# Music Programs in Charter and Traditional Schools: A Comparative Study of Chicago Elementary Schools 

Jamey Kelley' and Steven M. Demorest ${ }^{\mathbf{2}}$


#### Abstract

Since the arrival of the first charter school in Minnesota in 1991, charter schools have become one of the largest movements in educational reform. In recent years, research has emerged that has compared the effectiveness of charter schools with their traditional school counterparts. The purpose of this study was to compare the extent of music offerings between charter schools and traditional public schools in the same urban district and geographic location within the city. Results indicated that while all schools in the sample offered significantly less music than national averages, significantly more charter schools offered music during the school day. Charter schools were more likely to offer traditional music (band, choir, orchestra) as electives. Schools with music programs, regardless of school type, had higher test scores and higher attendance rates even when controlling for differences in socioeconomic status between music and non music schools. Results are discussed in terms of their implications for the charter school movement, arts education policy, and suggestions for future research.


## Keywords

charter schools, access to music, arts policy, urban

In recent decades, charter schools have emerged as an alternative to traditional public education in the United States. They are seen as an alternative to traditional public schools especially in urban areas that are perceived to have been underserved by

[^0]traditional public education (Graves, 2007). The Center of Education Reform (2010) cites that over 1.5 million students are currently enrolled in charter schools across the country. While this nascent movement is gaining popularity in public opinion, much of the existing research on charter schools has focused on administrative rather than instructional practices (Bifulco \& Bulkley, 2008), and the research findings on the effectiveness of teaching within charter schools is mixed. In music, there are two studies (Austin \& Russell, 2008; Elpus, 2012) that have created a preliminary descriptive profile of music instruction in charter schools. Yet we know little about how charter school music offerings compare with those of traditional schools within the same community in terms of either amount or quality of instruction. This makes it difficult to assess the impact of the charter school movement on children's access to a musical education.

## The Charter School Movement

Since the arrival of the first charter school in Minnesota in 1991, charter schools have become one of the largest developments in educational reform (Bifulco \& Bulkley, 2008). From 2008 to 2010, the number of charter schools created grew by $6 \%$ nationwide despite moratoriums and caps on charter schools in some areas of the country (Center for Education Reform, 2010).

Charter schools are public schools operating under a contract or charter granted by a public agency or legislative body. This agreement allows charter schools a degree of independence from local and state regulations. Even though these schools are not accountable to the local school district, charter schools are accountable to the chartering agency and to the parents of the students. If a charter school does not perform to the standard of the chartering agency, the contract of the school will be eliminated. Similarly, if the parents of students are dissatisfied with a charter school, they can remove their students and cause financial loss to the school (Bifulco \& Bulkley, 2008).

In recent years, research has emerged that has compared the effectiveness of charter schools with their traditional school counterparts. Investigations on the effect of charter schools on student performance, when compared to traditional schools, have been mixed. Charter schools have been found to have negative effects on students' math and reading scores in Texas, North Carolina, and Florida when compared to similar students in traditional public schools (Bifulco \& Ladd, 2007; Booker, Gilpatric, Gronberg, \& Jansen, 2004; Sass, 2006); conversely, elementary charter school students in Arizona were found to have greater reading growth than traditional school students over a 3 -year longitudinal study (Solman \& Goldschmidt, 2004). Two studies examining the effects of charter schools in California found either no effect or mixed effects on comparisons of student performance (Buddin \& Zimmer, 2003, 2006). Within the research community, no consensus has been established on the effect of charters when compared to traditional schools.

Advocates of charter schools claim that the freedom from local school district regulations allows them to be more innovative than traditional public schools by employing new teaching practices or developing innovative curricula (Bifulco \& Buckley,
2008). However, when comparing practices between charter schools and traditional schools, very few charter schools exhibited innovative practices that traditional schools did not also employ, save for the abandonment of teacher tenure in most charter schools (Preston, Goldring, Berends, \& Cannata, 2012). One study has identified that charter schools are more cost-efficient than traditional schools (Gronberg, Jansen, \& Taylor, 2012). However, the cost savings are due to fewer regulations, such as eliminating a standard salary schedule for staff, rather than novel budgetary practices to educate students at a lower cost.

Current research shows little distinction in the academic performance and teaching practices between charter and traditional schools (Gronberg et al., 2012; Kelly \& Loveless, 2012; Zimmer, Gill, Booker, Lavertu, \& Witte, 2012). The research on charter schools has most often focused on school effectiveness, examining outcomes on high-stakes testing; research examining curricular and pedagogical choices in charter schools has been lacking (Buckley \& Fisler, 2002). Furthermore, there is little or no information on charter schools' commitment to arts education and even less on how they compare to traditional public schools in curricular offerings in music and the arts (Austin \& Russell, 2008). Does this new schooling model offer more in the way of arts education than its traditional counterpart, or does the focus on high-stakes testing make charters less likely to offer music and arts education?

## Music Education in Public Schools

In 2012, the United States Department of Education published a report on the status of arts education (Parsad \& Spiegelman, 2012). The data were gleaned through surveys mailed to a stratified national sample of elementary and secondary schools during the 2009-2010 school year. The survey found that $94 \%$ of elementary schools and $91 \%$ of secondary schools reported offering music instruction during the school day. Schools with higher enrollments in free and reduced-price lunch program had a lower percentage of music instruction present in their schools.

In their descriptive profile of music programs in elementary schools, Abril and Gault (2006) found that $92.5 \%$ of reporting schools offered music education as part of the school curriculum. A small minority of schools reported offering music instruction as an option for students, while only one school indicated that they did not offer any music instruction. In over $90 \%$ of elementary schools, music instruction of at least 30 minutes per week was reported; $94.9 \%$ of elementary principals reported employing a music specialist as a teacher. In their survey of secondary schools, Abril and Gault (2008) found that $98 \%$ of secondary schools reported offering music education, taught by a specialist. The researchers were cautious about the results as response bias could be in effect because principals who did not have music programs may not have responded to the survey. The average number of full-time music specialists in urban areas was 1.98 compared to 2.31 specialists on average in suburban areas. Urban schools, on average, offered fewer courses in music $(M=4.36)$ than suburban schools $(M=4.86)$, although this finding was not statistically significant. However, when socioeconomic status (SES) was taken into consideration, the number of course offerings was statistically
lower at schools with higher participation in the free and reduced-price lunch program (low SES, $M=3.29$; middle SES, $M=3.97$; high SES, $M=4.73$ ).

## Music, SES, and Academic Achievement

Using data from a preexisting longitudinal survey of high school students ( $N=13,240$ ), Elpus and Abril (2011) investigated the demographics of high school ensemble students. Twenty-one percent of those responding were enrolled in a music ensemble (choir, band, or orchestra). Of those participating in music ensembles, lower SES students, Hispanic students, and English language learners were significantly underrepresented. This corroborates earlier findings that SES may influence access to and participation in music programs. Abril and Elpus also discovered that students with higher standardized test scores in math and reading as well as higher grade point averages were overrepresented in music programs.

These findings are in line with the popular perception that music participation can lead to higher academic performance. Other data, however, do not support overall superior achievement by music students (Fitzpatrick, 2006; Kvet, 1985; Wallick, 1998), though students that participate in music programs are more engaged in their school experience and likely to be involved in prosocial activities that lead to positive educational outcomes (Eccles \& Barber, 1999; Feldman \& Matjasko, 2007). It has been suggested that the relationship between music and achievement may actually represent a tendency for high-achieving students to seek out music instruction for their elective activities (Demorest \& Morrison, 2000). For students who perform poorly in school or English language learners, elective opportunities are often curtailed by the need for remedial math or language course work. Some studies have suggested that while academic performance may not be better for low-SES students, music participation may slightly moderate the negative effect of lower SES for some students (Fitzpatrick, 2006; Kinney, 2008; Miksza, 2007; Southgate \& Roscigno, 2009). It is possible that students in lower SES settings, where charter schools are often located, may benefit academically or socially from increased access to music instruction.

While a majority of public schools in the United States offer music education, schools in urban areas do not always provide the same range of music educational experiences as suburban schools (Parsad \& Spiegelman, 2012). Because charter schools are frequently founded in urban areas of high educational need (Graves, 2007; Loveless \& Field, 2011), any comparison of charter schools with traditional schools should control for similar geography and demographic characteristics.

## Music Instruction in Charter Schools

Austin and Russell (2008) conducted the first study examining the status of music programs in charter schools. They sent a questionnaire to 400 charter school administrations in the 15 states with the largest proportion of charter schools in the country. The response rate was $31 \%$, with 122 schools returning the survey. Results indicated that music instruction is significantly associated with grade-level configuration and
what groups are responsible for designing a charter school. General music was the most likely offered music instruction in charter schools. The authors compared their results with previous data published by the U.S. Department of Education collected from surveys from across the country. The comparison demonstrated that traditional schools have music instruction in a higher percentage of schools, have more credentialed specialists, and are more likely to have a school district curriculum for music. Charter schools in their sample offered music less often, but the schools that did offer it had more minutes committed to music instruction. The researchers also concluded that while the majority of charter schools offer music instruction, music education is not given the same status in charter schools as it is in traditional schools.

Elpus (2012) designed a study to survey charter school practices within a specific geographical area, New York City, to control for legislative differences between states and school districts. A questionnaire was e-mailed to 99 charter school administrations; 38 administrators responded, providing a response rate of $40.8 \%$, which the researcher deemed satisfactory. Approximately $87 \%$ of respondents offered formal music instruction; those schools that did not report music instruction cited budgetary reasons for the omission. In contrast with Austin and Russell (2008), this study found that choral music was the most frequent offering in music programs, followed by general music and instrumental music. Elpus also explored teacher credential, compensation, and design partners as they relate to the status of music programs in charter schools. Charter schools that had parents involved in the design of the school were more likely to have music programs.

Although these initial studies provide descriptive details of music programs within charter schools, the comparison to traditional schools is limited. Austin and Russell (2008) compared their results of a relatively small sample of charter schools from 15 states with a national sample of traditional schools across the country. Elpus (2012) controlled for legislative differences by using a sample from a specific geographic area; however, no comparison to local traditional schools was made. Finally, both studies had response rates under $50 \%$. The results should be viewed cautiously as there may be a nonresponse bias in effect; Elpus discussed how some administrators of charter schools that do not have music programs may have been unlikely to respond. While these initial studies offer a glimpse into the music programs of charter schools, more study is needed to fully understand the incidence of music instruction within charter schools and how it compares with that of traditional schools.

The purpose of this study was to compare music instruction in charter schools and public traditional schools within the same geographical area: Chicago, Illinois. Specifically, this study investigated if there is a relationship between the type of school (charter or traditional) and a number of variables concerning the music program such as required, elective, and extracurricular music offerings; facilities; number of music teachers; teacher expertise; and frequency of instruction. Additionally, school demographics, such as SES and academic performance, were examined in relation to the presence of music instruction within the school. The choice to limit the study to a single geographic region allowed us to (a) offer a much more direct
comparison of charter and traditional schools that were seeking to serve the same population and (b) achieve a much higher response rate than previous surveys that relied on written questionnaires.

The research questions for this study were (1) Do charter schools offer the same amount and type of music education opportunities as geographically matched traditional schools? and (2) Do charter schools and traditional schools with music programs differ from schools that do not offer music in academic performance indicators or demographics?

## Method

## Sampled Schools

Chicago Public Schools (CPS) were chosen as the population for this study because of the active charter school movement found there. In 1988, William Bennett, the U.S. secretary of education, proclaimed CPS to be the worst public schools in the nation (Luppescu et al., 2011). Subsequently, CPS employed many reforms to change the reputation of the school district. When the school system came under the control of the mayoral office in the mid-1990s, standardized testing was implemented to hold students and schools accountable for performance. In 2004, Arne Duncan, then CEO of CPS, called for a dramatic reform in school design (Rivero, 2009). This new campaign, Renaissance 2010 , called for 60 to 70 low-performing schools to be closed and projected 100 innovative schools would be opened by 2010. By the spring of 2010, 69 schools had been closed and 92 charter schools had opened.

Though the Renaissance 2010 campaign initially was committed to closing lowperforming schools, some successful traditional schools were closed for low enrollment or facility issues rather than low test scores (Caref, Hainds, Hilgendorf, Jankov, \& Russell, 2012). Additionally, schools in African American communities endured more school closures than similar performing White or Hispanic schools (Caref et al., 2012). Some African American students were relocated to four different schools within a 3-year period. This suggests that students were reassigned to similar low-performing schools and received a similar quality of education (Gwynne \& de la Torre, 2009). While Renaissance 2010 has created positive effects like higher graduation rates and higher standardized test scores at the high school level, achievement gaps between racial groups has increased, and the majority of CPS graduates are not "college ready" (Luppescu et al., 2011).

The educational history of Chicago provides a fertile environment for research in the practices of charter schools, especially in comparison to traditional schools. With the motivation for school reform, Chicago charter schools have become an important component within the school district. Furthermore, as closed traditional schools are replaced with new charter schools, the comparison of school types is integral to the body of educational research. As of Fall 2013, CPS had identified 96 of its schools as charter schools on its website.

## Arts Education in Chicago Public Schools

Arts education in CPS, like many large metropolitan school districts, is quite variable throughout the city. At the time of data collection for this study, the funding policy for arts education teachers (including music, visual arts, drama, and dance teachers) was wholly contingent on the size of the school. Each Chicago Public School was entitled one full-time arts education teacher for every 750 students that attended the school; for schools with less than 750 students, one half-time arts education teacher was entitled (Chicago Public Schools, 2013). This policy is similar to other funding paradigms in other metropolitan areas, although the number of students per arts teacher is considerably higher. Miami has policies for one full-time arts teacher for every 550 students; Boston funds an art teacher for every 350 students within a school (Chicago Public Schools, 2013). While the funding structure seems less progressive than comparable metropolitan areas, Ingenuity Incorporated (2013) reported that CPS had a ratio of one arts teacher for every 360 students (1:208 in high school, 1:398 in elementary schools). Dallas Independent School District had one music instructor for every 699 students and one visual arts teacher for every 679 students (Pinto, 2009). The New York City Department of Education reported a ratio of 1:522 between elementary students and arts teachers and a ratio of $1: 511$ between middle school students and arts teachers (New York City Department of Education, 2013). Chicago's ratio of arts education teachers to students should be observed with caution, as the data do not delineate whether the teachers are full- or part-time.

As part of the CPS Arts Education Plan adopted in 2012, every elementary student is expected to receive 120 minutes a week of arts instruction; however, any kind of arts instruction (visual arts, music, dance, or theater) will meet policy expectations (J. Lasalle, personal communication, June 16, 2015). Currently, CPS is in the process of ensuring all elementary schools comply with the recent arts education initiative.

While the school district provides funding for arts education at each school, the building administration is given complete authority to decide whether to use the entitlement for arts education as well as what type of arts education to provide to students (J. Lasalle, personal communication, June 16, 2015). Since buildings implement their own arts programs, arts education programs vary considerably across the city (Chicago Public Schools, 2013). In the 2011-2012 school year, there were 2,754 arts endorsements among the teaching staff of CPS (Chicago Public Schools, 2013). Of these endorsements, approximately $50 \%$ were in visuals arts. Approximately one third of the endorsements were in music. Theater endorsements made up $13 \%$ and dance endorsements only $3 \%$ of the total arts endorsements in the district (Chicago Public Schools, 2013). However, it must be noted that some teachers have endorsements in multiple subject areas. It is likely that a number of these reported arts endorsements were held by teachers credentialed in other areas and not teaching in the arts. While specific data on the arts programs in Chicago are unavailable, this information on endorsements suggests that many schools may elect to have a visual arts program as the only arts education option. Furthermore, this funding paradigm for arts education classes may
make music classes, specifically more expensive classes like instrumental music classes, less common than expected in other districts or school types. Regardless of type of arts instruction, Chicago Public School students receive, on average, 99 minutes of arts education in elementary schools (Ingenuity Incorporated, 2013).

## Survey Instrument

Prior to collecting data, we designed and piloted a structured interview protocol to be administered by telephone that could glean basic information on the music program of each school. The instrument was designed to elicit efficient and accurate responses from school personnel (e.g., an administrator or a receptionist). During the piloting of the instrument, we observed that secondary schools had a much greater variability in types of offerings and personnel in those schools were often unable or reluctant to provide information about their music programs, making comparison difficult. Consequently, we chose to narrow the scope of this initial study to only elementary schools ( $\mathrm{K}-8)^{1}$ in order to obtain more reliable and consistent data.

As of Fall 2013, CPS listed 57 public charter elementary schools on its website, and all were included in the sampling frame. For each charter school in the sample, we identified the traditional public school in closest physical proximity through the CPS website to use for comparison. The sampling frame incorporated a total 114 elementary schools.

The interview protocol contained 18 questions that addressed three areas of interest: (a) amount and type of music instruction, (b) music program resources, and (c) extracurricular music activities. Ten items explored music instruction including access to music instruction during the school day, number and length of music classes per week, and type of music class (e.g., compulsory, elective, general music, choral). Five items examined music program resources such as the number of full-time or parttime teachers, certification status of music teachers, and space dedicated to music instruction. Finally, three items investigated extracurricular music activities such the frequency and type of after-school musical activities offered at schools (e.g., choir, mariachi, popular music) as well as information regarding the facilitator of the activities (school personnel vs. outside agency). The questionnaire was designed for an online platform, which allowed the interviewer to record responses from a drop-down menu as well as type in free responses when necessary ( see Appendix A in the online supplemental material for the complete questionnaire, available at http://jrme.sagepub.com/supplemental). The interview protocol took less than five minutes on average to complete.

Prior to executing the interview protocol, we contacted the Institutional Review Board at the University of Washington. Since the information that we were seeking from schools was public information (e.g., information that a parent could request), we were advised that an institutional review board approval was unnecessary. However, when we contacted each school, we identified ourselves as researchers prior to beginning the interview protocol and asked for verbal assent to participate.

Each of the 114 elementary schools was contacted via telephone by one of the researchers in the fall semester of 2013. If initial contact with the school was
unsuccessful, three additional attempts were made. In three instances, an e-mail address of the school music specialist was supplied to the researchers; access to the survey was sent to those three music specialists electronically. We were unable to get complete data from nine schools (three traditional and six charter schools) from our original sampling frame. This led to an initial response rate of $92 \%$.

After we collected the data, we noticed a high variability in the grade-level configurations of some of the schools in the original sample. To ensure the most valid comparison possible, the decision was made to limit the schools included in the analysis to those that taught at least three grade levels ( $\mathrm{K}-5$ ) traditionally associated with elementary school to make the sample more homogenous. This decision eliminated seven schools (one traditional and six charter schools) from our analysis; however, the eliminated schools were schools that were either newly opened, serving only a few grade levels, or were designed as traditional middle schools (grades 6-8). (See Appendix B in the online supplemental material for a list of the grade configurations of the schools surveyed, available at http://jrme.sagepub.com/supplemental.) The number of schools with complete survey results included 53 traditional schools and 45 charter schools ( $N=98$ ). Demographic statistics by school type are reported in Table 1.

## Results

## Music Instruction

Fifty-seven out of the 98 schools surveyed (58\%) reported offering some form of music instruction during the school day. Sixty-nine percent of charter schools and $49 \%$ of traditional schools offered music instruction during the school day. A $\chi^{2}$ goodness-of-fit test was performed to examine if the incidence of music programs in the sample was significantly different from national norms. Using the reported data from the U.S. Department of Education on arts education in public schools (Parsad \& Spiegelman, 2012), the expected incidence of music programs in elementary schools with comparable free and reduced rates is $89 \%$. The results indicate that our sample was significantly different in the incidence of music programs found in schools $\left(\chi^{2}=95.19\right.$, $d f=1, p<.001$ ); in this case, the sample had significantly fewer music programs than the national data. A $\chi^{2}$ test for independence was performed to examine if frequency of music programs was proportional between school types. The proportion of music programs in charter schools was significantly higher than the proportion of music programs in traditional schools ( $\chi^{2}=3.93, d f=1, p=.047$ ).

An additional $\chi^{2}$ test for independence was performed to examine if music program offerings were proportional among small (less than 400 students, $n=29$ ), medium (400-799 students, $n=51$ ), and large schools ( 800 or more students, $n=18$ ) across school type. Results indicated there was a significant relationship between the incidence of music programs and the size of the school $\left(\chi^{2}=12.53, d f=2, p=.002\right)$. Post hoc comparisons identified differences between large and small schools $\left(\chi^{2}=7.57\right.$, $d f=1, p=.006)$ and medium and small schools $\left(\chi^{2}=10.56, d f=1, p<.001\right)$ but not between medium and large schools ( $\chi^{2}=0.08, d f=1, p>.05$ ). Thus, the incidence of
Table I. Percentage of Selected Demographics in Schools by Type.

| Characteristic | Charter |  |  |  |  | Traditional |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $n=45$ |  |  |  |  | $n=53$ |  |  |  |  |
|  | M | SD | Median | Minimum | Maximum | M | SD | Median | Minimum | Maximum |
| Caucasian | 1.60 | 3.57 | 0.20 | 0.00 | 16.10 | 1.72 | 4.01 | 0.60 | 0.00 | 24.00 |
| African American | 53.77 | 43.85 | 56.10 | 0.00 | 99.60 | 62.62 | 43.41 | 94.70 | 0.30 | 100.00 |
| Hispanic | 40.95 | 42.69 | 15.40 | 0.00 | 99.00 | 34.34 | 40.86 | 4.40 | 0.00 | 98.20 |
| Asian | 0.77 | 2.53 | 0.00 | 0.00 | 14.90 | 0.58 | 2.29 | 0.00 | 0.00 | 15.30 |
| English-language learner | 19.68 | 22.27 | 3.60 | 0.00 | 74.70 | 14.12 | 17.37 | 2.20 | 0.00 | 50.10 |
| Low income | 91.13 | 8.09 | 93.90 | 63.50 | 99.30 | 95.92 | 4.71 | 97.30 | 72.20 | 100.00 |
| Special education | 10.02 | 2.81 | 9.40 | 5.40 | 17.00 | 13.74 | 5.66 | 12.40 | 3.70 | 29.80 |

music programs in large schools (72\%) and medium schools ( $69 \%$ ) was significantly higher than small schools (31\%).

Of those 57 schools with music programs, $74 \%$ offered compulsory music classes to all of their students. The majority of the compulsory music classes was in the form of general music classes with a small number reporting instrumental (1), choral music (1), and music and movement (2). Seventy-one percent of music programs in charter schools and $77 \%$ of music programs in traditional schools offered compulsory music to all grade levels with one additional traditional school offering a combination of compulsory and elective. Looking at the entire sample, only $45 \%$ of schools offered compulsory or elective music to all grade levels ( $49 \%$ of charter schools and $42 \%$ of traditional schools).

The mean frequency of music classes was 1.21 classes per week in charter schools and 1.32 classes per week in traditional schools. Classes in traditional schools ( $M=$ $53.70, S D=7.72$ ) were significantly longer in minutes than charter schools $(M=$ $48.28, S D=8.11), t(50)=2.44, p=.018$.

Only $2 \%$ of charter schools $(n=1)$ and $9 \%$ of traditional schools $(n=5)$ offered elective music classes; elective classes were described as music classes that met during the day that were not compulsory. Choir and band were the only elective options at the charter school. At traditional schools, elective options included band (3 schools), orchestra (2 schools), choir ( 2 schools), general music ( 1 school), popular music (1 school), guitar (1 school), and private instrumental lessons (1 school).

## Music Program Personnel

One hundred percent of all charter schools that offer music had at least one full-time music teacher on staff as compared to $89 \%$ of traditional schools. In addition, $7 \%$ of music programs in traditional schools had two full-time teachers while $4 \%$ of music programs in charter schools had two full-time music teachers. No charter schools employed part-time music teachers while $8 \%$ of traditional schools with music programs did. For schools that offered music during the school day, $76 \%$ of traditional schools and $71 \%$ of charter schools had dedicated space for music instruction.

## Extracurricular Music Activities

There was no significant relationship between type of school and incidence of extracurricular activity, $\chi^{2}(1)=0.38, p=.537$. Thirty-seven percent of all schools reported offering extracurricular music activities; $40 \%$ of charter schools ( 18 schools) and $34 \%$ of traditional schools ( 18 schools) offered music activities before or after the school day (see Table 2).

We performed a $\chi^{2}$ test for independence to examine the relationship between size of school and incidence of extracurricular activity. There was a significant relationship between school size and incidence of extracurricular music activity, $\chi^{2}(2)=7.00, p=$ .030, with larger schools more likely to have extracurricular music activities. Post hoc comparisons identified differences between large and small schools $\left(\chi^{2}=5.70, d f=1\right.$,

Table 2. Incidence of Music Offerings at Sampled Schools.

|  | Charter |  | Traditional |  | All Schools |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ( $n=45$ ) |  | ( $n=53$ ) |  | ( $\mathrm{N}=98$ ) |  |
|  | $n$ | \% | $n$ | \% | n | \% |
| Music instruction | 31 | 69 | 26 | 49 | 57 | 58 |
| Compulsory | 30 | 67 | 23 | 43 | 53 | 54 |
| Elective | 1 | 2 | 5 | 9 | 6 | 6 |
| Extracurricular music | 18 | 40 | 18 | 34 | 36 | 37 |

$p=.017)$ and medium and small schools $\left(\chi^{2}=5.55, d f=1, p=.019\right)$ but not between medium and large schools $\left(\chi^{2}=0.25, d f=1, p>.05\right)$. Charter schools were significantly more likely to have their extracurricular activities run by the music staff, $\chi^{2}(1)=5.60, p=.018$. Of the 36 schools with extracurricular music offerings, $78 \%$ of charter schools and $39 \%$ of traditional schools had their extracurricular activities facilitated by a music teacher on staff, while the remainder reported that an outside organization facilitated extracurricular music activities.

The type of extracurricular music activities that were reported by schools were choir (26 schools), band ( 9 schools), orchestra (4 schools), guitar (3 schools), private instruction ( 2 schools), piano ( 2 schools), mariachi ( 2 schools), popular music ( 2 schools), drumline ( 1 school), and unspecified ( 3 schools). Traditional schools reported a higher incidence of nontraditional extracurricular music activities such as mariachi, popular music, and guitar (see Figure 1). Of schools that offered extracurricular music activities, only $58 \%$ of traditional schools offered extracurricular choir, band, or orchestra compared to $84 \%$ of charter schools.

## Academic Performance Data

A two-way, fixed-factor ANCOVA was conducted to examine the relationships between school type, access to music instruction, and performance on the Illinois Standard Achievement Test (ISAT), controlling for the percentage of low-income students in each school. Mean ISAT performance scores were only available for 93 of the schools in the sample as some schools had been open for less than a year. There was a significant main effect of offering music instruction, $F(1,92)=7.59, p=.007$, indicating that schools that offered music instruction $(M=50.60 ; S D=11.65)$ performed better on the ISAT than schools that did not offer music ( $M=42.70$; $S D=13.09$ ). There was no corresponding main effect for school type (charter or traditional) on ISAT scores. Additionally, there was no interaction detected between school type and music instruction on ISAT scores.

A two-way, fixed-factor ANCOVA was performed to examine the relationships between school type, access to music instruction, and school attendance rates, again


Figure I. Types of extracurricular activities by school type.
controlling for percentage of low-income students. Ninety-one schools had published their attendance rates on the CPS website. Results from the test indicated significant main effects for both school type, $F(1,90)=17.72, p<.001$, and access to music instruction, $F(1,90)=7.30, p=.008$, on attendance rates, although no interaction effect was detected. These results indicate that charter schools ( $M=96.10 ; S D=1.46$ ) have significantly higher attendance rates on average than traditional schools ( $M=$ 94.78; $S D=1.75$ ). Similarly, schools that offer music instruction during the school day regardless of school type ( $M=95.65 ; S D=1.49$ ) have significantly higher attendance rates than schools that do not offer music ( $M=94.38 ; S D=2.00$ ).

## Discussion

CPS, both traditional and charter, offer significantly less music instruction at the elementary level than national norms even when accounting for free and reduced-price lunch rates. This illustrates the importance of place in any discussion of charter versus traditional instruction. Unlike previous studies that compared charter school music to national norms (Austin \& Russell, 2008), charter schools in this geographically controlled sample offered significantly more music instruction than their traditional counterparts, though differences in school configuration lead us to interpret this result with caution.

The results of this study substantiate Austin and Russell's (2008) finding that there is a significant relationship between the size of school and the incidence of music instruction in charter schools. A significant relationship was also found between the size of school and the incidence of extracurricular music activities. These findings
suggest that smaller schools may lack sufficient resources, such as equipment or payroll, to provide music experiences for their students. While some school reformers advocate for smaller schools to address individual student needs, such schools may be at a disadvantage when it comes to offering adequate arts education.

The type of music instruction offered in both types of schools was primarily compulsory rather than elective and was offered at all grade levels; the majority of schools employed a music specialist to teach music. The lack of electives is not unusual when considering the typical elementary music program and its focus on compulsory general music offerings. However, the small number of elective music classes in both charter and traditional, including instrumental and choral opportunities, is unusual when keeping in mind that most of these schools included grades 6 to 8 . This may reflect an idiosyncratic characteristic of the K-8 music programs in Chicago; again, the researchers caution generalizing to broader populations.

Extracurricular music was less prevalent in our sample but was most commonly found in larger schools. Charter schools primarily offered band, choir, or orchestra as an extracurricular activity facilitated by the music teacher on staff. In comparable traditional schools, there were more nontraditional after-school activities (mariachi, popular music) and more music facilitators from the community. The data suggest that despite a reputation for new paradigms of instruction, charter schools that include music in their curriculum choose to offer a more conventional approach to music education. Traditional schools, on the other hand, appear to be less conventional in their implementation of music education opportunities. This may be due in part to some traditional schools' reliance on community-based nonprofit organizations to run their after-school programs, who may choose to offer less traditional music experiences (Veblen, 2007).

Schools that offered music instruction during the school day had significantly higher test scores and higher attendance rates than schools that did not, even when controlling for differences in the number of low-income students between the schools (see Figure 2). The only difference by school type was that charter schools had higher attendance rates overall. While there is likely no causal link between the presence of music instruction and better school outcomes, these data suggest that the presence of music instruction in schools may be an indicator of a healthy school environment. Schools with music programs may be more committed to providing students with many different types of learning experiences, which in turn promotes student engagement. Schools with music programs may provide more interactions within the school community with more opportunities for parents, teachers, children, and administrators to communicate with each other. These schools may also provide more opportunities for integrating material across disciplines rather than drilling for standardized tests. While the present data cannot explain why schools with music programs had stronger test scores and higher attendance rates, future research should explore the nature of this relationship.

## Limitations of the Study

There are several limitations to the present study. First, because the schools were purposefully sampled from a specific geographical location and the entire population of


Figure 2. Comparisons on academic performance (percentage of students who meet or exceed state standards on ISAT assessment) and attendance rate (yearly average percentage of daily student attendance) between schools with music or no music programs.
Note. Error bars denote one standard deviation from mean.
charter schools was included, the results cannot be generalized beyond this population. Second, survey designs can be limiting when seeking information about complex issues, though there was a clear benefit to using an interview rather than questionnaire approach in terms of response rate. While acquiring basic information about an elementary school music program may seem simple, some schools reported very complicated details about their music programs. We tried to represent the participants' responses as accurately as possible within the constraint of the survey tool. Third, on some occasions the information provided may have been supplied by school personnel who were not completely informed about the school music program. When a participant in the survey did not know the answer to survey questions, the researcher asked to speak to someone else (either an administrator or a music teacher) who may have known the details. Despite this approach, participants may have unknowingly given misinformation.

## Implications and Considerations for Future Research

For policy makers, the results of this study provide useful information. First, charter schools as a whole may provide more educational services such as music education than might be expected. Prior to this investigation, one working hypothesis was that charter schools would offer considerably less access to music education. The
reasoning was that since many charter schools are designed by for-profit organizations, these companies would design schools with the profit margin in mind and opt for cheaper arts education alternatives (Lacireno-Paquet, Holyoke, Moser, \& Henig, 2002; Tienken \& Orlich, 2013). We found instead that the charter schools in our sample were more likely to provide access to music education experiences. Perhaps, in an effort to recruit students among a competitive field of other charter schools, charter schools design programs that they believe will be attractive to both parents and students. Policy makers in the public sector might consider this possibility and be proactive in providing comparable programs within traditional public schools or safeguard arts education programs from further cuts in struggling districts. Additionally, as more research explores the inner workings of charter schools, examinations into the quality of arts educations programs within charter school need to occur. Future studies should investigate if there are substantial differences in the quality of arts education between different types of charter schools (e.g., for-profit, turn around schools, bilingual, career focus).

Along with Austin and Russell (2008), the results of this study provide evidence of a relationship between school size and access to music education. When schools are larger, they are more likely to have music education programs. This finding also has substantial policy implications for those who consider small schools an important educational benefit. While there may be some benefit to smaller schools (Vander Ark, 2002), there is also a cost in terms of variety of curricular offerings. For charter or traditional schools that are designed to be small, stakeholders might look for opportunities to share resources between schools in order to provide arts education or be willing to disclose that they will not provide certain programs like music education.

Additionally, the results of this study indicate that the schools sampled, both charter and traditional, offer significantly less access to music education than national norms for urban schools (Parsad \& Spiegelman, 2012). This finding raises many questions about music education in urban settings. What variables within urban settings influence whether or not arts education is a priority? How do local testing procedures, tax revenue designs, district initiatives, or teacher turnover influence the music education programs within an urban school district? How do some urban school systems provide music education programs throughout their district while others do not? Profiles of urban school districts and their access to music education need to be better understood to examine if there are systematic tendencies within large urban school districts. It may be erroneous to lump all urban school districts together, as each large metropolitan area may have different challenges to serve its students.

Future research examining arts education in charter schools should consider the role of place in making comparisons. Replications of this study using different large school districts with an active charter school presence could provide important clarification about the incidence of music programs in charter schools. After a series of replication studies have been conducted, a meta-analysis of this line of inquiry could identify trends across geographic locations.

Additionally, the approach of comparing charter schools to traditional schools within the same school district that was used here could serve as a strategy
for studies on a national scale. A viable way to accomplish this would be to use a survey design similar to Austin and Russell (2008) where participating charter schools are randomly selected from a national database. Using our paired comparison design, researchers would then need to find comparable and proximal traditional schools and survey those schools as a comparison group. This type of investigation would provide important understanding of the national trends and policies of arts education in charter schools while controlling for regional difference in school policies and funding. In addition to large surveys, more observational and ethnographic research of arts education practices within charter schools is needed to examine the degree to which such schools are innovators and to explore the role of music in the culture of these schools.

While charter schools have emerged as an alternative to traditional public schools, there is not a clear understanding of how arts education fits within the charter school model. Stakeholders, from parents who would enroll their children into charter schools to legislators who approve new school charters, should be better informed of the type of arts education charter schools provide. With continued investigation in the practices of these schools, the incidence and quality of arts education programs in charter schools can be more accurately defined in relation to traditional education.

## Supplemental Material

The online Appendices A and B are available at http://jrme.sagepub.com/supplemental.

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## Note

1. Traditional elementary schools in Chicago are almost exclusively organized in a $\mathrm{K}-8$ configuration, though there is more variability among their charter school counterparts.

## References

Abril, C. R., \& Gault, B. M. (2006). The state of music in the elementary school: The principal's perspective. Journal of Research in Music Education, 54, 6-20. doi:10.1177/002242940605400102
Abril, C. R., \& Gault, B. M. (2008). The state of music in secondary schools: The principal's perspective. Journal of Research in Music Education, 56, 68-81. doi:10.1177/ 0022429408317516
Austin, J. R., \& Russell, J. A. (2008). Charter schools: Embracing or excluding the arts? In L. K. Thompson \& M. R. Campbell (Eds.), Diverse methodologies in the study of music teaching and learning (pp. 163-182). Charlotte, NC: Information Age.

Bifulco, R., \& Bulkley, K. (2008). Charter schools. In H. F. Ladd \& E. B. Fiske (Eds.), Handbook of research in education finance and policy (pp. 425-446). New York, NY: Routledge.
Bifulco, R., \& Ladd, H. F. (2007). School choice, racial segregation and test score gaps: Evidence from North Carolina. Journal of Policy Analysis and Management, 26(1), 31-56. doi:10.1002/pam. 20226
Booker, K., Gilpatric, S. M., Gronberg, T. J., \& Jansen, D. W. (2004). Charter school performance in Texas. Unpublished paper, Texas A\&M University.
Buckley, K., \& Fisler, J. (2002). A review of the research on charter schools. Philadelphia, PA: University of Pennsylvania.
Buddin, R., \& Zimmer, R. (2003). Academic outcomes. In R. Zimmer et al. (Eds.), Charter school operations and performance: Evidence from California (pp. 37-62). Santa Monica, CA: RAND.
Buddin, R., \& Zimmer, R. (2006). Charter school performance in two large urban districts. Journal of Urban Economics, 60, 307-326. doi:10.1016/j.jue.2006.03.003
Caref, C., Hainds, S., Hilgendorf, K., Jankov, P., \& Russell, K. (2012). The black and white of education in Chicago's public schools. Retrieved from http://www.ctunet.com/root/text/ CTU-black-and-white-of-chicago-education.pdf
Center for Education Reform. (2010). Annual survey of America's charter schools: 2010 data. Retrieved from http://www.edreform.com/2012/01/annual-survey-of-americas-charter-schools-2010/
Chicago Public Schools. (2013). The Chicago Public School Arts Education Plan 2012-2015. Retrieved from http://www.cpsarts.org/wp-content/uploads/2013/11/CPS-Arts-Ed-Plan. pdf
Demorest, S. M., \& Morrison, S. J. (2000). Does music make you smarter? Music Educators Journal, 87(2), 33-36, 58. doi:10.2307/3399646
Eccles, J. S., \& Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? Journal of Adolescent Research, 14, 10-43. doi:10.1177/0743558499141003
Elpus, K. (2012). Music education and school choice reform: Music programs in New York City charter schools. In L. K. Thompson \& R. M. R. Campbell (Eds.), Situating inquiry: Expanded venues for music education research (pp. 79-98). Charlotte, NC: Information Age Publishing, Inc.
Elpus, K., \& Abril, C. R. (2011). High school music ensemble students in the United States: A demographic profile. Journal of Research in Music Education, 59, 128-145. doi:10.1177/0022429411405207
Feldman, A. F., \& Matjasko, J. L. (2007). Profiles and portfolios of adolescent school-based extracurricular activity participation. Journal of Adolescence, 30, 313-332. doi:10.1016/ j.adolescence.2006.03.004

Fitzpatrick, K. R. (2006). The effect of instrumental music participation and socioeconomic status on Ohio fourth-, sixth-, and ninth-grade proficiency test performance. Journal of Research in Music Education, 54, 73-84. doi:10.1177/002242940605400106
Graves, C. (2007). Lifting charter school cap essential for quality public education choices in underserved communities. New York Amsterdam News, 98, 12.
Gronberg, T. J., Jansen, D. W., \& Taylor, L. L. (2012). The relative efficiency of charter schools: A cost frontier approach. Economics of Education Review, 31, 302-317. doi:10.1016/ j.econedurev.2011.07.001

Gwynne, J., \& de la Torre, M. (2009). When schools close: Effects on displaced students in Chicago Public Schools. Retrieved from http://www.corythames.com/upload/Chicago\  Public\%20Schools.pdf
Ingenuity Incorporated. (2013). State of the arts in Chicago Public Schools: Baseline report 2012-2013. Retrieved from http://www.ingenuity-inc.org/filebin/Ingenuity_StateoftheArts_ BaselineReport.pdf
Kelly, A.P., \& Loveless, T. (2012). Comparing new school effects in charter and traditional public schools. American Journal of Education, 118, 427-453. doi:10.1177/0022429408322530
Kinney, D. W. (2008). Selected demographic variables, school music participation, and achievement test scores of urban middle school students. Journal of Research in Music Education, 56, 145-161.
Kvet, E. J. (1985). Excusing elementary school students form regular classroom activities for the study of instrumental music: The effect on sixth-grade reading, language, and mathematics achievement. Retrieved from http://www.lusd.org/cms/lib6/CA01001399/Centricity/ Domain/55/pulloutlessons.pdf
Lacireno-Paquet, N., Holyoke, T. T., Moser, M., \& Henig, J. R. (2002). Creaming versus cropping: Charter school enrollment practices in response to market incentives. Educational Evaluation and Policy Analysis, 24, 145-158. doi:10.3102/01623737024002145
Loveless, T., \& Field, K. (2011). Perspective on charter schools. In M. Berends, M. G. Springer, D. Ballou \& J. H. Walberg (Eds.), Handbook of research on school choice (pp. 99-114). London, England: Routledge.
Luppescu, S., Allensworth, E., Moore, P., de la Torre, M., Murphy, J., \& Jagesic, S. (2011). Trends in Chicago's schools across three eras of reform: Summary report. Retrieved from ccsr.uchicago.edu/publications/trends-chicagos-schools-across-three-eras-reform-sum-mary-report
Miksza, P. (2007). Music participation and socioeconomic status as correlates of change: A longitudinal analysis of academic achievement. Bulletin of the Council for Research in Music Education, 172, 41-58.
New York City Department of Education. (2013). Annual arts in schools report 2012-2013. Retrieved from http://schools.nyc.gov/documents/ArtsReport/2012-13/ArtsReport_Q325.pdf
Parsad, B., \& Spiegelman, M. (2012). Arts education in public elementary and secondary schools: 1999-2000 and 2009-2010. Washington, DC: National Center for Education Statistics. Retrieved from: nces.ed.gov/pubs2012/2012014.pdf
Pinto, M. (2009). Thriving Minds Year 2 Report: Equity of opportunity-creative learning census. Retrieved from http://www.roundpath.org/pub_files/2009-Year2-CLCensus-Thriving-Minds-Pinto.pdf
Preston, C., Goldring, E., Berends, M., \& Cannata, M. (2012). School innovation in district context: Comparing traditional public schools and charter schools. Economics of Education Review, 31, 318-330. doi:10.1016/j.econedurev.2011.07.016
Rivero, V. (2009). Turning around schools in need. District Administration, 48(8), 56-61.
Sass, T. R. (2006). Charter schools and student achievement in Florida. Educational Finance and Policy, 1, 91-122. doi:10.1162/edfp.2006.1.191
Solman, L. C., \& Goldschmidt, P. (2004). Comparison of traditional public schools and charter schools on retention, school switching, and achievement growth. Phoenix, AZ: The Goldwater Institute.
Southgate, D. E., \& Roscigno, V. J. (2009). The impact of music on childhood and adolescent achievement. Social Science Quarterly, 90(1), 4-21. doi:10.1111/j.15406237.2009.00598.x

Tienken, C. H., \& Orlich, D. C. (2013). The school reform landscape: Fraud, myth, and lies. Lanham, MD: Rowman \& Littlefield.
Vander Ark, T. (2002). The case for small high schools. Educational Leadership, 59(5), 55-59.
Veblen, K. K. (2007). The many ways of community music. International Journal of Community Music, l(1), 5-21.
Wallick, M. (1998). A comparison study of Ohio proficiency test results between fourthgrade string pullout students and those of matched ability. Journal of Research in Music Education, 46, 237-247. doi:10.2307/3345626
Zimmer, R., Gill, B., Booker, K., Lavertu, S., \& Witte, J. (2012). Examining charter student achievement effects across seven states. Economics of Education Review, 31(2), 213-224.

## Author Biographies

Jamey Kelley is assistant professor of music at Florida International University. His research interests include social psychology of music education, gender studies in music education, access to music education, and music participation.

Steven M. Demorest is professor of music at Northwestern University. His research interests include the assessment and remediation of inaccurate singing, cultural neuroscience of music, music cognition, and sight-singing pedagogy.

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[^0]:    'Florida International University, Miami, FL, USA
    ${ }^{2}$ Northwestern University, Evanston, IL, USA
    Corresponding Author:
    Jamey Kelley, Florida International University, II 200 S.W. 8th Street, WPAC I45C, Miami, FL 33I99, USA.
    Email: jamey.kelley@fiu.edu

