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The role of the arts in school reform

Lissa May and Brenda Brenner

Jacobs School of Music, Indiana University, Bloomington, Indiana, USA

ABSTRACT

In a national climate of high-stakes testing, there is an ever-increasing need for policy that ensures high-quality arts education for all children. At the same time that arts education in K-12 schools is being diminished or eliminated, there is an ever-increasing body of research linking participation in the arts to various aspects of cognitive and social development. The Madison Violin Project, a partnership between a low-performing, low-socioeconomic status elementary school and a school of music, provides a model for effecting change through the arts. Implications are drawn from this model for elementary students, pre-service teachers, and arts education policy.

KEYWORDS

Arts and cognitive and social development; culturally relevant music teaching; national arts policy

Editor's note: Contextual and background information about the research site described in this article can be found in the Introduction to this special issue.

Evidence is mounting that meaningful participation in the arts has a positive effect on the cognitive and social development of children, yet decreases in funding and policy at the federal, state, and local levels have caused arts education to be marginalized or even eliminated from public school curricula, particularly in the most impoverished schools. Linda Darling-Hammond (2010) writes, “We need to take the education of poor children as seriously as we take the education of the rich, and we need to create systems that *guarantee* all of the elements of educational investment routinely to all children” (pp. 278–279). She also contends that “small-scale pilot projects, demonstrations, innovations, and other partial solutions are not sufficient” (Darling-Hammond 2010, pp. 278–279). While this is certainly true, in the absence of policy that ensures a high-quality arts education for all children, there remains a need for high-quality instructional programs that not only provide opportunities for children, but also develop skills and dispositions in preservice teachers that will enable them to replicate these programs in other settings.

The Madison Violin Project provides high-quality, meaningful instruction in music for elementary children in a No Child Left Behind (NCLB) “failing” school, and at the same time prepares preservice music teachers to deliver effective and culturally relevant instruction to high-risk children. The power of this model to affect the way children learn, to help instill self-confidence and a sense of identity in children living in poverty, and to actively involve preservice teachers in a model where

they can see and participate in quality teaching in a high-risk environment has implications for policy and the role that the arts can play in school reform.

National policy and the arts

Over the last three decades accountability and choice have increasingly dominated the rhetoric surrounding educational reform. Since the authorization of NCLB in 2002, educational policy has been tied increasingly to high-stakes testing. Twelve years later, not only have we failed to meet the goals of this legislation at national and state levels, there has been a negative impact on arts education in local school districts throughout the country. Diana Ravitch (2010) writes, “Although its [NCLB’s] supporters often claimed it was a natural outgrowth of the standards movement, it was not. It demanded that schools generate higher test scores in basic skills, but it required no curriculum at all, nor did it raise standards. It ignored such important studies as history, civics, literature, science, the arts, and geography” (p. 15). Linda Darling-Hammond (2010) posits that standards-based reform promised that “learning standards and assessments for students would be tied to investments in better-prepared teachers, higher-quality and better-aligned learning materials, and stronger support for struggling students” (p. 68). Unfortunately, in too many instances this has not been the case. In an effort to demonstrate adequate yearly progress and retain federal funding, states and local school districts have resorted to means that narrow curriculum and limit opportunities for children. Frequently the arts have been marginalized, with

scarce local resources reallocated to remedial programs for children who are failing standardized tests in language arts and mathematics. A study conducted by the California Music Project, which examined student participation in music courses from 1999–2004 using data from the California Department of Education Demographics Unit, reported a 50% decline in the number of California public school students involved in music education courses during that five year period. During that same timeframe, the number of California public school music teachers declined by 25.7%. Interviews conducted with educators and policy makers revealed two possible causes for this decline: the implementation of the NCLB Act and the budget crisis in California (Music for All Foundation, 2004). In a 2006 survey, elementary school principals reported that the NCLB Act, budget cuts, standardized tests, and scheduling had the most negative impact on their music programs (Abril & Gault 2006). McMurrer (2008) tracked changes in instructional time in elementary schools from 2001–2008 and revealed an increase of 47% in language arts and a 37% increase in mathematics instructional time in those districts increasing time in tested subjects. These same districts reported a decrease in instruction time in art and music of 35%. The fate of “failing schools” where such interventions have not been successful has included the adoption of packaged school reform plans, replacement of teachers and administrators, and complete take-overs by states. Often little input is sought from parents and communities regarding local school improvement measures, and frequently the important role that the arts play the development of children is completely overlooked.

The value of the arts in cognitive and social development

Concurrent with the de-emphasis and even elimination of the arts in K–12 schools has been an increase in research linking participation in the arts to various aspects of cognitive and social development. Researchers have examined the effect of music instruction on phonemic awareness and reading development (Anvari, Trainor, Woodside & Levy, 2002; Barwick, Valentine, West & Wilding, 1989; Buzlaff, 2000; Douglas & Willats, 1994; Gromko, 2005; Patel & Iverson, 2007; Standley & Hughes, 1997), cognitive development (Bilartz, Bruhn, & Olsen, 2000; Costa-Giomi, 1999; Schellenberg, 2005; Schlaug, Norton, Overy, & Winner, 2005), brain plasticity (Hyde et al., 2009; Moreno et al., 2009), vocabulary and verbal sequencing (Piro & Ortiz, 2009), and standardized test results (Johnson & Memmott, 2006). Music participation has also shown to be a powerful instrument in shaping children’s self-confidence and identity (Costa-Giomi, 2004; Hallam, 2010;

Richard et al., 2013; Trusty & Oliva, 1994). El Sistema, the music education system which has grown since its inception in 1975 to include 102 youth orchestras, 55 children’s orchestras, and 270 music centers throughout Venezuela, provides a compelling example of music as a vehicle for social justice and change. Programs modeled after El Sistema have emerged across the United States over the past decade and have prompted discussion about how to reach at-risk and low-income children through music. In his acceptance speech for the 2009 TED Award, José Antonio Abreu spoke of the lack of identity and self-esteem that accompanies poverty and heralded the power of music to provide a child with “a noble identity” that “makes him a role model for his family and his community”(in Tunstall, 2012, p. 133). Despite the original intent of NCLB to lower the achievement gap and eliminate inequity among our nation’s schools, in reality it often does the most damage to schools and children with the least opportunity.

Madison Elementary School

Madison Elementary School (MES), situated in an extremely poor neighborhood of a mid-sized Midwestern community, is just such a school. Madison’s attendance rate (94%) consistently falls slightly below the state average of 96%. Although current data is not available, in 2009 the stability rate at Fairview was 80% compared to a state average of 90% (Indiana Department of Education, 2014). Over the past decade MES has undergone a great deal of change for a variety of reasons including district budget woes, mandated restructuring in compliance with NCLB sanctions, and lack of stability in leadership. Beginning 10 years ago with the non-renewal of the contract of a veteran principal, the school has been under the leadership of five different principals, and the district has had five different superintendents at the helm. In 2010, due to a projected budget shortfall, 11 MES teachers were placed on the reduction in force layoff list—more than twice as many as any other elementary school in the district. This statistic not only points to the lack of stability of the teaching staff, it highlights their overall inexperience as well, since teachers with the least experience are laid-off first. The turnover of leadership and teachers has resulted in a lack of consistency in addressing the challenges facing the school. Assessment measures of students’ basic skills have not remained consistent and restructuring and improvement plans have come and gone.

The Madison Violin Project

The Madison Violin Project began in the fall of 2008 as a collaboration between a large university music school and MES with the goal of providing violin instruction to young children without access to such instruction and

with the intention of answering some basic research questions concerning the cognitive and social effects of early violin study.

An anonymous donation of fractional-sized violins, months of careful planning to align pedagogical principles of beginning violin instruction with state music, language arts, and mathematics standards, the creation of a tiered instructional model utilizing a university faculty member and students, and the development of a research protocol set the stage for the project. All first graders were given violin instruction, since this age group mirrored the age that young children typically begin violin instruction in the university pre-college string program after which the project was modeled, and also because researchers were particularly interested in the effects of violin lessons on the emergent reading process. Thanks to a very generous grant from the Summer Star Foundation for Nature, Arts and Humanity, the program has expanded over the past six years to provide violin instruction to all first and second graders with optional instruction for students in grades three and four. After fourth grade, students can continue playing violin in the school district's orchestra program. All first and second graders at MES receive large group instruction twice a week and also attend a small group session (typically involving three to five children) once a week during recess. The small group sessions allow for more specific instruction and additional practice, crucial since these children do not take instruments home. Surprisingly the children (with only a few exceptions) look forward to the recess violin lessons, which allow them to bond with their peers through music-making.

The instructional model includes elements from various approaches including El Sistema, Suzuki, String Project Consortium, and the university pre-college program, all integrated within a traditional public school setting. Multiple levels of instructors led by a master teacher work together to form a pedagogical community in which each individual contributes a unique voice to the curriculum. Musical skill and artistry, sequential instruction for children and preservice teachers, and alignment of violin curriculum with other core curricula are central to the model. This guided preservice teaching experience with at-risk children suggests that this type of school-community musical model fosters a deep understanding of diversity and helps young music educators develop culturally relevant teaching practices while providing at-risk students with valuable instruction.

Outcomes for preservice teachers

The professional development component of the Madison Violin Project has had a significant impact on the

preservice teachers in the project. Most of these university students come from upper-middle-class communities and grew up in circumstances very different from the children at MES. This excerpt from an e-mail to the preservice teachers addresses initial questions that arose about the behavior of some of the Madison students at the inception of the project:

There have been some questions as to why a few of the Madison students seem different than students in schools that many of you might remember attending. For those of you who are new or have not been aware of the background of some of our students, here are some fragments of information. Please keep in mind that the population at Madison is diverse and that I am only highlighting a few specifics. Most of the families do not have much money. The Madison area includes a housing project, trailer courts, and a safe house for abused women and children. Around the school you will see kids with maroon backpacks. Those are from the "Backpack Buddies" program, which sends a backpack filled with food home with the kids each evening. Madison is a Title 1 school, meaning that it receives federal funding that is supposed to help bridge the achievement gap between low income students and other students. The bottom line is that while some of our students come from wonderful family situations where they get a lot of care and support, many do not. Often the children live in unstable situations; some of the parents are incarcerated, some might abuse drugs or alcohol, some of the students are homeless (we had one little boy whose family lived in a car)—in many cases they move around a lot, often they have large families and no one to take care of the kids, and so on. Many times when you see a student acting up, it turns out that they went to bed at 1 or 2 in the morning, or that someone was throwing beer bottles at their bedroom wall all night during some party that a parent was having. Or that they didn't take their medication (or that someone else in the family took it).

I am not sending you this so that you feel sorry for our students but just so that you know where many of them are coming from since there were a few questions about what's "wrong" with these kids. I don't think there is a single kid in this group who hasn't done a fantastic job at some point. If we do our job right (set them up step by step EVERY DAY—violin setup, bow holds, etc.) we should demand the best out of them and they are very likely to deliver" (K. Bugaj, personal communication, September, 2008)

The preservice teachers work first as helpers in the large group settings, and then many independently teach small group lessons. As their skills and expertise develop, some are selected to lead large group instruction. Many of the university students have taught at Madison for several years, and for some the experiences have been life-changing. One preservice teacher wrote:

My experiences at Madison have irreversibly and positively changed the way I approach teaching. Not to say

that prior to Madison I did not believe in the power of a single thirty-five minute session to reverse a child's day, but witnessing a child open up during a class is potentially one of the most rewarding and telling parts about teaching at Madison. The Madison students have taught me that a positive attitude can really affect the way children learn material (J. MacLean, personal communication, November, 20, 2013)

And another commented:

Teaching violin at Madison this semester has been one of the most rewarding experiences that I've had. I've learned that with proper training, every child is capable of learning to play the violin, without exception. I see in each of my students the potential to become not only a great violin player, but also a noble and kind person. When I see young Winston's face light up when he produces a beautiful singing tone, I smile with satisfaction. These kids need music. It is a way for them to continue developing the real attributes within, which are those that deal with the beauty of their soul. (B. Lew, personal communication, November 20, 2013)

Perhaps one of the most significant outcomes for the preservice teachers in the Madison Violin Project has been their emerging understanding that a pedagogically sound curriculum with high musical goals and expectations and a core belief that every child is capable of learning produce positive results. Some of the more mature instructors recognize that changing *their own* behavior and attitude directly influences the behavior of the students. Working as helpers in classes taught by master teachers is very powerful, as it allows them to observe first-hand the challenges that come with teaching at-risk children. They observe their mentor's successes, but more importantly they see that at times even a highly qualified, experienced teacher fails. Through their work in the Madison Violin Project the preservice teachers are able to hone their pedagogical and behavior management skills, gain an understanding of the diverse needs of the children that they are teaching, and perhaps most importantly develop the confidence to work with at-risk children compassionately and effectively.

Outcomes for Madison Elementary students

The investigation of the cognitive and social effects of early violin study on young at-risk children was one of the primary goals of the Madison Violin Project. One component of the research was a quantitative study designed to compare of the cognitive growth of students at Madison (experimental group) with that of students at an elementary school in the same district with similar demographics (control group). Over the past six years there have been a number of challenges associated with collecting "hard" data on this population, most notably the initial difficulty in communicating

with families, turnover of teachers and district administration, lack of consistency from year-to-year in the school district's policies and strategies regarding curriculum and assessment, and student mobility.

During the first year of the study, the researchers learned a great deal about working with the families at MES. All first graders received violin instruction, whether or not parents gave consent for their child to participate in research component of the project, and while some families were excited about the opportunity for their children to learn to play the violin, others were skeptical. Nearly half did not give consent for their children to participate in the research component of the project, with some indicating that they were wary of university faculty "using their children as guinea pigs." This changed dramatically in the second year, with more than 90% of the parents giving consent. Many factors contributed to the growing trust families felt for the program including the presence of the director of the program at start-of-school events, conversations with parents, the relationships that the children developed with the director of the program and the preservice teachers, and the pride parents felt in seeing their children perform as young violinists at the end-of-the year concerts. Over the years, the violin project has become an important part of the fabric of the Madison school community. One striking example of the relationship that the director of the program has developed with children and families occurred when an edict from the district administration reorganized classrooms and teachers over a school vacation without input from parents. Families turned to the director of the violin project for support and advice.

The turnover of teachers and administrators at Madison and at the district level has resulted in various plans to "turn around" this underperforming school. Over the past 6 years, among many other smaller changes, a new school was built, district lines were redrawn to increase the size of Madison by nearly 100 students (without significantly changing the demographics), and a commercial "packaged" curriculum was instituted. Throughout these changes the violin project has remained a consistent, positive component of the school, overcoming scheduling challenges and re-establishing trust with new administration and teachers.

The initial plan to utilize school district summative test scores to track student growth was replaced with researcher-administered cognitive testing because assessment between schools and from year-to-year within the same school was not consistent. Gaining access to the students to administer cognitive pre- and posttests was often problematic due to absenteeism of some of the children, administration changes that required re-negotiation of accessibility to the students, and the concern of classroom teachers about children missing instructional

time. Annual statewide standardized testing begins for students in third grade and provides another approach to examining cognitive growth on a longitudinal basis.

Of the 45 children who began first grade at MES in the fall of 2008, only 16 were still enrolled at the completion of sixth grade. This pattern of mobility has continued over the 6 years that the project has been in existence at both the Madison and the control site, which has necessitated a change in direction for the research study. The quantitative research has been reconceived as a 6-year longitudinal study, and greater emphasis has been placed on qualitative aspects of the study.

Several themes have emerged from the examination of annual interviews with Madison teachers and administrators and communication with parents. Teachers and administrators report that skills learned in violin such as listening, the ability to focus, the discipline of following a routine, and the ability to work with others carry over into the children's classroom work as well as other aspects of the school. Additionally some students who struggle in other areas are successful in violin class, which builds confidence and self-esteem. One teacher mentioned that it is great that the children feel that they are "experts at something that their classroom teacher doesn't know how to do" (M. Parmenter, personal communication, May 2009). At the end of the first year of the project one first-grade teacher reported that although she could not draw a direct relationship between violin instruction and academic work, the 2008 first-grade class was the first class in her 27 years of teaching in which all of the students were reading at or above grade level, including several children in the class with identified learning disabilities.

Developing the ability to work with others and building social relationships among the teachers and the children are important objectives of the violin instruction at Madison. Interviews revealed that some children who are discipline problems in their classrooms excel in violin, perhaps because violin study appeals to kinesthetic and aural learning styles or perhaps because of the student-centered approach built into the violin curriculum, which often places children in leadership roles. In her book *The Dreamkeepers*, Gloria Ladson-Billings (2009) describes a "coach" model of teaching in which the "coach" is comfortable sharing responsibility with others including parents, community members, other teachers, and the students themselves. The "coach" model reflects the teamwork that has helped lead to student success in the Madison Violin Project. Sharing the role of "teacher" with the students acknowledges that they have some things to teach both the instructor and their peers. This helps engage students who need to have some control over their environment and who are able to learn from the leadership they can

provide. Often the other students in the class are more receptive and attentive when their peers are leading than they are to being dictated to by yet another adult. One thing that makes it possible for the children to lead themselves is the highly structured nature of the curriculum. The students know what step comes next, and although they might each be at a different level of mastery, they are all able to engage and succeed at their current level.

Another outcome of the violin project has been the change in the attitude and behavior of parents. Both teachers and administrators observed parents paying closer attention to their children's performance at concerts, no longer bringing food and drinks, talking, and entering and leaving at will. Parents repeatedly express great pride in seeing their children playing the violin. One parent wrote that her son loved playing the violin and that it had changed what she saw in him. She reported that he was a pretty a "rough and tumble" kid who had started getting in trouble, but that violin had made him think in a different way (K. Heise, personal communication, May 2009). She was so excited about an upcoming concert at the university that she bought him new dress clothes even though money was tight. Another parent expressed gratitude for the violin project since it provided her daughter, who had never been interested in anything in school, something that she loved.

The power of music as a vehicle for social change is evident from the reflections of teachers, parents, and administrators at Madison. José Antonio Abreu spoke of the lack of identity and self-esteem that accompanies poverty and the power of music to provide a child with "a noble identity" that "makes him a role model for his family and his community" (in Tunstall, 2012, p. 133). This quote from a veteran Madison teacher about the violin project exemplifies Abreu's words:

I think the biggest thing is that the children don't realize what their possibilities are. ... If we start changing that idea and get them connected with some people outside of their own community, maybe it'll start changing their ideas about what they can do; help them get out of the circle of generational poverty that starts when you don't see any other lifestyle for yourself. For them to have the opportunity to try out things that so many kids do that they don't get to; and the fact that the children and their parents start to see some new possibilities— that for me is probably the most important benefit. (K. Heise, personal communication, May 2009)

Policy implications

Darling-Hammond's contention that we must take the education of poor children seriously and provide more than "small-scale pilot projects, demonstrations, innovations,

and other partial solutions” is certainly true. While the Madison Violin Project is a “small-scale project,” important implications for education policy can be drawn from the experiences and outcomes of the program. Careful scrutiny of the effects of current national, state, and local policy on Madison provides a glimpse into the day-to-day life of “low-performing” schools, and the outcomes of the violin project demonstrate the power of the arts to impact children. Rather than national policy that narrows the curriculum, requires children who deal daily with the effects of poverty to take demoralizing standardized tests that reinforce their low self-esteem, and labels schools such as Madison as “failing,” we need educational policy that breaks the cycle of generational poverty that exists for many children in America. Educational policy should guarantee expert teachers for all children across a broad array of curricular offerings, assure a consistent, sustainable educational environment that is motivating to children, and create opportunities for strong community–school relationships.

One important avenue to accomplishing these goals is high quality preservice and inservice professional development that prepares teachers to succeed. Darling-Hammond (2010) claims that the systematic development of competent teaching is central to improving student achievement (p. 194). She further points to the importance of developing “teaching schools”—K–12 schools partnered closely with universities. She notes that involvement in such schools “helps prospective teachers understand the broader context for learning and begin to develop the skills needed for effective participation in collegial work around school improvement throughout their careers” (Darling-Hammond, 2010, p. 216). This has certainly been true for the preservice teachers participating in the Madison Violin Project. Additionally, through observation of a highly effective lead teacher from the university faculty and frequent opportunities to practice the strategies observed, they are developing the skills, attitudes, and dispositions that will help them succeed in any school environment.

The outcomes of the violin project for the children and families at Madison provides evidence of the power of music to change lives. The high-stakes testing environment that focuses almost exclusively on language arts and mathematics does not foster a love of learning in many children. The arts provide an avenue to success for some children, reinforcing critical skills that will serve them well throughout their lives through something that they love. The development of policy at all levels that guarantees access to a broad curriculum that includes quality instruction in music for all children is critical. The message from the collective Madison voices tells us that these kids need music—it changes their ideas about what they can do and helps the children and their parents start to see new possibilities.

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