



Supporting the Development of Musical Talent

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People around the world have heard of Yo-Yo Ma and have enjoyed his magnificent music.

Yo-Yo Ma, considered by many experts to be the greatest living cellist, is famous not only for interpreting well-known works for the cello and commissioning new cello pieces, but also for creatively collaborating with musicians from different genres. Less well-known is the work of Dr. Yeou-Cheng Ma, the older sister of Yo-Yo Ma. Dr. Ma, an accomplished violinist in her own right and a former musical prodigy (Hoffman, 1993), has made valuable contributions to the worlds of music and medicine. She assists young musicians by helping to run the Children's Orchestra Society (Tommasini, 1998) and helps developmentally challenged children with communicative disorders through her pediatric practice (Santana, 2002).

What kind of family environment helped produce Yo-Yo Ma and Dr. Yeou-Cheng Ma, who played together in the White House when they were 7 and 11 years old, and in Carnegie Hall only 2 years later (Hirshey, 2005)? Their parents were both musicians who met at the Sorbonne, where their late father, Dr. Hiao-Tsiun Ma, earned his Ph.D. in musicology (Tommasini, 1998), and the senior Dr. Ma was Yo-Yo Ma's first cello teacher (Hirshey). If we could understand what kind of environmental circumstances were conducive to the development of musical talent in children like the young Yo-Yo Ma and young Yeou-Cheng Ma, we might be able to apply that knowledge to other musically gifted children.

In this article, we will first address *why* it is beneficial for young people to have the opportunity to be involved in music, and to pursue the development of their musical talent to the fullest.

Then, we will turn our attention to *how* young people can be supported in their musical endeavors, drawing on our research to provide examples, and concluding with suggestions about what you can do to encourage talented young musicians—even if you do not possess a background in music yourself.

Developmental Benefits of Musical Activities

If you love some instrument, if you like the sound of it, it's like no other sound. It's really yours. It comes from deep within, and it's something you can always connect with inside. How good can that be? Your music, your sound—it's your friend for life. You can express how you feel, send your self into the larger world. You will always have that

voice. That's a pretty powerful thing.

—Yo-Yo Ma (Hirshey, 2005, ¶ 1)

When students are committed to developing their musical talent, and provided with the resources they need to do so, studying music can affect their lives in numerous positive ways. All children who learn to play an instrument improve their fine motor coordination, and the acquisition of these skills may be reflected in brain development (Pantev et al., 1998; Schlaug, Jancke, Huang, Staiger, & Steinmetz, 1995). Children whose musical education includes improvisation and composition are sharpening their creative thinking skills (Hickey & Webster, 2002), while those whose education focuses on performance learn interpretation, or how to communicate an emotional meaning of the music to the audience through varying aspects such as volume and tempo (Nakamura, 1987; Sloboda, 1985a). Most music students learn to read music, which is a very complex mental activity (Halpern & Bower, 1982; Sloboda, 1985b). An additional cognitive benefit for music students is that they learn how to focus their attention, an ability that can help with the study of other school subjects. Regular practice sessions may give students of music the opportunity to develop their metacognitive skills, or independent ability to manage their own learning (Woody, 2004). An intriguing area of research suggests that music lessons for children may improve some measures of intelligence (Rauscher et al., 1997; Schellenberg, 2004).

In addition to the cognitive benefits of music learning, the social and emotional benefits are numerous (Harrington, Chin, & Player, 2001). Making music may be an

outlet for expressing feelings. A young musician may experience flow (Csikszentmihalyi, 1990), a positive feeling state that may contribute to ongoing motivation to be involved in music.

Music recitals are a common rite-of-passage for music students (Davidson & Scutt, 1999). The discipline of preparing for public performances teaches children a sense of responsibility and effectiveness as they work toward long-term goals. Much practice is necessary to become successful at playing an instrument (Sloboda, 1994; Sloboda, Davidson, Howe, & Moore, 1996; Sosniak, 1985). Children who excel at music may experience earned self-esteem because they are proud of their accomplishments (Chin, 2000; Marsh & Roche, 1996).

Being involved in music can also improve children's relationships with others. By cooperating with other musicians in band, for example, children learn important social skills, and also make friends. In our research with teenage musicians (Chin, Harrington, Brafman, & Shook, 1997), most reported that being involved in their musical activities improves relationships with other people and is a way to meet new people. They also reported that musical activities improve relations with adults by providing something to talk about with parents and teachers. And, of course, many reported that their parents are proud of their musical accomplishments and happy to do what they can to support their musical activities.

The Need to Support the Development of Musically Talented Young People

[T]he optimal development of exceptional ability in any

domain requires the special coordination of resources and an involvement of many individuals for it to be developed to a high degree (Olszewski-Kubilius, Grant, & Seibert, 1994, p. 21).

Research suggests that children who are especially gifted, whether in the arts or academics, often need the substantial support of other people in their lives in order to develop their talents and fully achieve their potential (e.g., Bloom, 1985; Csikszentmihalyi, Rathunde, & Whalen, 1993; Feldman, 1986; Olszewski-Kubilius et al., 1994). For example, it is estimated that it takes about 16 years of private lessons to become a "professionally prepared" instrumentalist in the classical tradition (Manturzewska, 1990). At least 10 years of experience composing music may be necessary in order to become an excellent composer (Hayes, as cited in Charness, 1988). Violin students at a conservatory have practiced about 5,000 to 10,000 hours by the time they are 21 years old (Ericsson, Krampe, & Tesch-Römer, 1993). Given these facts, it is easy to see that it may be impossible for a child, however musically gifted, to sustain the years of concentrated effort needed to achieve musical excellence without the help of others. According to Olszewski-Kubilius et al., parents and teachers can play critical roles in nurturing a child's talent. Ideally, parents would advocate for the child's needs at school, provide appropriate activities to supplement the child's education in school, and arrange opportunities to interact with peers, friends, and adults with similar interests. Teachers would be sensitive and skilled, tailoring the curriculum to the child's abilities, and serving as mentors.

Our Own Research About How to Support Musically Talented Young People

Our own research has focused on musically gifted high school students who successfully completed a state-wide talent search and attended an intensive 4-week music program at the California State Summer School for the Arts (CSSSA), also currently known as Innerspark. CSSSA/Innerspark, which is a residential summer school offering programs in animation, creative writing, dance, film- and video-making, music, theatre, and the visual arts, is supported by both public and private funding, and was established by the California state legislature in 1985 in order to achieve many goals, including the possibility that “artistically gifted and talented students, broadly representative of the socioeconomic and ethnic diversity of the state, [would] receive intensive training in the arts through a multidisciplinary program” (CSSSA Innerspark, 2006, ¶ 3). Past issues of *Gifted Child Today* include descriptions of similar intensive, multidisciplinary arts programs, such as the Kentucky Governor’s School for the Arts (Bash, 1991), GATEWAY (Gifted and Talented Education With Artistic Youth) in South Carolina (Brooks & Smith, 1990), the Indiana University Summer Arts Institute (Clark & Zimmerman, 1987), and Interlochen Arts Camp in Michigan (Stathakis & Pellegrino, 1991).

Our ethnically diverse sample of 356 adolescents was composed of 56% female and 44% male students. Research participants attended CSSSA during one of the years from 1993–1998, and voluntarily filled out questionnaires prior to attending the program. The musically talented

teenagers in our study were asked to describe the ways in which their musical development had been supported by important people in their lives. They identified a wide range of musically supportive behaviors that had been provided by family members, friends, and teachers.

In the process of coding the responses of our CSSSA students, we recognized many examples of what social support researchers have identified as instrumental support, which is tangible or material in nature, and emotional support, which is affirming or esteem-oriented (Cobb, 1979; Cohen & Hoberman, 1983; House, 1981; Kahn, 1979; Weiss, 1974). In addition, we identified a third type of social support specific to musical activity. Here, we briefly discuss the three types of support, while giving examples of each type from our research. (A more complete discussion can be found in Chin, 2004.)

Instrumental Support

What physical resources do parents provide for their gifted children? Most of the parents of academically gifted children in one study reported assisting their children to reach their potential by participating in such activities as reading together, going on family excursions or trips, doing recreational activities, and attending performing arts events (Hertzog & Bennett, 2004). In a study of the childhood of concert pianists, parents would do such things as buy a grand piano instead of a car, regularly drive 80 miles to a music lesson with the right teacher, or move the entire family in order to be in an environment with better opportunities related to music (Sosniak, 1985).

In our own research, we have found that important people, usually parents, sometimes provide practical aid

for the pursuit of musical activities in many ways, such as paying for lessons, purchasing a musical instrument, searching out information about auditions, and the like. As a talented 14-year-old male musician explains so articulately: “My parents support me by taking me to auditions, rehearsal, and competitions. They also support my musical aspirations financially with fees and instruments.” Some talented young musicians reported that music teachers, knowing their families could not afford to pay for lessons, taught them for free.

Young musicians lucky enough to have musical relatives may have a source of critiques or specific pointers on playing an instrument. For example, a talented 15-year-old female musician describes how important her parents are:

The people who have supported me in music are mainly my parents. They obviously pay for the lessons, take me to my lessons, but they also especially in the past few years have supported me by being there when I need to figure out a piece or when I’m frustrated. They make me laugh and tell me to try it again. They’ve always given me truthful honest opinions on how I played and how a piece sounds. It’s all right for an audience to be superficial in praise but my parents can’t be and if I do bad they tell me and if I do good they tell me. They act as the audience members who help me improve in music.

A talented 14-year-old male musician mentions: “My father helped with some technical musical skills, because he is also a percussionist (drummer).”

It is more common to have music teachers help with technique. As a

talented 16-year-old female student tells: “There has been a teacher in my life who has been very important to my musical development. She taught me to read notes, how to hold a violin properly, techniques, and tried out many different pieces on me.”

Many teachers may help a music student, as in the following case of a 16-year-old male student:

I have had many teachers who’ve helped me build the stepping stones to where I am today. My initial piano teacher offered the basics, and a following teacher began my arranging, composing, and understanding of music theory. It was the band directors at school who began me in the instrumental music and completed my understanding of notation.

Emotional Support

In our research, we found that the type of support that musically talented teenagers most commonly reported receiving was emotional support (Chin, 2004). The value of emotional support cannot be underestimated. Researchers studying friendship and romantic relationships among adults have found that emotional support is valued more than instrumental support (Burlinson, Kunkel, Samter, & Werking, 1996). The type of family environment conducive to the development of talent in academically gifted children is one that values emotional expressiveness, where parents behave warmly, nurturing their children’s self-esteem through praise and approval (Olszewski, Kulieke, & Buescher, 1987; Robinson & Noble, 1987). Some of the teenagers, who have attended California State Summer School for the Arts described being inspired by the talented peers

they came into contact with there (Burlinson, Leach, & Harrington, 2005). Effective music teachers can help inspire students to have a “crystallizing experience,” described by Walters and Gardner (1986) as a special moment experienced with respect to a domain, which is sufficiently sustaining to inspire the individual to commit to that domain. Nearly all participants in Freeman’s (1999) study of musically precocious boys aged 10–14 reported having had such an experience, an example being “Well, music’s biggest impact hit when I was six years old. I’ll never forget it—the director told my parents that I had strong ability in the area of music” (p. 80). Individuals can also experience crystallizing experiences at older ages. For example, a professional violinist reported that the summer before her senior year of high school, her violin teacher at music camp wanted her to leave high school early and attend his university on full scholarship to study with him (Chin, 1996b). Although she didn’t end up going, she realized she wanted to pursue music as a career because of him, and called her parents from Canada to let them know.

In analyzing our students’ responses, we have found it useful to distinguish between two types of emotional support: emotional encouragement and inspiration.

Emotional Encouragement. We found that important people may give compliments and positive feedback to a teenager involved in music. For example, a talented 16-year-old female musician mentioned that people in general helped her by doing the following: “[People] told me I sounded good and that I was improving, encouraged me to audition, admired me, and listened to me.” A talented 16-year-old male musician reported: “Even when I became discouraged they told me to keep at it and that it

was right for me.” A talented 13-year-old female musician described the key roles that family members and other churchgoers played: “. . . my mom, grandma, and many friends encourage me to sing. They let me perform in their churches, and they have always given me praised words when I was done singing.”

Friends also can be an invaluable source of emotional encouragement. A talented 14-year-old musician mentioned that artistic or creative friends offer acceptance that other peers may not: “They don’t perceive you to be weird. If they’re in band, too, they can’t call you a band geek.”

Inspiration. Sometimes talented musical teenagers are inspired by others. A 15-year-old female musician explained being grateful for having a mother and grandmother who believed in her:

I am very lucky to have my mother, because she always gives me the courage that “I can do it.” My grandmother has also helped me by telling me that anything is possible. I always use that little phrase to keep me going. Since my mother and grandmother gave me confidence all those years, I have learned to do it myself!

A talented 17-year-old female musician told of being moved by a relative’s performance: “. . . my grandpa doesn’t know it, but once when he was singing in church, in Spanish, I was so touched and inspired by his solo.”

A talented 16-year-old male musician was introduced to a new genre of music by a relative:

My grandmother sat me down one day and put a Duke Ellington CD on. I enjoyed it so much the next year I had dropped my

classical clarinet playing to play the sax in my award-winning Middle School Band.

Teachers can inspire students by instilling a passion for music. A talented 17-year-old male musician reported: “Mr. H___ made me what I am. He taught me most of what I know about music. It was while in his class I decided to devote my life to making people happy through music.”

Teachers may also serve as role models. A talented 16-year-old musician described his teacher:

My vocal teacher has inspired me by sharing with me some of the experiences she has had in singing and performing. She is obviously dedicated to her profession as a singer and enjoys her work. I’ve never heard her complain.

Support Specific to Musical Activity

The performance process, which is an integral part of the practice of music and other performing arts, has been described as follows:

The musician, dancer, or actor communicates an interpretation to the audience. . . . The audience experiences the performance, sharing in the interpretive process. The mutual aesthetic experience of listener and performer creates the dynamic of performance (Haroutounian, 1995, p. 114).

Bensman commented upon the social nature of the performing arts, stating, “the performing arts are the most directly social of all the arts, even though all of the arts are means of communication and are based

upon social experience” (Kamerman & Martorella, 1983, p. 7). The inherent nature of the performing arts may attract certain personality types, and may also influence the ways in which young people develop their talents.

In our own work (Chin, 1996a, 1997), we have found that teenage performing artists, compared to nonperforming artists such as writers and visual artists, tended to be more extraverted and also reported higher levels of affiliative motivation for involvement in their art, more frequently citing such reasons as wanting to belong to a group. We have also found that our teenage performing artists more often reported practicing in more social contexts and doing their art with other people than did our nonperforming artists. Performing artists also were more likely than nonperforming artists to report that participation in their artistic activity benefits important relationships or causes problems for those relationships (Chin et al., 1997). For example, performing artists were more likely to report such benefits as feeling closer to family members or friends, or such problems as not having enough time to spend with family or friends, due to involvement in their artistic activity.

We also identified two types of support—attending performances and participating in musical community—that were specifically responsive to the personality characteristics of these young musicians and to the particular nature of their musical activities.

Attending Performances. Attending performances is one way that people can show their support for a young person’s musical activities, and was frequently mentioned as important by young musicians. A talented 16-year-old female musician explained, “. . . just being at my performances is support and encouragement.” A

talented 15-year-old female musician described, “Just about everyone I invite comes to my concerts and recitals. One time my Uncle S___ drove up to our house (14 hours away!) to see me perform.”

Participation in Musical Community. Knowing people who also do music or art may provide a sense of community and shared values. A talented 16-year-old musician said of her fellow artistic or creative friends, “We share a common bond.” Fellow musicians or artists may also provide valuable opportunities to collaborate. For example, a talented 17-year-old female musician reported: “My mother always supported my music because she is a singer (in choirs and at church) and she would sing with me.” A multitalented 14-year-old female student described having fun with friends who were also creative: “I discuss art with my drawing/painting friends, and make up songs with my musical friends.”

Lessons Learned: How We Can Support Talented Young Musicians

As Yo-Yo Ma put it, “In the States, the arts are viewed as a luxury instead of a necessity” (“Yo-Yo Ma in Conversation,” 1992). Unfortunately, music instruction has not always been an important part of public education in the United States. For example, many public school administrators faced with shrinking budgets and enormous public and political pressures to improve their students’ scores on high-stakes tests have reduced or eliminated programs in the arts generally, including those in music (Amrein & Berliner, 2002; Catterall & Brizendine, 1985; Posnick-Goodwin, 1997; Rentner et al., 2006). In fact,

in some school districts, an entire generation of students has missed the opportunity to discover and develop their own musical talents and passions, or to have their musical gifts noticed and nurtured by others. As a consequence, many students have been deprived of the intellectual and emotional growth that the study and practice of music can provide.

In addition to advocating for the presence of music programs in their local schools (e.g., Besnoy, 2005), what can concerned adults do to help musically talented young people appreciate and continue to develop their own talents? Research suggests that the following actions may be useful.

Show Interest

Make the effort to discuss a young person's current musical activities with him or her. Sometimes adults don't know what to talk about with young people. Teenagers in our studies reported that it was a benefit for them that music and other artistic activities gave them something to talk about with adults. A parent, even one without a musical background, can monitor the amount of time that a child practices (Sosniak, 1985), encourage the child to practice (Sloboda & Howe, 1991), and keep informed about a student's progress by talking to the teacher after the lesson (Davidson, Howe, Moore, & Sloboda, 1996).

Offer Verbal Encouragement

Emotional encouragement, such as compliments, praise, and other positive feedback, is the most commonly reported type of support in our study (Chin, 2004) and may help to boost a young musician's self-esteem. Confidence in one's musical ability has been found to be an

important predictor of children's continued engagement in musical activities (Yoon, 1997).

Listen to a Young Person's Music Playing

Informally, you can best appreciate a young person's singing or instrumental playing by listening to him or her. More formally, you can solicit invitations to a young person's performances, and then attend. The young person will remember that you attended.

Listen to Music With a Young Person

Whether you have a musical background or not, this is something you can do to be part of the musically talented young person's musical world. You can listen to recordings together, or attend performances together.

Provide Tangible Items and Information

Providing instruments, lessons, space/time to practice, information about auditions or programs, sheet music, and recordings is important. You can provide a talented young musician with tangible things to help him continue his musical activities. As a society, we could improve accessibility to instruments and lessons for all young people.

Provide Circumstances Conducive to Inspiration

The difficult thing about inspiration is that you cannot predict when it will strike. We can, however, increase the odds of a talented young musician being inspired in his or her musical activities. We know that role models can help inspire music students. Role

Gifted Child Today Special Issue on the Development of Visual Arts Talent

This special issue of *Gifted Child Today* will focus on encouraging, educating, and/or providing opportunities for children and youth interested in developing their talent in the visual arts. Perspectives regarding curriculum, instruction, special programs, evaluation, or teacher preparation are welcome. Sandra Kay, guest editor, is soliciting manuscripts that provide a lens on visual arts talent. Deadline for submission is **September 1, 2007**. Manuscripts may be submitted to Susan Johnsen, Ph.D., Editor, Baylor University, School of Education, One Bear Place #97301, Waco, TX 76798-7304. Please note that the manuscript is for the special issue.

models may be music teachers or professional musicians, but they may also be relatives, friends, or teachers in other subjects. If you are a parent and your child lacks enthusiasm for studying with his or her current music teacher, you might want to try another teacher; as students become more advanced musically, they may have different needs in a teacher, and might even want to be challenged to a greater degree (Chin, 1996b; Davidson, Moore, Sloboda, & Howe, 1998). It may pay off to research special programs such as summer music camps. In their youth, most of the concert pianists studied by Sosniak (1985) had attended a summer music camp, where they were able to meet musical peers and idols. Many of the teenagers we studied reported that they were understood and supported in the environment of the California State Summer School of the Arts in ways they were not in their schools at home. Similarly, Yo-Yo Ma's first experience at a summer music camp at the age of 15 was a very positive experience for him: "I went nuts, it was so exciting" (Mazey, 1995, p. F1). As a teenager who had been homeschooled, he was thrilled to discover the joy of playing music with others his own age (Mazey). Violinist Wendy Rose, who attended the camp that same summer, was moved to tears by Yo-Yo Ma's rendition of the Franck cello sonata. Yo-Yo Ma has said of that time and its impact on his life, "I just started playing my heart out. . . . From that moment on, it's been a continuing process" (Hirshey, 2005, ¶ 2).

Become Involved in Music Yourself

According to one study, parents of more motivated music students were found to have increased their

own musical activities after their child began taking music lessons (Davidson et al., 1996). If you are a parent, you and/or other family members may want to join the musically talented child in your family on the journey of musical growth. Good luck!

References

- Amrein, A. L., & Berliner, D. C. (2002). High-stakes testing and student learning. *Education Policy Analysis Archives*, 10(18). Retrieved June 26, 2006, from <http://epaa.asu.edu/epaa/v10n18>
- Bash, L. (1991). The Kentucky Governor's School for the Arts: Program with a "payoff." *Gifted Child Today*, 14(3), 31–35.
- Besnoy, K. (2005). Using public relations strategies to advocate for gifted programs in your school. *Gifted Child Today*, 28(1), 32–37, 65.
- Bloom, B. S. (Ed.). (1985). *Developing talent in young people*. New York: Ballantine Books.
- Brooks, K., & Smith, M. J. (1990). Gateway to the arts. *Gifted Child Today*, 13(1), 45–46.
- Burleson, K., Leach, C. W., & Harrington, D. M. (2005). Upward social comparison and self-concept: Inspiration and inferiority among art students in an advanced programme. *British Journal of Social Psychology*, 44, 109–123.
- Burleson, B. R., Kunkel, A. W., Samter, W., & Werking, K. J. (1996). Men's and women's evaluations of communication skills in personal relationships: When sex differences make a difference—and when they don't. *Journal of Social & Personal Relationships*, 13, 201–224.
- California State Summer School for the Arts Innerspark. (2006). *About us*. Retrieved June 26, 2006, from <http://www.csssa.org/About.html>
- Catterall, J. S., & Brizendine, E. (1985). Proposition 13: Effects on high school curricula, 1978–1983. *American Journal of Education*, 93, 327–351.
- Charness, N. (1988). Expertise in chess, music, and physics: A cognitive perspective. In L. K. Obler & D. Fein (Eds.), *The exceptional brain: Neuropsychology of talent and special abilities* (pp. 399–426). New York: Guilford.
- Chin, C. S. (1996a). *Artistic motivation in creatively talented adolescents*. Unpublished manuscript, University of California at Santa Cruz.
- Chin, C. S. (1996b). *Music and relationships: Interviews with professional and non-professional adult musicians*. Unpublished manuscript, University of California at Santa Cruz.
- Chin, C. S. (1997). *The social context of artistic activities: Adolescents' relationships with friends and family*. Unpublished manuscript, University of California at Santa Cruz.
- Chin, C. S. (2000). Musical self-concepts of young children [CD-ROM]. In C. Woods, G. Luck, R. Brochard, F. Seddon, & J. A. Sloboda (Eds.), *Proceedings of the Sixth International Conference on Music Perception and Cognition*. Keele, England: University of Keele Psychology Department.
- Chin, C. S. (2004). *Social support for adolescents' artistic activities*. Unpublished doctoral dissertation, University of California at Santa Cruz.
- Chin, C., Harrington, D., Brafman, R., & Shook, B. (1997, April). *The impact of artistic activities on adolescents' relationships*. Poster presented at the annual meeting of the Western Psychological Association in Seattle, WA.
- Clark, G., & Zimmerman, E. (1987). Indiana Summer Arts Institute: More than meets the eye. *Gifted Child Today*, 10(5), 42–44.
- Cobb, S. (1979). Social support and health through the life course. In M. W. Riley (Ed.), *Aging from birth to death: Interdisciplinary perspectives* (pp. 93–106). Boulder, CO: Westview Press.
- Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, 13, 99–125.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.

- Csikszentmihalyi, M., Rathunde, K., & Whalen, S. (1993). *Talented teenagers: The roots of success and failure*. Chicago: University of Chicago Press.
- Davidson, J. W., Howe, M. J. A., Moore, D. G., & Sloboda, J. A. (1996). The role of parental influences in the development of musical ability. *British Journal of Developmental Psychology*, 14, 399–412.
- Davidson, J. W., Moore, D. G., Sloboda, J. A., & Howe, M. J. A. (1998). Characteristics of music teachers and the progress of young instrumentalists. *Journal of Research in Music Education*, 46, 141–160.
- Davidson, J., & Scutt, S. (1999). Instrumental learning with exams in mind: A case study investigating teacher, student and parent interactions before, during and after a music examination. *British Journal of Music Education*, 16, 79–95.
- Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100, 363–406.
- Feldman, D. H. (1986). *Nature's gambit: Child prodigies and the development of human potential*. New York: Basic Books.
- Freeman, C. (1999). The crystallizing experience: A study in musical precocity. *Gifted Child Quarterly*, 43, 75–85.
- Halpern, A. R., & Bower, G. H. (1982). Musical expertise and melodic structure in memory for musical notation. *American Journal of Psychology*, 95, 31–50.
- Harrington, D. M., Chin, C. S., & Player, K. P. (2001, April). *Self-reported benefits of involvement in extra-curricular artistic activities in adolescence*. Poster presented at the biennial meeting of the Society for Research in Child Development in Minneapolis, MN.
- Haroutounian, J. (1995). Talent identification and development in the arts: An artistic/educational dialogue. *Roeper Review*, 18, 112–117.
- Hertzog, N. B., & Bennett, T. (2004). In whose eyes? Parents' perspectives on the learning needs of their gifted children. *Roeper Review*, 26, 96–104.
- Hickey, M., & Webster, P. (2002). Creative thinking in music. *Music Educators Journal*, 88, 19–23.
- Hirshy, G. (2005, January 30). We are the world. *PARADE* [Electronic version]. Retrieved June 26, 2006, from http://www.parade.com/articles/editions/2005/edition_01-30-2005/featured_0
- Hoffman, J. (1993, October 3). After child's play, what comes next? *New York Times*, p. II-1.
- House, J. S. (1981). *Work stress and social support*. Reading, MA: Addison-Wesley.
- Kahn, R. L. (1979). Aging and social support. In M. W. Riley (Ed.), *Aging from birth to death: Interdisciplinary perspectives* (pp. 77–91). Boulder, CO: Westview Press.
- Kammerman, J. B., & Martorella, R. (1983). *Performers & performances: The social organization of artistic work*. New York: Praeger.
- Manturzewska, M. (1990). A biographical study of the life-span development of professional musicians. *Psychology of Music*, 18, 112–139.
- Marsh, H. W., & Roche, L. A. (1996). Structure of artistic self-concepts for performing arts and non-performing arts students in a performing arts high school: "Setting the stage" with multigroup confirmatory factor analysis. *Journal of Educational Psychology*, 88, 461–477.
- Mazey, S. (1995, September 30). Yo-Yo Ma is performing to sell-out crowds next week. His philosophy? Sharing music is everything. *The Ottawa Citizen*, p. F1.
- Nakamura, T. (1987). The communication of dynamics between musicians and listeners through musical performance. *Perception and Psychophysics*, 41, 525–533.
- Olszewski, P., Kulieke, M., & Buescher, T. (1987). The influence of the family environment on the development of talent: A literature review. *Journal for the Education of the Gifted*, 11, 6–28.
- Olszewski-Kubilius, P., Grant, B., & Seibert, C. (1994). Social support systems and the disadvantaged gifted: A framework for developing programs and services. *Roeper Review*, 17, 20–25.
- Pantev, C., Oostenveld, R., Engellen, A., Ross, B., Roberts, L. E., & Hoke, M. (1998). Increased auditory cortical representations in musicians. *Nature*, 392, 811–814.
- Posnick-Goodwin, S. (1997, October). Lost arts? *California Educator*, 2, 8–17.
- Rauscher, F. H., Shaw, G. L., Levine, L. J., Wright, E. L., Dennis, W. R., & Newcomb, R. L. (1997). Music training causes long-term enhancement of preschool children's spatial-temporal reasoning. *Neurological Research*, 19, 2–8.
- Rentner, D. S., Scott, C., Kober, N., Chudowsky, N., Chudowsky, V., Jof-tus, S., et al. (2006). *From the capital to the classroom: Year 4 of the No Child Left Behind Act*. Washington, DC: Center on Education Policy. Retrieved October 26, 2006, from <http://www.cep-dc.org/nclb/Year4/Press>
- Robinson, N. M., & Noble, K. D. (1987). Social-emotional development and adjustment of gifted children. In M. C. Wang, M. C. Reynolds, & H. J. Walberg (Eds.), *Handbook of special education: Research and practice* (Vol. 4, pp. 57–76). New York: Pergamon Press.
- Santana, S. (2002, June). Doctor-musicians: Juggling a commitment to medicine and a passion for music. *AAMC Reporter*. Retrieved June 26, 2006, from <http://www.aamc.org/newsroom/reporter/june02/doctormusicians.htm>
- Schellenberg, E. G. (2004). Music lessons enhance IQ. *Psychological Science*, 15, 511–514.
- Schlaug, G., Jancke, L., Huang, Y., Staiger, J. F., & Steinmetz, H. (1995). Increased corpus callosum size in musicians. *Neuropsychologia*, 33, 1047–1055.
- Sloboda, J. A. (1985a). Expressive skill in two pianists: Metrical communication in real and simulated performances. *Canadian Journal of Psychology*, 39, 273–293.

continued on page 65

continued from page 16

is very important in the psyche of those who have internalized this expectation. The metaphors of *fame is good* or *success is fame* or *success is fame for one's talent* or *labor versus success is fame for being you* are important in how they affect the lives of our children.

The Impact of This Confluence on the Emerging Metaphor

When you mix together these elements you find that during the past 20 years or so, the primary metaphor influencing the perceptions of children with gifts and talents has become *life as entertainment* (Kövecses, 2005). At different times in American history, important metaphors for the purpose of life have included survival, self-improvement, gaining wealth, and now entertainment. Underpinning most of the dominant metaphors during the past 75 years has been the construct of a meritocracy. In a meritocracy, people earn and realize opportunities due to hard work and commitment to improving oneself. The emerging entertainment

metaphor does not seem to be underpinned by such assumptions or concerns. Hence, being discovered means to become famous for the person one is, not based on any specific dedicated behaviors, sacrifices, or even goals.

Another aspect important to the entertainment metaphor is the ongoing expectation to be engaged in something one considers entertainment. Many children listen to music, watch television, and communicate with others on the computer, all while engaged in other endeavors. In other words, old notions of personality types determining who multitasks seem antiquated, being replaced by interests, passions, talent, access to technology, and the ever-present root metaphor of entertainment as a way of understanding life.

As adults interested in the development of gifted students, we will need to help shape the evolving characteristics of the entertainment metaphor to be sure that hard work, the importance of preparedness, goal setting, the role of incremental progress, stretching oneself, and occasional failure become internalized by our children. We should also commit to expanding students' knowledge base about professions and the pathways to get there. Because

the entertainment metaphor seems more representative of our youth, we will need to recognize the fact that we cannot eliminate it, but we may be able to help define it. As we all live in an increasingly *me-oriented* society, building community will necessarily be on the terms of the children who understand their world with an entertainment metaphor as its basis. It is important that we come to understand both the ramifications of this metaphor and the meaning that it holds for our children in order for us to be effective shepherds (yet another metaphor) as we attempt to guide them successfully into adulthood. **GCT**

References

- Kövecses, Z. (2005). *Metaphor in culture: Universality and variation*. Cambridge, England: Cambridge University Press.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Winner, E. (1988). *The point of words: Children's understanding of metaphor and irony*. Cambridge, MA: Harvard University Press.
- Sloboda, J. A. (1985b). *The musical mind: The cognitive psychology of music*. New York: Oxford University Press.
- Sloboda, J. A. (1994). Music performance: Expression and the development of excellence. In R. Aiello & J. A. Sloboda (Eds.), *Musical perceptions*. (pp. 152–169). New York: Oxford University Press.
- Sloboda, J. A., Davidson, J. W., Howe, M. J. A., & Moore, D. G. (1996). The role of practice in the development of performing musicians. *British Journal of Psychology*, 87, 287–309.
- Sloboda, J. A., & Howe, M. J. (1991). Biographical precursors of musical excellence: An interview study. *Psychology of Music*, 19, 3–21.
- Sosniak, L. A. (1985). Learning to be a concert pianist. In B. S. Bloom (Ed.), *Developing talent in young people* (pp. 19–67). New York: Ballantine.
- Stathakis, C. A., & Pellegrino, A. S. (1991). Interlochen: Exemplary education in the arts. *Gifted Child Today*, 14(5), 40–44.
- Tommasini, A. (1998, May 11). That children may discover joy of music. *New York Times*, p. E1.
- Walters, J., & Gardner, H. (1986). The crystallizing experience: Discovering an intellectual gift. In R. J. Sternberg & J. E. Davidson (Eds.), *Conceptions of giftedness* (pp. 306–330). New York: Cambridge University Press.
- Weiss, R. (1974). The provisions of social relationships. In Z. Rubin (Ed.), *Doing unto others* (pp. 17–26). Englewood Cliffs, NJ: Prentice Hall.
- Woody, R. H. (2004). Motivations of exceptional musicians. *Music Educators Journal*, 90, 17–21.
- Yo-Yo Ma in conversation. (1992, February 15). *The Economist*, p. 107.
- Yoon, K. S. (1997, April). *Exploring children's motivation for instrumental music*. Paper presented at the biennial meeting of the Society for Research in Child Development in Washington, DC.

continued from page 47

continued from page 47