

Twentieth-Century Music Education: Early American Schools and the Phonograph

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Around 400 B.C.E., Plato wrote, “the patterns in music and all the arts are the keys to learning.” We may or may not agree with Plato, but a number of current studies suggest that music is an important academic subject. For example, the Arete Music Academy reported that a sample of students who studied music were more likely to have larger vocabularies and higher reading skills than those who didn’t study music.* In the following paper, Professor Veronica Ent argues that in the eighteenth and nineteenth centuries, music education languished in rural and urban schools due to a lack of well-trained teachers. A dramatic shift occurred when a technological advancement called the “phonograph” appeared in the marketplace. The ability to replicate sound in an economical format led to many changes in music instruction, and remnants of these practices continue today.

—Ed.

Many curriculum advancements in the early 1900s laid the foundation for standardizing the disciplines in the school systems of each state. Like other disciplines emerging in education at the time, music appreciation and instruction were shaped by sound replication advancements in the 1900s. Teachers in the 1800s and early 1900s were hired for having multiple skills. Many could teach academic subjects, and some could also play a musical instrument, maintain a schoolhouse, manage student needs, and develop curriculum where none existed. Exceptionally accomplished teachers were in short supply, and many times instruction in some areas of the curriculum would suffer due to a teacher’s limited capabilities.

The invention of the phonograph was a foundational technological advancement that shaped early education in ways that continue to influence classroom music today. The replication of sound in an economical format changed the curriculum from a musician-based approach to a recorded-music phenomenon. Prior to the phonograph, music education was rare and relied on the vocal and instrumental abilities of the teacher. Early accounts refer to the importance of a teacher’s ability to play the reed organ and describe how superintendents sought teachers with

this skill. Later, with the mechanical advancements of the piano and phonograph, instruction in music changed from the well-known song-based to an appreciation-of-music approach.

The School-Music Era Begins

Early American music education, like many other specialty areas, relied on the teacher's ability, interest in the subject, and available resources. Teachers who played the organ were highly sought after by administrators desiring to include music in their schools. Unfortunately, few teachers had organ training, and music education often was sacrificed to retain a good teacher. Some unskilled teachers would seek students who were trained to play the organ, but this was seldom the case, and their success depended on available resources. In rare accounts, a music teacher would travel to the schools on horseback offering instruction once or twice a month (Haack 1981). Nevertheless, a reoccurring rural school music program was scarce prior to the 1900s.

In the mid-1800s, reed organs outnumbered pianos since they were sturdier and less affected by climate. However, by the turn of the century when pianos became more popular, they replaced many organs. While pianos required regular tuning, they were simpler to play with no squeaky pedals to pump. The piano was considered "modern and better" for households and schoolrooms of the early 1900s (Agay 1975, 50). In addition to pianos, "pianolas" or player (or mechanical) pianos also emerged in some early school settings; so skilled or not, teachers could have their classes sing along with the latest popular music (Haack 1981).

At about the same time the player piano was entering the school scene, so too were modern phonographs (or gramophones). Many school music supervisors considered the player piano the most "valuable keyboard" in the school (Gibson 1922, 1052) and saw phonographs as an exclusive piece of technology for select situations (Keene 2009). Rural schools that could not afford player pianos had to wait until phonographs were within financial reach. On the other hand, urban educators sought to supplement an aesthetic music curriculum with player pianos. The player piano was considered by some to be the best method for teaching children the true aesthetics of the music compositions of the masters, while the phonograph was a tool for teaching rhythms and lyrics (Keene 2009).

A common strategy that first was used with player pianos in the schools was music-memory contests in which children would demonstrate fluency in music recognition. Charles Tremaine, a

New Jersey music teacher, first originated this strategy in 1916 by using player piano rolls and giving prizes to students who could recall the name of the song (Katz 1998). Shortly after Tremaine's contests with player pianos, this same "contest" strategy took place using phonographs. Soon, these school "contests" became a sensation across the country. Newspapers would advertise the event, children were encouraged to learn songs, and then they would compete as groups in the memory contest in which phonographs were used to play the music. The phonograph industry thrived because the music memory contests provided free advertising, and new recordings were requested by contest organizers (Katz 1998).

In regards to singing, school music supervisors arranged much of the curriculum in the early 1900s. Supervisors believed that vocal training encouraged social, civic, and character training of rural schoolchildren. Typically, schools were given a specific song list and elementary children were expected to learn to sing fifty to seventy-five songs, one-third of which were to be memorized. Customarily the songs consisted of popular reoccurring seasonal melodies, holiday anniversary tunes, and patriotic ballads (Gibson 1922). The belief that children needed to be trained in vocal singing was common in the nineteenth century until music education changed to an aesthetics-based approach in the early twentieth century (Katz 2010). This shift was slow since leadership in school music was lacking before 1910, and phonographs were only affordable to a few schools. Much of the early use of phonographs in the schools involved children marching to songs to keep their feet warm; the device was also used to control unruly children and entertain them (Haack 1981).

The Victor Talking Machine Company

In 1877, Thomas Edison was successful in inventing a phonograph that could record and duplicate sound (Gelatt, 1955). This was a new technology that many (such as the Victor Talking Machine Company) quickly improved. The company sold "Victors" for home use at an amazing rate. Though only marketed to wealthy households, the Victor phonograph was a fascinating technology that entertained the Victorians for decades (Edie 2016). It became more affordable and widespread in the 1910s with its peak in the 1920s.

Eldridge R. Johnson founded the Victor Talking Machine Company in 1901 (Barnum 1991). He derived the company's name from his personal feelings of business "victory." The company began when Emile Berliner asked Johnson, a machinist, to develop a low-cost spring motor

player for his “flat disc” records. While this arrangement led both Johnson and Berliner into years of litigation with other gramophone and disc inventors, Johnson prevailed and was able to build the Victor Talking Machine Company (Baumbach 1981). The Victor, a phonograph with the “horn” outside the cabinet, was the initial flagship of the company (Edie 2016).

The Victor Talking Machine Company is often recognized by the image of the dog looking into the phonograph. The phonograph in the image was not originally a Victor talking machine. Since Johnson liked the image, he commissioned the artist Francis Barraud to alter the horn to appear as a Victor phonograph (Figure 1) instead of the Edison-Bell phonograph, its competitor. The dog’s name was Nipper and he was the dog belonging to the artist’s late brother. The dog looked into the horn for the sound of his late master’s voice. This emblem remains as the trademark for the Victor Talking Machine, now owned by General Electric (Barnum 1991).

The Victorians disliked the external horn on the Victor. It was seen as an eyesore in the parlor (Baumbach 1981). As a result of this criticism, Johnson and his team developed an internal horn design that amplified the sound under the turntable in the cabinetry. These units were called “Victrolas,” meaning the horn was placed inside. Today, the term “Victrola” is often used incorrectly to refer to all vintage phonographs (Edie 2016).

Johnson quickly became a millionaire because of the popularity of his Victor-Victrola phonographs. During the first decades of his company, the phonographs were sold as fast as they could be manufactured. Unfortunately, the company faced a downturn when a fire destroyed a large portion of the factory. This fire, combined with a change in production due to World War I and the expiration of Victor patents, caused imitators and other phonograph companies to begin selling similar products (Gelatt 1955). Regardless of the potential risk of competitors and the company’s slow progress toward innovation, Johnson remained most interested in abundant advertising. Over six percent of the company’s expenses were for advertising the Victor-Victrola



Figure 1: Advertisement, Victor Talking Machine Company, c. 1921.

phonographs (Barnum 1991). Perhaps this emphasis on marketing led the Victor Talking Machine Company to seek opportunities in the schools.

Victor Talking Machine Company's Education Department

At about the same time that managers and distributors were focusing on sustaining Victor sales, school music supervisors recognized the Victor phonograph as a solution to the issues faced by teachers having varied abilities to teach music. One supervisor who had caught the eye of Louis F. Geissler, general manager of the Victor Talking Machine Company in Camden, New Jersey, was Frances Elliott Clark (Keene 2009) (Figure 2). As a respected music supervisor for Milwaukee area schools in 1910, Clark was fascinated with the phonograph and the remarkable sound duplication of great musical selections. Her passion for music education and this new technology led to a nationwide reform in music education. She began demonstrating to other supervisors how to use the phonograph to teach children how to listen to music and then appreciate the musicality and quality performances (Katz 2010).



Figure 2: Frances Elliot
Clark, 1916



Figure 3: Charles A. Fullerton,
1925

Clark carefully devised age-appropriate guidelines for teachers and capitalized on the ability of the Victor phonograph to replay sounds and songs. Her instruction included tone quality,

phrasing, and the delivery of vocalists as the children learned to sing the songs. To encourage improvement, Clark played recordings and then used a comparison technique in which she had students reflect on their performance after listening to the professional recording (Keene 2009). These were the types of strategies that Clark shared with others and representatives of the Victor Talking Machine Company. The company later hired Clark to direct its Educational Department, thus beginning to change the nature of music education across the country (Keene 2009).

At about the same time that Clark was becoming recognized for classroom phonograph strategies, Charles Fullerton was becoming interested in a similar method of instruction focusing on rural school music instruction near Kansas City. After several visits to what he called the “dreary, poorly equipped” rural schoolhouses in Iowa, he began promoting the phonograph. He complained in his writings that livestock and crops fortunate enough to be raised in the breadbasket of America were better cared for than the children who were taught to provide food for the next generation. He carped that the technological and scientific advancements for farming exceeded the advancements in the schoolroom. He asserted that rural students had the same music talents as urban students. As a result, he felt strongly that every rural school should be provided with a phonograph (Fullerton 1925)

Fullerton (Figure 3) took his ideas a step further and developed a “choir plan” that used the phonograph to teach rural children melodies and how to standardize tone (1929, 3). In 1917, he began formalizing his strategies in phonograph-based instruction. Phonograph records were played for the class and areas of confusion explained. The class would then be asked to sing the refrain along with the recorded vocalist. Finally, the whole class would sing the entire song, first with the record and then without it (Keene 2009). Fullerton began to create choirs in the communities where his methods were used. At the peak of his success, he had as many as four thousand rural children participating in county choirs (Keene 2009).

Fullerton and Clark were colleagues as midwestern music supervisors. During early music supervisor meetings, Clark often called upon Fullerton to lead committees for music instruction. Once Clark became the director of the Education Department in the Victor Talking Machine Company, Fullerton asked the company to begin producing children’s records within their vocal range and style (Keene 2009). Fullerton encouraged Clark, who became a stronger advocate for using the phonograph in schools. Her influence at the Victor Talking Machine Company led her to author books and promote economical Victor phonographs for schools.

The Schoolhouse Victor XXV

In 1911, the Victrola VI, a twenty-five dollar tabletop model with an internal horn, was advertised as an inexpensive machine for rural schools (Figure 4). Originally available only as a 10” turntable, it was upgraded to a 12” diameter after 1913. The machine was made of oak, and later, mahogany (Edie 2016). This model was discontinued in 1925, four years before the Schoolhouse Victor XXV was introduced.



Figure 4: Advertisement, Victrola VI, in *The Victrola in Rural Schools*. (Camden, NJ: Victor Talking Machine Company, 1919).

One of the most influential products on the market was the Schoolhouse Victor XXV (Figure 5). This phonograph opened the doors to all schools by offering an affordable, sturdy, practical machine that would serve a school for years. The Victor XXV was designed with the child in mind. It was tall and had its own stand, which kept it at a level for listening and protected it from damage (Baumbach 1981). The unit was fairly self-contained and the lid could lock.

The Schoolhouse Victor phonograph entered the market in 1913 at a sixty-dollar price point and was discontinued at 115 dollars in 1925 (Baumbach 1981).** The unit was the only phonograph that remained a “Victor” while the others were “Victrolas.” After 1917, model serial number seals used on the Schoolhouse Victor ran out, so several of the later model Schoolhouse Victor phonographs were stamped with the Victrola plate (Baumbach 1981).

The self-storing wood horn was unique to the Schoolhouse Victor XXV (Figure 6). It was made of quarter-sawn oak and was not to be used for home use. Instead, it was large, designed of wood to offer a stronger tone, and durable for schoolroom use. The self-storing horn design was designed to reduce the footprint of the large machine (Baumbach 1981).



Figure 5: Sturdy Schoolhouse Victor XXV



Figure 6: Schoolhouse Victor XXV with hidden horn

In several instances the Victor XXV was taken from the schoolroom to the yard for rhythm exercises and movement lessons. While these phonographs were common until the late 1920s, many of them did not survive due to their large size and awkwardness.

Curricular Strategies

Clark directed the development of softcover handbook-style manuals to assist rural schoolteachers with music instruction. Printed from 1916 to 1921, the manuals provided an in-depth rural school introduction that included images of the phonograph being used in early schools. The essays in *Music Manual for Rural Schools with the Victrola* stress the desire to bring “culture” to the rural child through the use of the talking machine (as it was called throughout the manual). It was considered one of the “seven wonders of the modern world” (Driver 1921, 7). Lee Driver, director of the Bureau of Rural Education, stated that the “talking machine” would not only provide opportunities for children to hear music, but would also elevate music in the home and church. He further asserted that interpretation of literature would be improved due to the setting the music created. He said, for instance, that *Hiawatha* was more impressive when the child heard (American) Indian music (1921).

In the second manual *Victrola in Rural Schools*, Anne Pike Greenwood wrote an essay about her experience using a phonograph in the schools. She shared with readers how she had funded

the purchase of a Schoolhouse Victor XXV and records (Greenwood 1914). As a result, her students became very interested in music and were whistling within weeks of the purchase. Whistling was a very popular pastime of children, and it was common for workmen to whistle while laboring in the field and mines (Figure 7).

Figure 7: “Whistling with the Victrola XXV. The Grant School, Atlantic, IA,” in *The Victrola in Rural Schools* (Camden, NJ: Victor Talking Machine Company, 1919).



Greenwood credits the Schoolhouse Victor XXV with changing her classroom environment; discipline improved and the children wanted to make music (Katz 2010).

Clark achieved her greatest influence via publications that set forth guidelines for appreciating music beyond music class. While the Victor Talking Company was the corporate author of the books, she was the true spirit behind them. The books that she was most known for are the 1920 and 1923 editions of *Music Appreciation for Little Children*, alternatively titled *Music Appreciation with the Victrola for Children*. These books clearly justified the need for music appreciation during the early years of schooling (grades first through sixth). The curriculum denoted “rhythm” as the first and foremost skill to be taught in “music class” using the phonograph. Clark (1923, 14) suggested that lessons in rhythm should be taught first followed by song and then instrumental music. Other content areas were also outlined as lessons. A large component of the curriculum she proposed was listening to sounds and recordings aligned with nature study, reading, etc.

Strategies to teach rhythm, song, and instrumental music required active engagement on the part of the students. For example, marching, walking, and hopping were movements that

students performed to music. In return, they learned body movements to rhythm. A popular lesson for rhythm was “The Clock.” Stage 1 and stage 2 below illustrate student movement and use of the voice while a phonograph played the “tick-tock” of a clock (Driver 1921, 32):

Stage 1

- Group I: Tap lightly on each tick tock
- Groups II & III: Sing with each tick toc

Stage 2

- Group I: Large clocks. Arms in front, clap on 1st beat and swing arms left to right
- Group II: Small clocks. Clap twice for each measure
- Group III: Watches. Clap softly four times each measure

Songs were taught through listening and imitation. Students would sing phrases individually and in groups with and without the record. Sometimes they sang answers to questions to reinforce harmony (Clark and Cady 1923). In the Victor Talking Machine Company books, teachers were provided with a comprehensive list of songs categorized by events, genre, and content. The curriculum explained that teaching vocal songs should be approached as an “art” product; that is, the songs were to be presented in an artistic manner in which soft tones were played so that students could appreciate the artist’s voice on the record prior to singing the song. Songs designed to connect children with inspiration fell into three main categories:

- Cradle songs (mothering lullabies),
- Cultural influences (American Indian Tribal Songs), and
- Old South (Nero spirituals) (Clark and Cady 1923, 50)

Clark suggested that when teachers are poor vocalists, the phonograph should be widely used. She also wrote that no bass or baritone vocals should be included in songs for children (1923).

The third area of music instruction with the phonograph was instrumental. The focus was on instrument sounds and their use in compositions that children could understand. Recordings played on the phonograph provided samples from classical selections and orchestras and were sometimes partnered with writing. For example, songs in 4/4, 2/4 or 6/8-time worked well for teaching penmanship. If a teacher was teaching the push-and-pull exercises of penmanship, she

or he might use a familiar march by John Philip Sousa, “Stars and Stripes Forever.” If she or he was teaching ovals, then “Brahms’s Waltzes” might be chosen (Figure 8).



Figure 8: “Writing to Music of the Victrola XXV, first grade, Malvern, Iowa,” in *The Victrola in Rural Schools* (Camden, NJ: Victor Talking Machine Company, 1919).

Beyond the music class, the “allied” arts were integrated with the phonograph. The “allied arts” are art forms such as poetry, art appreciation, and dance (Clark and Cady 1923, 145). One strategy that integrated the phonograph with the allied arts was to have students appreciate a picture and select music that was aligned with the emotions or ideas in the picture. The reverse also could occur; that is, the students could choose an image based on the music. The same picture-music strategy was also applied to poetry and dance. Students would have a selection of songs to apply to the art forms being taught in the classroom (Clark and Cady 1923, 149).

Nature study, geography, and history were also considered subjects that the phonograph could support. Records of bird songs, instrumental selections that had bird effects, and music that replicated nature sounds were recommended to teachers.



Figure 9: “Ready for Bird Music, Wittenberg, WI”; *The Victrola in Rural Schools* (Camden, NJ: The Victor Talking Machine Company, 1919).

Students would be challenged to recognize in the recordings sounds of water, wind, and rain. They were sometimes required to recognize the calls of blue jays, whip-poor-wills, owls, and other birds (Figure 9). In history and geography, the recorded music was used as cultural support

for knowledge of countries and historical events in America. Such songs as “Danny Boy” represented Ireland, and “Dixie” might be used during instruction about the Civil War.

Shortly after the publication of the phonograph music curriculum, radio was beginning to become popular. The Victor Talking Machine Company was sold to Radio Corporation of America (RCA) in 1929. Still, Clark kept her position, adapting her music education curriculum to radio and encouraging a radio broadcast of Victor recordings for children (Keene 2009).

Unbeknownst to Clark, Ellsworth Dent was to replace her as director of the Education Department for the Victor Talking Machine Company in 1936 (Keene 2010). Dent discovered that the company expected him to inform Clark that she was replaced, but he would not honor this request. He created a co-director position for Clark, allowing her to stay with the company until she chose to leave in 1947. During this time Clark worked alongside Dent, focusing on music education while he focused on new directions with film. Clark, who left the company at age eighty, received a monthly stipend from the Victor Talking Machine Company until her death in 1958 (Keene 2010).

The End of an Era

The Victor Talking Machine Company had some opposition. In the early years of its development, many critics such as John Philip Sousa (1906), regarded the phonograph as a detrimental device. He wrote that lullabies were not needed when a baby could be put to sleep by listening to a phonograph. He claimed that the use of the phonograph to teach music was the “easy way out” and allowed society to bypass learning songs because they could simply hear them on the phonograph (1906, 280). Other critics believed that the phonograph would cause children never to seek professional level music performance since the sound replication was “perfect,” thus leaving little incentive to play or sing one’s own version of a song. Still others felt that the phonograph was a way to disguise a lack of ability to recall titles and composers. People might know songs or the sound of a musical instrument by simply referring to the phonograph and record labels (Katz 2010).

The Great Depression all but halted the sales of phonographs since radio was becoming far more economical and convenient than the purchase of records (Gelatt 1955). While the new RCA Victor Company carried on, its focus in the 1930s was toward radio broadcast and film.

Nevertheless, school systems continued to offer music instruction, and the phonograph was considered a part of the necessary equipment for teaching music. Appreciation of music was still very important to music supervisors until about the late 1950s when “child-centered” approaches were threatened by the nation’s concern with a possible Russian attack. While it was still believed that children needed the culture of music, a paradigm shift for more scientific rigor was forcing a change in music education (Keene 2009). By the 1960s, a new “comprehensive musicianship” curriculum (Keene 2009, 396) that focused on historical theory and a societal-based understanding of music emerged in schools. Regardless of the curriculum and capacity, the record-playing phonograph still remained in schools until it was replaced by cassettes in the 1980s and later, compact discs in the 1990s.

Conclusion

The phonograph in early education was a foundational technological advancement that continues to influence classroom music today. The replication of sound in an economical format changed the curriculum from a musician-based approach to a recorded-music phenomenon. Prior to the phonograph, few schools offered instruction in music and, when it was offered, it relied on the vocal and instrumental abilities of the teacher. Early accounts refer to the importance of a teacher’s ability to play the reed organ and describe how superintendents sought teachers with organ-playing experience. Later, with the mechanical advancements of the piano and phonograph, music’s role in the curriculum changed from the well-known song-based approach to an appreciation-of-music approach.

Through the efforts of Frances Elliot Clark and the Victor Talking Machine Company, school music in the early 1900s was reformed; and it remained one of the longest unchanged disciplines until the 1960s. Clark influenced both rural and urban schools and offered phonograph models specifically for school use. She presented curricula that required careful listening and replication of sounds. Music memory contests challenged schoolchildren to recognize music and at the same time promoted sales of phonographs across the nation. In several of the books printed by the Victor Talking Machine Company, actual lessons were designed and photographed for teachers to follow in a “cookbook” style. In the 1930s, the landscape changed and much of phonograph education shifted to radio, but the same strategies and techniques were used. Today, the music curriculum in schools still has remnants of Clark’s ideas. It is not uncommon to find today’s

students moving their bodies to music rhythms, illustrating a song, or listening to a culturally specific ballad. The phonograph and the ability to replicate sound in the 1900s was a profound advancement that remained paramount to advancements in music education throughout the twentieth century and today.

* Quotation from "Why Music Matters," NAMM Foundation, <https://www.nammfoundation.org/why-music-matters>. See also "Statistical Benefits of Music in Education." Arete Music Academy. Accessed July 17, 2014. www.aretacademy.org.

** Today, the collectable Schoolhouse Victor XXV can range in price from 3,000 to 6,000 dollars (Edie 2016).



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