Conception of Giftedness, which includes above-average ability, creativity, and task commitment, the researchers developed an observational model with checklists for screening students with high potential dance and music talents. All students at the two schools were observed and then some students were chosen to participate in a seven-week, multi-session audition class. Some who evidenced high potential were chosen for even more advanced lessons. Student successes in national and international arenas are presented as evidence of the success of the processes and instruments the authors developed to identify students they considered at risk. The authors believe experiences in the arts helped to reverse failure in academic environments.

Kay and Subotnik's (1994) article is linked to the previous article. Gardner's (1983) theory of multiple intelligences (musical, spatial, and kinesthetic) and Renzulli's (1977, 1986) Three Ring Conception were modified to include physical and cognitive skills in music and dance, motivation, and creativity that was defined as individual expression and cooperative problem solving. The authors contended that dance and music instruction need to begin at an early age, yet there are few such programs at the elementary level. Students in this study were from diverse cultural, ethnic, and socioeconomic backgrounds. As in the Baum and Oreck study (1996), an extended seven-week audition process was developed to expose all students in grades three and four in two urban schools in New York City to art forms and related skills, from which students could then be identified. After the identification process, the programs offered long-term, in-depth curriculum modification for selected students.

Qualitative data, collected through onsite visits, observations, and interviews, determined that as a result of this project, teachers reported being able to identify a wide range of talent among students and see value in integrating the arts into elementary education curricula. The researchers also found that students with motivation and creativity could be taught the basic skills, but students who came with basic skills had a harder time developing creatively.

Clark and Zimmerman (2001) focused on artistically talented visual arts students in rural schools from economically disadvantaged and/or ethnically diverse backgrounds. Project ARTS was a three-year project, funded by a Javits

grant, to identify underserved, high ability, visual and performing students in grade three for implementation and assessment of differentiated visual arts programs appropriate to these same students in the next two years. Two rural schools serving rural culturally diverse students in New Mexico, two in Indiana, and three schools in South Carolina participated in Project ARTS. Locally designed measures in the visual and performing arts were used to identify students with potential talents in the hopes that enriching experiences would to help them develop advanced products. Two standardized instruments, Clark's Drawing Abilities Test (CDAT) and an abbreviated Torrance Tests of Creative Thinking (TTCT) were used and a correlation was found between CDAT and TTCT even though they measure different expectations, executions, product outcomes, completion, and scoring criteria. Students who were higher achieving in other content areas also had higher achievement in the visual arts than those who were lower achieving in other content areas. The locally designed measures were found to be appropriate for identifying artistically talented students in their local schools. A number of different measures was recommended be used for identification that include different several local measures, CDAT, and achievement test scores.

Similar to the Evans, Bickel, and Pendarvis (2000) article, students' perceptions about being artistically talented was the focus of another article co-authored by Clark and Zimmerman (1988) with artistically talented students. Most students were aware of their art talents and had favorable views of themselves as well as gifted students in general. These students reported having "illuminating experiences" that were similar to, but less intense than, those reported by Freeman (1999). Their art-making experiences were stimulated by pleasurable experiences, not emotional crises, and they devoted much time and energy to doing artwork. Family members were viewed as encouraging art talent development even if they did not have art backgrounds or many resources in their homes that encouraged art study. Many of these students also expressed a need for advanced teachers who would challenge them more than they were experiencing in many of their school situations.

One article (Zimmerman, 1997) addressed the topic of professional development for teachers of artistically talented students. Few studies exist about developing leadership and empowerment of students talented in the visual and performing arts. A survey of past participants and a focus group of teachers attending one summer session were conducted. Content analysis of responses to a questionnaire and focus group interview questions resulted in categories that included knowledge of subject matter and pedagogy, self-esteem, collaboration, and empowerment. It appeared knowledge of subject matter content and pedagogy, building self-esteem, and allowing choices lead teachers to take leadership roles and collaborate with others. Eventually they made changes in their private and professional lives in their schools, communities, state organizations, and beyond, and became activists for promoting appropriate education for artistically talented students.

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REFLECTIONS ON THEMES IN THE ARTICLES

In considering Kathleen's case presented earlier, it is evident she possessed many qualities normally associated with a student who is gifted and talented in both the areas of music and academics. Her parents are well educated and she displayed high levels of talent at an early age. Her parents were supportive and encouraged her abilities, although neither were musicians. In addition, she participated in extracurricular activities and in special college level programs when she was in high school. Several of her teachers were role models and provided contexts for her illuminating experiences that led to her success and dedication to make a difference in the world. How unique is her case and how does it relate to the articles in this section?

There were many similarities and differences in these articles. Researchers all collected data from special programs designed for artistically talented music and visual arts students. In several studies, parent and community involvement was important to the success of the programs. Similar findings emerged about hard work, parental support, and differentiated curriculum as necessary for developing arts talents. Identification procedures that were developed did not rely solely on standardized test scores and, in a number of studies, local measures were devised that emphasized observation, performance, work samples, and recommendations from a variety of sources.

Common to the articles about music talent development were notions that supported research and assumptions in the work of Bloom, Renzulli, and Gardner. Bloom (1985) and his colleagues examined processes by which individuals reach high levels of accomplishment in their fields by the age of 35 and their findings were referred to in several studies in this section. Several music and dance studies adapted Renzulli's (1977) Three Ring Model of Giftedness. Gardner's (1983) theory of Multiple Intelligences was an important basis for the research in several dance and music articles. Although there were many commonalities found in the articles in this section, there were a variety of differences as well.

The studies in this section represent diverse students, parents, and teachers from suburban, inner city environments; rural contexts; and various socioeconomic groups. Students at both elementary and secondary schools were included in the studies. Several researchers who conducted inquiries in innercity schools claimed that dance and music success does not correlate with a history of academic success, but at the same time believed that positive experiences in the arts could reverse failure in academic environments. These researchers claimed that identification in their program was based on audition performances, rather than on factors such as classroom behavior, ethnicity, or academic scores and that their procedures were free of cultural and economic bias. On the other hand, other studies took place in rural areas and small cities with diverse populations and produced data that indicated high achievement in the visual arts is most likely to be accomplished by students who are high achieving in other school subjects. These differences in findings bring to light

problems that involve using outcomes from one study in a particular context and claiming that they can be generalized to other contexts with vastly different populations of students.

One topic of concern that was not addressed in most of the studies was gender differences in art talent development. In a study I conducted (Zimmerman, 1995) about differences between artistically talented boys and girls, cultural stereotyping was apparent in choices of subject matter and media, awareness of their capabilities in art, and practical planning for future careers as artists. I suggested that counselors, parents, teachers, and community members should be educating artistically talented girls to be independent, have a mission in their lives, develop strong senses of identity and self-esteem, and achieve in contexts free of sexual stereotypes or negative influences.

Diverse research methods were used in articles in this section, including both qualitative and quantitative methodologies for collecting and interpreting data. Use of a variety of methods is important and ensures the quality of inquiry in the field of gifted and talented arts education with a broad base of support in the field of educational research. Without in-depth inquiry, one time, idiosyncratic studies may produce misconceptions that have been widely proliferated and accepted by the public at large. In-depth lines of inquiry do exist in arts education. For example, a theoretical model has been developed about art teacher leadership development and artistically talented students that represents the culmination of a decade of collaboration researching feminism and leadership in art education (Thurber & Zimmerman, 1997, 2002; Zimmerman, in press).

MISCONCEPTIONS AND MISUNDERSTANDINGS ABOUT ARTS TALENT DEVELOPMENT

Many educators assume that composing, playing an instrument, and singing requires natural talent and that innate talent in music and the visual arts is the most important factor needed to be successful in the arts. However, not all students have music talent (Davis, 1994). In fact, Sosniak (1985) and Sloan and Sosniak (1985) reported in Bloom's (1985) classic book about talent development that objective accounts of early music and art talent did not point toward innate giftedness in those areas.

Parents in two studies about music talent viewed potential in their children based not only on natural talent, but also on their children's motivational levels and their own contributions of encouragement and support (Dai & Schader, 2002; Evans, Bickel, & Pendarvis, 2000). Teachers found schoolwork and rewards influential in developing music talent, whereas students attributed their talent and success to hard work (Evans, Bickel, & Pendarvis, 2000). Findings from a study by Guskin, Zimmerman, Okolo, and Peng (1986), conducted with academic and visual arts students, suggested both groups of

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students wanted gifts and talents to be the result of effort, rather than some immutable difference.

Another widely held misconception is that the development of visual art and performing art talents are similar to each other but are quite different from development in traditionally academic subjects. Haroutounian (2002) believes music talent is different from visual arts talent and that generalized arts rating scales should not be used because they tend to link the arts as one entity. In 1989, Gardner argued that there is not a separate artistic intelligence but rather each intelligence can be "directed toward artistic ends; that is, the symbols may, but need not be marshaled in an artistic fashion" (p. 74). Music educators, including those whose articles are included in this section, have embraced Gardner's concept of musical intelligence as an important theoretical conception. In the visual arts, there is no groundswell of support perhaps because there is no identified visual arts intelligence in Gardner's approach.

Another difference between music talent development and visual arts talent development is the manifestation of extraordinary talent at an early age. Prodigious behavior is evident in music and chess but there have been few prodigies in visual arts. Seashore (1938) and Gordon (1989) confirmed that basic music qualities are displayed at an early age and reliable measurement of music talent can be made by age 9 or 10. Walters and Gardner (1984) claimed musical and mathematical talent would emerge at earlier ages than talent in the visual arts. Others claim students will manifest talent in the arts at different ages or grade levels (Bloom, 1985; Khatena, 1989). Early talent development seems to be more of an established notion in music education and is not as much a fixed concept in visual arts education.

Either tacitly expressed or directly stated, it is a widely held belief by educators and others that students in the arts are not outstanding academically, in fact they have problems in academic subjects. Some research reported in these articles indicates that students who were talented in dance and music were less successful in some academic subjects (Baum, Owen, & Oreck, 1996). Two studies in this section concluded that some artistically talented visual arts students also were accomplished in academic subjects as well (Clark & Zimmerman, 1988, 2001). More research needs to be done in this area.

Scholars have questioned the arbitrary separation of intelligence and arts performance for many years. Gardner (1983) claimed a positive relationship among the arts and intellectual and academic abilities, whereas Sternberg (1985) argued that art abilities are not related to intellectual capabilities. Winner (1996) suggested that artistically talented students have abilities that cannot be measured on a traditional IQ test. Eisner (1994) claimed that affect and cognition are *not* independent processes that can be separated. Cognition is expanded through different kinds of intelligence as people confront and solve problems.

Another common misconception held by many educators is that creativity is a mutually understood term in visual and performing arts talent development. Several of the studies in this section about musical and dance talent development used creativity, derived from Renzulli's (1977) Three Ring Conception, as part of a definition leading to an identification procedure. Several researchers in this section modified Renzulli's definition of creativity so that it could be operationalized in their studies. In the Baum, Owen, and Oreck (1996) study, creativity itself is not defined, but it is operationalized as expressiveness, movement qualities, improvisation in dance and expressiveness composition, and improvisation in music. In the Kay and Subotnik (1994) article, creativity was conceived as individual expression and cooperative problem solving in music and dance using the same categories for creativity as in the Baum, Owen, and Oreck (1996) article. Although Zimmerman and Clark (2001) found a correlation between Clark's Drawing Ability Test and Torrance's Test of Creative Thinking, Torrance (1963) himself reported that creative achievements in writing, science, medicine, and leadership were more easily predicted than creative achievements in music, the visual arts, business, or industry. Haroutounian (2002), in her book about music talent development, advised that music educators not use general creativity tests, aptitude or IQ tests, or academic achievement tests as measures for identifying artistically talented students. They are not suitable for arts identification, she contended, and may exclude potentially talented arts students.

As is evident in educational and psychological literature, there is no agreement among the terms *talent*, *giftedness*, and *creativity* and relationships among these terms. Sternberg and Lubart's (1999) definition of creativity as "the ability to produce work that is both novel . . . and appropriate" (p. 3) is one that has been widely accepted. A number of contemporary psychologists and educators also agree that creativity is a complex process that can be viewed as an interactive system in which relationships among person, process, products, and social and cultural contexts is of paramount importance (Csikszentmihalyi, 1996; Sternberg 1999).

Contexts in which students are judged to be creative can vary from one setting to another. Sternberg (2001) viewed intelligence in a dialectical relationship to creativity, where intelligence is viewed as advancing societal norms and creativity as opposing societal norms and proposing new norms. A person needs intelligence to be creative, therefore, but not all intelligent people are creative. Creativity from this point of view is a characteristic of an individual as he or she reacts with one or more systems within a particular social context.

A number of researchers claim that only adults can be creative. For example, children, according to Csikszentmihalyi (1996), can demonstrate talent in a number of areas, but they cannot be creative because creativity involves changing a domain and the ways of thinking within that domain. Other researchers, however, have supported the position that nearly everyone has some creative ability and their potential should be supported in educational settings (Parkhurst, 1999). From this point of view, creativity would then encompass what is creative for a student in a particular school context, rather than the society in which the student resides.

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SOME CONCLUDING THOUGHTS

To enable students such as Kathleen, whose accomplishments were described earlier, to make a difference in this world, research must be conducted that addresses important issues in the fields of visual and performing arts talent development. A research agenda should be developed that can provide important information for improving educational opportunities for talented arts students. These articles represent the work of a number of researchers who are conducting inquiry in the field of developing talent in the areas of music, dance, and the visual arts. More research is needed in drama education as well. In addition, there is a need for research about the impact of educational opportunities, educational settings, and the role of art teachers on the development of artistically talented students. The impact of the standards and testing movement and its relationship to the education of talented students in the visual and performing arts is an area greatly in need of investigation. Research also is needed about male and female students' backgrounds, personalities, skill development, and cognitive and affective abilities as well as cross-cultural contexts and the impact of global and popular culture on the education of artistically talented students.

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