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Distance Learning and Its Effect on the Future of One-on-One String Instruction

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ABSTRACT

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Distance learning has increased its presence in academia, and there is a growing trend among higher education music schools to utilize distance learning in tandem with a traditional curriculum. Many instrumental pedagogues do not understand the benefits even though distance learning has been used for close to twenty years in string instruction. In higher education, the Manhattan School of Music and the Cleveland Institute of Music developed distance learning departments that collaborate with the Royal Danish Academy of Music and the New World Symphony Orchestra. These schools use distance learning for outreach programs, master classes, chamber music coachings and one-on-one instruction. Examining an online string teaching course and technology and media's effect on current music instruction concludes that distance learning is most effective for experienced learners, not for children or beginners. There are many champions of this extension from traditional instrumental learning who believe this is the future of teaching. At the same time, many pedagogues and musicians are skeptical of distance learning with suspicions that it will eliminate jobs and traditional face-to-face teaching. While face-to-face instruction will always be the best method of string teaching, distance learning can supplement and enhance traditional pedagogy with a combination of high-level technology and instruction.

This document pinpoints the current state of distance learning in higher education music schools and conservatories through interviews with directors and examination of distance learning offerings. Promising examples of MOOCs are discussed, but the lack of proper instruction in general education distance learning is also examined because of the questionable

and variable content found on the Internet. Surveying general education distance learning resources like YouTube, Skype lessons and video learning websites shows inconsistencies in level and for-profit motivation that may not reflect quality of instruction. Due to social media and the Internet, new generations of students will be saturated in this technology, so it is time for musical pedagogues to embrace distance learning and seek ways to incorporate these innovations in their approach to teaching and learning. The author feels this must occur as a conscious approach for pedagogues to inform, get involved, and guide the future.

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Acknowledgments

I acknowledge as an inspiration for this paper a presentation in the *Music and the Academy* course in spring quarter of 2011 at Northwestern University Bienen School of Music by Scott Church, the Vice President of Business and Product Development for Connect for Education. Church presented his company's online offerings in music and the class' reaction was one of concern and disgust that professors and their content could be replaced so easily by an online course, despite learning about the economic benefits for schools and the popularity of online courses for many students in higher education. My colleagues in the class were very defensive that this type of course could jeopardize one's ownership of content and eliminate the one-on-one interaction that we viewed as being at the heart of education.

Extreme gratitude goes to Greg Howe, Jesper Andersen, Gabe Gordon and Justin Trieger, the directors of distance learning at the Cleveland Institute of Music, the Royal Danish Academy of Music, Manhattan School of Music and the New World Symphony respectively. They were supportive in helping me to understand distance learning and patiently helped me to overcome the stereotypes and preconceived notions I had about this type of learning. Their work shows how distance learning is an interesting supplement and enhancement to what is available to students.

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Introduction

I had previously taught violin and viola at a for-profit community music school that encouraged their faculty to extend their teaching to online lessons. This made me question ethically how I feel as a teacher about putting my name behind this type of learning and what it would mean for the quality of teaching I could provide. I had a hard time believing that beginners can learn strings effectively via video teaching. These concerns were enough to eliminate my desire to explore the possibilities of this type of teaching. I inevitably left this school and their attempts at online teaching because of my concerns regarding who would own the content of my teaching and apprehension, that my image could be used for their company's self-promotion. Therefore my research on this topic began with a great amount of caution, skepticism, and a deeply rooted traditional-is-better attitude. I assumed that distance learning was the most cost-effective way to replace all that I found good in the future of one-on-one teaching and traditional pedagogy.

This document is a call to action for string teachers to understand the concept of distance learning in higher education and its role as applied to instrumental lessons. I hope that this research will help pedagogues to understand the benefits offered through distance learning so that they may employ distance learning as a component in their arsenal to enhance effective string education. This research will help pedagogues to more effectively guide the future of string education and one-on-one teaching by understanding distance learning both in the context of higher education, and to put distance learning into context at all levels, including the influence it has on the general education level of music lovers interested in string playing.

Distance education according to Moore and Thompson is described as any instructional arrangement in which the teacher and learner are geographically separated and communication through media is required.¹ “Distance learning” and “distance education” are synonymous terms, and the distance learning-community seems to struggle with the use of a universal term. Often the differences are simply determined by a marketing or labeling angle.² This definition from Moore and Thompson does not mention time, but for the purposes of focusing on instrumental instruction, I will differentiate between distance learning as synchronous (real-time) or asynchronous. The former, which is based on simultaneous communication, and the latter describing the case where teaching and learning take place at different times, as done through YouTube, audio, and video recordings. Distance learning is often also referred to as video conferencing, video education, or Skype learning.³ Gregory Howe, director of distance learning at the Cleveland Institute of Music describes distance learning as:

a broad term that has come to apply to any type of teaching done over the Internet. In particular, asynchronous learning sessions can occur almost anytime a student wants to work. So, [with] content that is written and posted on-line, which might include prerecorded video or audio that is downloaded or streamed, distance learning can also apply to teaching that is done online, being led or facilitated by a teacher/guide that is connected to a group of people through a chat room or audio connection.⁴

Questioning and understanding what this type of technology means to whom/for what, and to understand the intentions behind how it is used is vital. This document first explores how distance learning is seen and used from a wider lens, by surveying distance learning as it has

¹ M. G. Moore and M. M. Thompson, *The Effects of Distance Learning*. University Park, PA: American Center for the Study of Distance Education, The Pennsylvania State University, 1997.

² Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

³ Ibid.

⁴ Ibid.

appeared in academic writing and journals over the last twenty years. YouTube and Skype teaching examples are examined to show how general-music lovers and adult-enrichment learners use distance learning, as reported by journalists at the *New York Times* and the *LA Times*. This includes the effects of social media on online learning. Free courses on teaching violin and viola through Coursera and Northwestern University provide another perspective into the world of massive open online courses (MOOCs), which are an increasingly popular form of distance learning. Finally, the focus returns to three of the major players in higher education distance learning in the United States—the Manhattan School of Music, the Cleveland Institute of Music, and the New World Symphony—and their collaboration with an extensive research study by the Royal Danish Academy of Music, which partnered with each of these institutions. These preceding examples were specifically chosen to present a broader picture of how distance learning is being used for amateur musicians, adult enrichment learners, and primary/secondary education level students, compared to the sophisticated and successful results found in higher education, which provide an ideal model for distance learning at all levels.

It is not clear if the true intention of any institution is to replace or reinvent face-to-face instruction. The pioneering programs for distance learning state that distance learning does not stand to replace traditional face-to-face opportunities or the importance of live performance.⁵ Gabriel Gordon, the distance learning program coordinator at the Manhattan School of Music, stresses that live performance will never be fully replaced by online learning and performance.⁶ The reason is that currently, synchronous playing cannot occur over the Internet, and audiences

⁵ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

⁶ Ibid.

still value live performance.⁷ Also, distance learning is not intended to replace the traditional conservatory or music school education, nor is that the intention of these distance learning departments.⁸ Technology can instead be used to stress the importance of historically-based pedagogy, which is an art that thrives off of the preservation of tradition.⁹ Technology can capture the audio or video of a student's lessons that captures the great words and playing of a famous pedagogue, or perhaps a masterclass showing a pedagogue's teaching style. This document shows the growth of distance learning over the last twenty years, and explores the potential of what is to come, showing the positive influence of distance learning in higher education. I hope this document will encourage current string pedagogues who have studied with the masters to evaluate the climate of pedagogy and come to an understanding about how the direction of future string pedagogy can be further enhanced by distance learning. Therefore, no matter what outside factors affect the decisions behind distance learning (e.g., money, budget cuts, job markets, availability of teachers), the potential benefits of distance learning should be understood. Equally important is the need to define inappropriate candidates for distance learning (e.g., beginners and young children). I also hope that those who are quick to dismiss distance learning can understand the potential it has in higher education to connect high-level players from around the world, instead of assuming that every distance-learning situation is similar to the non-supported situations (e.g., free courses, YouTube videos) that will be discussed further in this paper.

⁷ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

⁸ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

⁹ Jonathan Ward Swartz, "Perspectives of Violin Pedagogy: A Study of the Treatises of Francesco Geminiani, Pierre Baillot, and Ivan Galamian, and a Working Manual by Jonathan Swartz," (DMA diss., Rice University, 2003).

The topical framework for this topic comes from a 1998 dissertation by Robin Kay Deverich, who discussed the need for distance learning options for adult violin students.¹⁰ She wrote from a music education perspective about a need for online methods of teaching for adult amateur violin students to learn with the flexibility of a program that was not restricted by location or traditional time scheduling.¹¹ Deverich stresses that distance learning can create lifelong learners because of the allowance for working across time, access, and distance constraints that come from pursuing in-person lessons.¹² The types of technology she cites as being forms of distance learning start in 1946 with filmstrips, film, video, and television, all pre-dating the Internet as methods through which violin was taught. Violin instruction started on the computer as early as 1990 through music education software.¹³ The issues Deverich raises for why distance learning is the preferable means for adult amateur violinists are still the most compelling reasons why distance learning can exist or survive: the anonymity, the time flexibility, and the convenience of instruction coming to the student are still reasons that prevail in the appeal of distance learning.¹⁴

Distance learning in music largely disappears from academic literature after this dissertation, with the exception being a similar type of learning that is documented (which at the time was not called distance learning); the Manhattan School of Music's Pinchas Zukerman

¹⁰ Robin Kay Deverich, "Distance Education Strategies for Strings: A Framework of Violin Instruction for Adult Amateurs" (DMA diss., University of Southern California, 1998).

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

Performance Program.¹⁵ This was a pioneer program for distance learning from the mid-1990s. There are now huge gaps in the music performance field of distance learning and only a few written articles with examples of other instruments, notably the piano and the guitar.¹⁶ The question is, how is it that the technology and ideas for distance learning have existed for twenty years, but so little documentation has been created? My interviews with directors of the distance learning programs, as well as a perusal of the school websites, show that over the course of the last couple of years, these programs expanded considerably, and there was an obvious demand for the creation of distance learning departments.¹⁷

Traditional and social media essentially control the public perception of distance learning, fueling the unstated apprehension that distance learning will replace person-to-person learning. These portrayals may in fact hide the real advantages that distance learning can offer as young people become more technologically savvy. Therefore understanding distance learning in formal programs in higher education as models of quality instruction will help us shape distance learning methods that takes place at all levels of string education. Social media provides continually-changing perspectives about the challenges, questions, and doubts that exist surrounding distance learning. Many musicians and pedagogues I have casually talked to are personally defensive about the trends the Internet encourages in teaching, and the idea that YouTube learning or online classes will replace their teaching. Distance learning can show pedagogues the benefits to a student's performance abilities and experiences in higher education

¹⁵ Ken Smith, "Virtual Teaching," *Strad Magazine* 107, no. 1277 (1996): 912.

¹⁶ Sture Brändström, Christer Wiklund, and Erik Lundström, "Developing Distance Music Education in Arctic Scandinavia: Electric Guitar Teaching and Master Classes," *Music Education Research* 14, no. 4 (2012): 448–456.

¹⁷ Gregory Howe, interview by author, Cleveland OH, February 13, 2015.

compared to the negative connotations that distance learning is taking away jobs, cheating consumers out of money for poor teaching and replacing traditional face-to-face teaching that is implied in some of the examples given in general and adult education.

Popular perception is that distance learning and online teaching methods are the future of many academic subjects. Many American universities offer online courses in multiple fields, and students may find it easier to take classes from home to eliminate the challenges of commuting, or to make it possible to pursue interests that previously had geographic or temporal restrictions.¹⁸ Distance learning at all levels allows student access to instruction that was only available in exclusive contexts (like enrolling at a university.)¹⁹ Distance learning improves access to lectures or online courses taught by university instructors so that they might be accessed by a general or perhaps worldwide audience.²⁰ In music instruction, there has been an interest in eliminating commuting and transportation costs and logistics, encouraging distance learning collaboration from educators across the world. Continual advancement in technology means faster video connections and more potential for growth on a global scale.²¹

Are we musicians and teachers who are unwilling to accept that distance learning is an acceptable form of future instruction possibly “technologically challenged”? There is potentially a generation gap when it comes to openness to allowing technology to influence what has always been a historically-based of instrumental pedagogy. Each higher education music school

¹⁸ Paul Diver and Ignacio Martinez, “Moocs as a Massive Research Laboratory: Opportunities and Challenges,” *Distance Education* 36, no. 1 (2015): 5-25.

¹⁹ Sarah Welsh, "The Pros & Cons of Long-Distance Learning," *Strings Magazine* 27, no. 2: 61-62.

²⁰ Ibid.

²¹ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

interviewed had different experiences with its faculty interest based on generation.²² Other questions that should be considered at all levels of distance learning is if it is possible to replicate an in-person level of commitment from a student when working remotely, and how do pedagogues reconcile teaching positions being replaced by distance learning teachers who are at other institutions? Where is the boundary between access and opportunity, and replacement?

In the best situations, conservatories and music schools are working to promote distance learning to enhance the options available for their students and to serve a larger community.²³ It is also possible to speculate that there may be cost-saving motivation for using distance technology. Distance learning is being used to supplement in-person lessons and create more opportunities for high-level instruction.²⁴ The research study by the Royal Danish Academy of Music and their partnering institutions in the United States exemplifies the high standards of instruction and technology needed and poses the questions that need to be asked in order to replicate this learning at other levels.²⁵ Understanding these benefits for those who are preparing for a career in music allows them to compare and become proficient in distance learning as we see more and more examples of its influence on general education music students. To promote and understand this involvement now means that the future of string instruction in higher education can be guided to ensure that over time, small, incremental replacements of face-to-face instruction will be consistently evaluated in its effectiveness to be respectful to the art of historical pedagogy.

²² Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

²³ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

²⁴ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

²⁵ "Research Findings," The Royal Danish Academy of Music, accessed April 22, 2015, <http://english.dkdm.dk/International/ProjectsandActivities/DistanceLearning/ResearchFindings>.

Michael Millar writes that “wishing for the return of the ‘good ol’ days’ is not an effective career strategy. For those who have the energy, talent, flexibility, love of continuous learning and persistence to create their own career paths, the future has many options.”²⁶ Millar’s career advice applies to the crossroads that pedagogy is facing as the technological world has started to shape instrumental instruction due to increasing demands to decrease the distance, geography, and time challenges that students, families, and teachers face.²⁷ The demand for these options in general education music students is increasing at a rapid pace, whether it be from geographical necessity or simply living up to the same standards as other fields of distance learning education. As general education instrumental pedagogy is seeing a shift toward an online existence, the field of instrumental pedagogy at all levels has to adjust to accommodate the growing trend and experiences students will bring and expect in higher education.

Distance learning departments have been established at some of the top music conservatories in the United States, with the Manhattan School of Music and the Cleveland Institute of Music having the most established programs. Distance learning exists as its own department at these schools because of the depth of programs and opportunities they provide for their music school students. A major component of having an official distance learning department is the addition of someone to supervise the technical aspects of the experience and ensure that the department has the technology and the technical support to run smoothly.²⁸ This technological supervision, which happens live throughout distance learning sessions, appears to

²⁶ Michael W. Millar, “The Future of Music Careers,” *College Music Symposium* 49/50 (2009): 54–58, 55.

²⁷ Catherine Saint Louis, “With Enough Bandwidth, Many Join the Band,” *New York Times*, January 11, 2012, A1.

²⁸ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

be a key component to the success of these programs.²⁹ Distance learning through Skype or other video formats outside of an academic institution lacks the technological sophistication that these higher education schools use.³⁰ The Manhattan School of Music is credited as the pioneering institution that set the standard for distance learning, but the Cleveland Institute's program is rapidly growing and has received quite a bit of publicity for their innovations in distance learning teaching as well.³¹ The distance learning program at the Manhattan School of Music was inspired by faculty members who wanted to be able to work with their students while they were away in an official capacity through a videoconferencing lesson program.³² Both schools have expanded distance learning to include new opportunities for students to do outreach allowing current students to partner with schools across the country to teach lessons. Participation in master classes, one-on-one teaching, and chamber music coaching in addition to broader subjects such as online courses and musical theater coaching are other additional benefits of distance learning.³³ The Cleveland Institute of Music has many similar programs for distance learning, including students from rural areas studying with some of the conservatory teachers.³⁴ Rural students have to pay tuition to the preparatory program and therefore audition, and they are expected to participate with the same level of commitment as in-person lessons.³⁵

²⁹ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

³⁰ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

³¹ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

³² Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

³³ "Distance Learning @ Manhattan School of Music," Manhattan School of Music, accessed March 14, 2015, <https://dl.msmnyc.edu>.

³⁴ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

The Cleveland Institute of Music also has strong partnerships with secondary schools, helping to bring music into classrooms across the country.³⁶ They also actively participate in the Global Conservatory Program along with the Manhattan School of Music, which consists of distance learning partnerships with other music institutions around the world.³⁷

The prevailing stereotype that all distance learning is the same needs to be changed.³⁸ Taking a class online with synchronous and asynchronous opportunities differs greatly from a YouTube tutorial on learning an instrument or a weekly Skype violin lesson with a teacher that you found on the Internet and have never met in person. There are great benefits that come from increasing a learning audience by bringing educational opportunities to people through the Internet or to nontraditional students around the world.³⁹ With the benefits in mind, it helps to examine these higher education distance learning examples, and use the research and work done to inform the standards needed at all levels, with technology and instruction in order to have success. How do pedagogues make examples of the best leaders and encourage all distance learning to move in that direction?

Distance learning for applied string performance instruction has to be evaluated differently from distance learning that is used for courses about music or pedagogy. A lot can be learned from visual media for string players, including bowing ideas and fingering suggestions.

³⁵ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

³⁶ Ibid.

³⁷ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

³⁸ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

³⁹ "Lifelong Learning," Curtis Institute of Music, accessed May 30, 2015, <https://www.curtis.edu/about-curtis/coursea>.

However, this requires a certain level of mastery to be able to understand abstract ideas and apply it to one's performance. By learning more about distance learning beyond what can be found in newspaper and media reports, pedagogues come to understand the challenges, along with the questions and doubts, that will help on a larger scale to force more pedagogues to care about the fact that distance learning is growing in popularity.⁴⁰ There should be a level of defensiveness and skepticism about the trends the Internet brings to teaching alongside the often-flawed YouTube teaching videos and questionable online classes meant to replace traditional learning. For this reason, I find distance learning nearly impossible for beginners and young children, and establish that distance learning is only appropriate for experienced learners. In-person learning should always be the prioritized pedagogical system.

The significance of this work is that there are not many scholarly articles about distance learning's recent growth in music and the valuable new opportunities available for students in higher education music performance. Although there is a focus on string instruction in this work, the examples provided are not necessarily exclusive to string playing. Instead this work traces distance learning examples from the first dissertation, to the pioneering programs in higher education music schools, with a specific focus on string instruction. Recognition of the variety in distance learning will help pedagogues to better understand and guide students to see what might usefully be offered at general and adult education levels. I hope to demonstrate in this paper that all distance learning is not the same and should not be mistaken as a solution for cutting costs that trivializes traditional string education.

⁴⁰ Almita Vamos, interview by author, Chautauqua, NY, July 21, 2015.

Technology has obviously had a huge influence on the accessibility of media to the general public. In the past, in order to witness a master class of “one of the greats” in string playing, there were limited options of VHS recordings available of master classes that were given, but often these recordings were dated, and there was not great clarity in the video or audio.⁴¹ In the twenty-first century, YouTube provides us with a wealth of master classes from both present-day and past pedagogues, with better audio and video clarity.⁴² Even accessing recordings of the “greats” is now possible through Google and YouTube, and what used to be rare content is now available to the general public.⁴³ With the world going in this direction in most subject matters, why should the process of learning music be any different? As D. G Hebert said,⁴⁴

Perhaps it is wise to keep in mind that in the field of music, as in other domains of human life, each new technological development opens up further possibilities for both empowerment and exploitation. Essentially technology is merely a tool that may be used for either good or ill, depending on the values of those that wield it. Thus, the rapid emergence and propagation of online education entails both great possibilities and equally great risks.

Since it is not a new technology, is there confusion over the syntax or label used for distance learning, and is it actually a common type of learning is widely used? Maybe in other fields most schools use this technology, and therefore this topic is not unusual enough to isolate and label as a new type of learning?

⁴¹ “Gingold Masterclass Videos,” Violinist.com, January 30, 2004, accessed May 15, 2015, <http://www.violinist.com/discussion/response.cfm?ID=3431>.

⁴² “Roland Vamos Masterclass on Zigeunerweisen,” YouTube, September 20, 2011, accessed June 1, 2015, <https://www.youtube.com/watch?v=Moj6Fdtmucl>.

⁴³ “Jascha Heifetz Plays Tchaikovsky Violin Concerto: 1st ov,” YouTube, December 13, 2006, accessed June 1, 2015, <https://www.youtube.com/watch?v=kFaq9kTlcaY>.

⁴⁴ David G. Herbert, “Reflections on Teaching the Aesthetics and Sociology of Music Online,” *International Review of the Aesthetics and Sociology of Music* 39, no. 1 (June 2008): 93–103.

Other schools like the Curtis Institute of Music have been engaging in distance learning via web-based lectures offered to the general public for free, with performances available for public viewing on the Internet.⁴⁵ They appeal to lifelong learners through online lectures and history classes for a general audience.⁴⁶ Offering free courses to the general public and lifelong learners, through online and distance learning initiatives, is becoming more and more common, with the benefit perhaps being for the brand of the school and possible later donations.⁴⁷ These general audience courses for lifelong learners exist with free courses through massive online open courses, or MOOCs, featuring courses through sites like Coursera, edX, and universities that host their own courses.⁴⁸ This is a separate entity from online course offerings toward degree programs, which are for tuition-paying students and require enrollment in a school.⁴⁹ These general-interest programs allow anyone, anywhere, without any stigma of educational level or experience, to take these courses, and therefore the commitment is only what the student puts into the program.⁵⁰ While some of these courses are aimed to teach at the level of what one could expect in a higher education course condensed into a short time frame, without charging any fees except for students who want a certificate of completion, what you get out of the course is possible connections to other individuals with similar interests on a very casual

⁴⁵ “Coursera,” Curtis Institute of Music, last modified Spring 2015, accessed April 30, 2015, <https://www.curtis.edu/about-curtis/coursera>.

⁴⁶ Peter Crimmins, “Curtis’ Legendary Reputation Draws 25,000 to First Online Class,” *Newsworks.org*, July 4, 2013.

⁴⁷ Justin Trieger, interview by author, Miami, FL, February 18, 2015.

⁴⁸ “MOOC.ORG,” last modified 2013, accessed May 20, 2015, <http://mooc.org>.

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

level, but the expectation for this to replicate a tuition-paying higher education experience is unrealistic.⁵¹

Much of what was written about as technology twenty years ago has changed with the constant advances in technology that affect our personal and professional lives. Therefore, without knowing full well what technologies will be possible in the future, how do we embrace the now so that we may guide what is to come? Should we expect a complete change to occur in distance learning in higher education with regard to music performance, and should we expect the art of performance to change dramatically as it is influenced by more technology?

In a tuition-requiring higher education music school, once a student is at a level to be able to handle master classes and has the ability to understand and comprehend criticism from a teacher besides his or her own, distance learning does become a great tool for opening the world of possibilities for more opportunities for feedback and learning.⁵² Also, with one's own teacher, once a face-to-face relationship is established, it seems that distance learning instruction is very effective when the teacher cannot be in town, or when the student cannot come to the teacher.⁵³ Distance learning requires a level of trust and respect in the other person who is on the other side of the camera and displaying on your monitor, and an increase in verbal communication and more effort to convey teaching points are needed.⁵⁴ As Jesper Andersen shared in the research findings from the Royal Danish Academy of Music, distance learning in instrumental teaching

⁵¹ Paul Diver and Ignacio Martinez, "MOOCs as a Massive Research Laboratory: Opportunities and Challenges," *Distance Education* 36, no. 1 (2015): 5–25.

⁵² Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

⁵³ Ibid.

⁵⁴ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

eliminates the familiar, the physicality of a music lesson, and the benefit of the three-dimensional body in teaching.⁵⁵ Additional challenges include the technology being advanced enough to capture real time, including problems with sound and video delays.⁵⁶ In string playing in particular, the hands-on physicality of teaching is very important, and distance learning creates challenges by eliminating any possibility for the teacher to make slight physical adjustments or for the student to, in turn, see a similar physical modeling of bowing or left-hand technique through physical proximity to the teacher.⁵⁷ With the most advanced distance learning programs, multiple cameras and monitors are used to simulate in-person teaching as closely as possible.⁵⁸ However, in most cases, teaching becomes more choreographed to the limitations of a video camera, relies more on verbal communication instead of allowing spontaneity, and requires fluid interaction.⁵⁹

Outside of higher education, just from a simple Google search there is a notable increase in for-profit distance-learning-type online string lesson opportunities both from private instructors and through school-type educational programs.⁶⁰ There are websites full of questionnaires and advice given to frequently asked questions that talk about the pros and cons

⁵⁵ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

⁵⁶ Ibid.

⁵⁷ Jonathan Ward Swartz, "Perspectives of Violin Pedagogy: A Study of the Treatises of Francesco Geminiani, Pierre Baillot, and Ivan Galamian, and a Working Manual by Jonathan Swartz" (DMA diss., Rice University, 2003).

⁵⁸ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

⁵⁹ Ibid.

⁶⁰ "Violin Lessons Online," Google, accessed May 25, 2015, https://www.google.com/?gws_rd=ssl#q=violin+lessons+online.

of this type of instruction.⁶¹ In casual settings, it appears that Skype instruction can coincide with a student moving away from an instructor and not finding a suitable replacement.⁶² Therefore, keeping that connection to a teacher through distance learning is a preferable way to continue music instruction. When it comes to amateurs and those who want to study music as a hobby, can distance learning work? As a typical Google search of “learn to play the violin” suggests, could a beginner seeking to learn an instrument get the same level of achievement through a computer screen as they could in a face-to-face lesson?⁶³ In this do-it-yourself world, it seems that people who are not knowledgeable about the music world do believe that lessons can be taken for free, and there seems to be a prevailing belief that all instruction is the same.⁶⁴

The methodology used in this document was through e-mail conversations, telephone interviews, and e-mail questionnaires with the leading distance learning conservatories in the world: the Manhattan School of Music, the Cleveland Institute of Music, the New World Symphony, and the Royal Danish Academy of Music. Additional studies on understanding asynchronous versus synchronous online education came through enrolling in Northwestern University’s online course, *Teaching the Violin and Viola: Creating a Healthy Foundation* through Coursera, in the fall of 2014, with follow-up correspondence with the director and team who created the course. This, combined with reading and researching what scholarship has been done in distance learning in both academic writing and media, helped to inform an understanding

⁶¹ “Music Teachers Blog,” Music Teachers Helper, accessed January 8, 2015, <http://www.musicteachershelper.com/blog/tips-on-teaching-by-skype>.

⁶² Catherine Saint Louis, “With Enough Bandwidth, Many Join the Band,” *New York Times*, January 11, 2012, A1.

⁶³ “Violin Lessons Online,” Google, accessed May 25, 2015, https://www.google.com/?gws_rd=ssl#q=violin+lessons+online.

⁶⁴ Ibid.

of this type of learning. Social media, YouTube, and keeping an eye out on emerging trends among my fellow musicians also helped to inform this study, as well as reading recent news stories in popular culture and connecting with faculty members and friends at various institutions across the United States.

This document is organized into an introduction, six chapters, and a conclusion. Following the introduction is “Distance Learning at All Musical Levels,” showing a realistic portrayal of the varieties of distance learning that are available to the general musician. This chapter serves to create an understanding for readers about the difference between distance learning done at the higher education level with the most advanced technology versus learning to play an instrument at home through a website. “Traditional Pedagogy and Technology” describes the growth of technology from traditional pedagogy and how technology has become a huge asset to the information available to students in a string studio. YouTube is also discussed, including the influence it has on the general music consumer, positive and negative. The next chapter, “Online Courses for String Players,” explains MOOCs and describes online courses that are available for string players, focusing specifically on *Teaching the Violin and Viola: Creating a Healthy Foundation*, which was an online course available through Coursera conducted through Northwestern University. The heart of this document is the next few chapters focusing on the major players in distance learning: the Manhattan School of Music, results and information from the Royal Danish Academy of Music, which ran a three-year research project, and the Cleveland Institute of Music and the New World Symphony Orchestra. The conclusion includes concerns and criticisms about what distance learning general education students have

available to them, and my expectation and hopes for positive growth in higher education distance learning.

Chapter 1

Distance Learning at All Musical Levels

It is important to realize that distance learning has existed for a considerable amount of time: through the use of video cassettes, DVDs, and CDs, which allowed people to learn a skill through a demonstration and imitation of what they saw.⁶⁵ YouTube has provided a new level of accessibility for distance learning at all levels of musical interest because it is a free and widely available source of information for anyone with an Internet connection.⁶⁶ YouTube allows the idea of synchronous interaction through Google Hangouts, the comment section following videos, and conversations and questions from the viewer to the creator of the video.⁶⁷ With synchronous learning, videoconferencing and distance learning raise the potential level for online learning at all levels.⁶⁸ Many universities offer online options for courses in order to cater to students who may be pursuing advanced degrees or are balancing a work and school schedule.⁶⁹ Online music lessons pursue the same idea at all levels of musical experience, although most sites seem to try to attract general interest casual adult enrichment learners or parents seeking teachers for their children.⁷⁰ In this chapter, the students that I am generalizing about are either adult enrichment learners, who I am defining as adults who may have studied music as youth

⁶⁵ Ken Smith, "Virtual Teaching," *Strad Magazine* 107, no. 1277 (1996): 912.

⁶⁶ "ARTS: Internet2 and Music Distance Education," USC Thornton School of Music (official page), accessed May 15, 2015, <https://www.youtube.com/watch?v=tsMdJW0sHD0>.

⁶⁷ "Comment Moderation," YouTube Help, June 1, 2015, <https://support.google.com/youtube/answer/111870?hl=en>.

⁶⁸ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

⁶⁹ Devon Haynie, "Opportunities for Credit a New Hook for MOOCs," *US News and World Report*, May 27, 2015, accessed June 1, 2015, <http://www.usnews.com/education/online-education/articles/2015/05/27/chance-for-credit-gives-new-life-to-moocs>.

⁷⁰ Catherine Saint Louis, "With Enough Bandwidth, Many Join the Band," *New York Times*, January 11, 2012, A1.

who choose to start lessons again as adults, and students who are under the age of eighteen and are studying music for general educational purposes, although this does not exclude youth who may decide to pursue music in college. The only type of music student not included in this chapter is the student studying music seriously in higher education, unless they are specifically mentioned with that label.

Searching Google, it is obvious that there are no limits to the number of websites and communities built around the idea of instrument instruction on the Internet, as well as to the level of musical ability that these sites are targeting. Specifically in the string world, the format of online teaching tends to be teachers making videos and instructional forums on how to play, and the target audience appears to be amateur musicians.⁷¹ For those who believe that learning anything is possible on the Internet, it is hard to generalize who the consumers are. These sites cater to consumers who can afford to spend money on music lessons and have the self-motivation to follow through with the goal of learning an instrument through distance learning. What is problematic about the extensive and diverse information on the Internet is that there is no check for credentials or quality, and the viewer is blindly trusting that the author of the video is an expert. Perhaps the target audiences are amateur adult musicians' children (or their parents) who want to learn, who have the curiosity to want to play a stringed instrument at home without finding a teacher. Of course the idea of going to the Internet for information is similar to how the public uses Google and YouTube searches to learn how to change a bike tire or how to cut an onion. The results of a Google search with the words "learn to play violin" provide results as varied as "Can I learn to play the violin on my own," "Can you learn to play the violin without a

⁷¹ "How to Play the Violin," wikiHow, accessed June 1, 2015, <http://www.wikihow.com/Play-the-Violin>.

teacher,” and “Learn to play the violin in one hour.”⁷² From a Wiki page to various websites and YouTube pages, all websites claim that violin can be learned on the Internet and offer ample encouragement that this is possible.⁷³

In an article by Catherine Saint Louis in the *New York Times*, she writes about students who are not necessarily on the educational track to studying music in higher education:

Students who used to limit the pool of potential teachers to those within a 20-mile radius from their homes now take lessons from teachers—some with world-class credentials—on other coasts or continents. The list of benefits is long: Players of niche instruments now have more access to teachers. Parents can simply send their child down the hall for lessons rather than driving them. And teachers now have a new way to build their business.⁷⁴

It seems as if Saint Louis is positively reinforcing the convenience, flexibility (students’ conflicts with time), and answers to potential time challenges (commitment issues, other activities, sickness, and transportation challenges) that go along with distance music education. Other arguments from this article include the following: “‘People who do online lessons end up doing a more consistent lesson schedule,’ he said. ‘They don’t have to fight snowstorms. They don’t have to take an hour a day to get to us. Other things don’t conflict, like baseball games.’ And most lessons are recorded so students can play them back while practicing, Mr. Antonaccio said.”⁷⁵ However, the types of lessons described in Saint Louis’s article, videoconference-style lessons, essentially have the same scheduling conflicts as face-to-face lessons.⁷⁶ It is naïve to try

⁷² “Google,” Google, accessed June 1, 2015, <https://www.google.com/#q=learn+to+play+the+violin>.

⁷³ “How to Play the Violin,” wikiHow, accessed June 1, 2015, <http://www.wikihow.com/Play-the-Violin>.

⁷⁴ Catherine Saint Louis, “With Enough Bandwidth, Many Join the Band,” *New York Times*, January 11, 2012, A1.

⁷⁵ Ibid.

⁷⁶ Ibid.

to place a value on a student's commitment to attending a music lesson through online lessons because making music lessons a priority and arranging times and coordinating around other activities is always going to be the biggest challenge to general education music students. Will eliminating transportation and location issues really make lessons that much easier because people can stay in the comfort of their homes?⁷⁷ Saint Louis does mention in her article some of the top fears that Skype lessons raise for participants:

However, many parents remain wary of laptop lessons. Their chief reservation is that teachers can't manipulate a student's fingers to fine-tune the subtleties of playing a string instrument. "A lot of people don't trust that the experience is the same," said Mr. Antonaccio, who's offered online lessons in violin, piano, and guitar since 2004. Even so, he said, "We have had kids that have grown up and learned to play entirely on camera."⁷⁸

What is not mentioned in this article is that the ability level of the student drastically changes the experience the student has with this type of distance learning.⁷⁹ If the student is a child or adolescent, the type of instruction that comes with music lessons is a specialized type of learning and requires tremendous focus and diligence.⁸⁰ Music lessons are largely founded on the philosophy of trying a new idea, implementing it, accepting criticism or constant adjustment, and then hopefully attaining mastery.⁸¹ These are the ideas that are repeated in the formula again and again during the course of one lesson, and therefore someone who has never had a lesson of any

⁷⁷ Catherine Saint Louis, "With Enough Bandwidth, Many Join the Band," *New York Times*, January 11, 2012, A1.

⁷⁸ Ibid.

⁷⁹ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

⁸⁰ "20 Important Benefits of Music in Our Schools," National Association for Music Education, NAFME News, accessed May 30, 2015, <http://www.nafme.org/20-important-benefits-of-music-in-our-schools>.

⁸¹ Frank Fitzpatrick, "Why Music, Part 5: Music and Education," *Huffington Post*, Education: The Blog, December 3, 2012, accessed June 1, 2015, http://www.huffingtonpost.com/frank-fitzpatrick/music-education_b_2213841.html.

type may find the formula hard to accept. However, with adult enrichment learners or adult amateurs, this could be a great format for lessons. Adults have the threshold to understand lessons, have faster comprehension, and learn concepts faster even if they are not as physically malleable as a child.⁸² Therefore, as Deverich's dissertation suggests, adults seeking distance learning solutions for one-on-one instruction for instruments makes a lot of sense, but as Saint Louis's articles suggests, convenience may not equal success.

Lee Romney's *LA Times* article "Online Music in the Key of See" is a very balanced article specifically about a piano teacher who teaches students of all ages and created more teaching opportunities for himself by expanding his teaching to distance learning.⁸³ The article shows the realities and challenges that distance learning brings to student retention and the pros and cons of the Skype teaching experience.⁸⁴ Romney writes,

Their results, published in 2010 in the *American Journal of Distance Education*, showed that there was less idle chitchat and joke-telling during videoconference lessons. Students made more eye contact and spent more time actually playing their instruments than those who studied in person, where there are arguably more distractions. (Being middle-schoolers, though, one student did point out that it was easier to cheat on fingering during the remote lesson, because the teacher's view was limited.)⁸⁵

Romney gets right to the point about why everyone is not sold on distance learning. "Resistance is understandable, given that the in-person master-apprentice model has a long and storied

⁸² Robin Kay Deverich, "Distance Education Strategies for Strings: A Framework of Violin Instruction for Adult Amateurs" (DMA diss., University of Southern California, 1998).

⁸³ Lee Romney, "Online Music Lessons in the Key of See," *Los Angeles Times*, April 29, 2013.

⁸⁴ Ibid.

⁸⁵ Ibid.

history. “That’s how Mozart was taught. That’s how Bach was taught,” said Orman, who with Whitaker is researching virtual-reality instruction methods for conductors.”⁸⁶

If the concept of lessons between a teacher and student has existed since the seventeenth century, why would it change and why should it change?⁸⁷ Romney acknowledges that there are practical issues of implementation, such as the high cost of the basic equipment needed to create an adequate online teaching studio within one’s home, with elements like two cameras and multiple monitors.⁸⁸ For “late technology adapters with tight budgets,” this could cause financial hardship for the teacher to start to distance-teach with the highest-quality equipment.⁸⁹ Another important point made is the idea of retention and keeping Skype students, versus students who make the in-person commitment to lessons.⁹⁰ In the article, regarding piano teacher Talc Tolchin, Romney writes, “Those who come to him in person generally stay two to six years, he said, while Skype students have stayed two to six months. That makes them less likely to recommend him to other students because they have little to show for their limited time.”⁹¹ The challenge of student retention is one that plagues every private teacher, but one can assume that it may take more effort for teachers to connect emotionally to their students online than the quicker chemistry and personalization from in-person lessons. Also, there is the possibility that students

⁸⁶ Lee Romney, “Online Music Lessons in the Key of See,” *Los Angeles Times*, April 29, 2013.

⁸⁷ “Lesson,” *The Oxford Dictionary of Music*, 2nd ed. rev., Oxford Music Online, Oxford University Press, accessed July 23, 2015, <http://www.oxfordmusiconline.com.turing.library.northwestern.edu/subscriber/article/opr/t237/e6048>.

⁸⁸ Lee Romney, “Online Music Lessons in the Key of See,” *Los Angeles Times*, April 29, 2013.

⁸⁹ *Ibid.*

⁹⁰ *Ibid.*

⁹¹ *Ibid.*

who seek Tolchin's teaching online are looking for some basics and fundamentals, and then want to move on and learn on their own.⁹² However, why Tolchin's retention numbers are what they are is contingent on many factors, and what is most important to take away from this article is that teaching online is not necessarily an "easy" solution to teaching more students.⁹³ Factors like the start-up cost, the need for high bandwidth and a strong Internet connection, and achieving success through the best technology and cameras may be more crucial than actual teaching ability.⁹⁴ There are arguments justifying how much Skype lessons increase the availability of music lessons for those who are either geographically in remote places or busy professionals, but for the general student Tolchin suspects that, "the ease and convenience of coming to a Skype session has the same ease on the back end of leaving."⁹⁵

What this article also effectively displays through the example of this piano teacher is the lineage of distance learning technology for people seeking out nontraditional education:

An accomplished musician, Tolchin began examining new ways of teaching more than a quarter-century ago, when he produced one of the first series of instructional videos on the market. In time, he shifted to DVD, but competition coupled with free YouTube tutorials eventually slowed sales.

Next, the hippie-era New York transplant with wispy gray hair tried phone lessons. It worked for him, "but the students needed to see my fingers." Two years ago, he gussied up his computer setup.⁹⁶

For musicians seeking to study with a professional musician with a high profile, a site that has started to draw more attention and buzz on social media is ArtistWorks.⁹⁷ There are

⁹² Lee Romney, "Online Music Lessons in the Key of See," *Los Angeles Times*, April 29, 2013.

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ Ibid.

twenty-six world-renowned teachers, who would be otherwise inaccessible for most non-conservatory-track music students. These teachers have created online studios to work with any student interested in their teaching.⁹⁸ Each teacher has videos to cater to all levels of students—beginner, intermediate, and advanced—and in addition, students can submit their own videos for individualized feedback.⁹⁹ The feedback is made available to the other participating students, where they can view videos and learn from the teacher’s comments to other students.¹⁰⁰ Prices range from a three-month membership for \$90 to a year for \$240.¹⁰¹ This ensures a commitment and is cheaper than privately studying with the teacher or, more unrealistically, moving to the city of the master teacher or auditioning for the school where the teacher works. Lessons are available in guitar with ten stylistic options in addition to bass, bluegrass, and classical.¹⁰² The classical instruments available on ArtistWorks are violin, flute, clarinet, trumpet, piano, French horn, and classical guitar.¹⁰³ There are also unconventional choices like scratching, harmonica, and drum.¹⁰⁴ ArtistWorks advertises their lessons on YouTube with clips of lessons so that you can preview how the teacher teaches and get a taste of whether this type of lesson could work for you.

⁹⁷ “Uniquely Interactive Online Learning,” ArtistWorks, accessed April 22, 2015, <http://artistworks.com>.

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

Watching Nathan Cole, the first associate concertmaster of the Los Angeles Philharmonic, who is the online teaching artist for ArtistWorks in violin, his teaching videos are excellent, but for the inexperienced violinist, they could present challenges by attempting skills that are above a student's current level. For example, Cole's vibrato video requires basic intonation ability and control over left-hand technique to be able to relax the left hand enough to learn the basics of vibrato and appreciate the nuances of everything that he is explaining.¹⁰⁵ He demonstrates concepts beautifully and clearly, but it is apparent from some of the questions on the thread that there are fundamental concepts in violin playing that someone who has never been taught vibrato would really struggle to understand.¹⁰⁶ This is normal for this level of beginning teaching, but it shows how teaching violin is not a one-size-fits-all idea that fits every student. Higher-level students can benefit from distance learning if they are able to watch the videos and apply the concepts to their own playing, versus beginners or young students who would probably struggle from not having a synchronous lesson.

Nathan Cole also has a video on playing "Baa Baa Black Sheep" on YouTube's free channel advertising for ArtistWorks, but this presumes that people watching the video would automatically be able to achieve the coordination to figure out how to physically replicate what they would see in the videos.¹⁰⁷ Yes, one could rewatch sections over and over again, but despite how great a teacher Nathan Cole is, one could speculate that ArtistWorks Video Exchange Learning is really best suited for students at a much higher level, despite being advertised toward

¹⁰⁵ "Learn Online with Violin Lessons from Nathan Cole," Violin Lessons with Nathan Cole, accessed April 22, 2015, <http://artistworks.com/violin-lessons-nathan-cole>.

¹⁰⁶ Ibid.

¹⁰⁷ "How to Play Baa Baa Black Sheep on Violin," YouTube, accessed April 22, 2015, <https://www.youtube.com/watch?v=GtNNhT5Ev4A>.

a general audience. It is almost deceptive to feel that someone who is a beginner could easily achieve the sound and facility that Cole has, because it takes more than a few months to make the fundamentals of violin playing click. Additionally, it presumes that studying an instrument is easy, and while the teachers are extremely positive and friendly in their videos, is it realistic to assume the teacher can have a complete picture of a student's abilities through the videos they send back? Could this feedback be enough to really give enough attention to help a student progress as compared to an in-person private lesson?¹⁰⁸ ArtistWorks is just one example that has recently appeared in social media as an online teaching method seeking publicity because of its high-level teachers. As stated earlier, there are many options and varying levels of teaching available on the Internet, which is why it is important to understand what is out there from a pedagogical view.

¹⁰⁸ "Vibrato Violin Lesson from Nathan Cole," YouTube, accessed April 22, 2015, https://www.youtube.com/watch?v=eCRC6ItsAdQ&list=PL53NVVx3pR7iQd00T77MxlCOaCKs_GwNZ.

Chapter 2

Traditional Pedagogy and Technology

Since the invention of the violin family, string pedagogy has been the concept of a professional teaching an apprentice, and that musical lineage concept has largely continued to the present day.¹⁰⁹ For a music student serious about their instrument, one of the most important influences is studying with a teacher for their musical lineage.¹¹⁰ With every generation, repertoire continues to grow, and new technical perspectives are needed to adapt to a changing repertoire. However, the pedagogical approach used has not changed as much in the twentieth century because it is based on the master teachers of the nineteenth century.¹¹¹ Therefore, this lineage is crucial in the attempt to continue positive traditions of playing and sound. One-on-one instruction has always been the preferred method for teaching strings, and there is no available evidence of written instruction to prove that it has not been.

Technology available in the twentieth century had obvious influences on pedagogy. Although there is always deviation from historical pedagogy by the positive influences of new etudes or new works written for the instrument, the influence of how technology has influenced and changed pedagogy is one that has been relatively quiet and subtle. The most obvious example would be recording and how much the Internet and the availability of recorded media

¹⁰⁹ David D. Boyden, et al., "Violin," *Grove Music Online*, Oxford Music Online, Oxford University Press, accessed January 23, 2014, <http://www.oxfordmusiconline.com.turing.library.northwestern.edu/subscriber/article/grove/music/41161>.

¹¹⁰ Jonathan Ward Swartz, "Perspectives of Violin Pedagogy: A Study of the Treatises of Francesco Geminiani, Pierre Baillot, and Ivan Galamian, and a Working Manual by Jonathan Swartz" (DMA diss., Rice University, 2003).

¹¹¹ *Ibid.*

have changed the accessibility of recordings. One could argue that technology and new media allow us to capture performances that were previously inaccessible, then replay them in the studio or at home. Additionally we can hear recordings that are edited to perfection and find unlimited information on the Internet about performers and performances. Scholarly research is no longer bound to a library, and therefore our resources are virtually unlimited. Increasingly, social media has opened the door to performers' thoughts, feelings, and lives, and audiences appear to love this insight.¹¹²

With this influx of new media available on the Internet, there also appears to be a lack of standardization of information. YouTube as a video-sharing website allows users to upload videos, but this user-generated content is not held to any "professional standard" or credibility standard; and the *expert* pedagogue posting the video could be an amateur with no training or knowledge, but simply a person with enough confidence to make a video claiming to be an expert.¹¹³ New technology makes music accessible to more people, including amateur musicians, and makes it easier to try things out at home, like figuring out how to play an instrument through online videos on the Internet. Some experts in the distance learning field encourage this type of technology because, on a larger scale, it is important and vital to expand the love of music and exposure to it to all people.¹¹⁴ Others denounce this type of learning for profit as an ineffective form of learning, and for giving distance learning a bad name.¹¹⁵ Higher education institutions championing distance learning stress that they are not creating distance learning opportunities to

¹¹² RayChenViolin, accessed May 30, 2015, <http://www.raychenviolin.com.2015>.

¹¹³ "Beginners Viola Tutorial," YouTube, accessed May 30, 2015, <https://www.youtube.com/watch?v=30s8eO1LqbA>.

¹¹⁴ Justin Triegeer, interview by author, Miami, FL, February 18, 2015.

¹¹⁵ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

replace in-person teaching.¹¹⁶ But we as consumers should be aware that this is not the case at all levels of instruction, and it takes a particular level of knowledge and expertise before distance learning in music can be an effective method of learning. There is a conflict that comes from distance learning between expanded reach and coverage of musical instruction and the quality of learning available to master a possibly complicated musical instrument. With in-person lessons, there is never a guarantee that lessons will equal talent and mastery, but the positive elements that come from private lessons are based on receiving an individualized approach to pedagogy.¹¹⁷ Therefore, what is the standard that pedagogues should strive to maintain in distance learning? Is the goal accessibility, and if so, how can we ensure success for the student? There may be no answers at this point, but these are questions that are worth considering in evaluating how distance learning moves forward at all levels.

In 2010, Greg Cahill collected three articles written about examples of technology used in teaching in *Strings Magazine*, citing examples such as using a video camera or digital recorder and the start of videoconferencing for lessons.¹¹⁸ The article about using a video camera, written by Sushma Subramanian, discusses the merits of videotaping a lesson so that content from the lesson can be remembered week after week and later be used as performance preparation, and also so that it can be shared with the parent.¹¹⁹ The article on using a digital recorder by Erin Shrader suggests that digital recorders can capture moments otherwise lost or let you play along

¹¹⁶ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

¹¹⁷ Almita Vamos and Roland Vamos, interview by author, Chautauqua, NJ, July 14, 2015.

¹¹⁸ Greg Cahill, "A Guide to High-Tech Teaching," *Strings Magazine* 25, no. 2 (2010):185.

¹¹⁹ Sushma Subramanian, "Plug and Play: Include a Video Camera in Your Lesson Plan," *Strings Magazine* 25, no. 2 (2010): 57.

with a recording.¹²⁰ The videoconferencing article by Williams discusses the Zukerman Performance Program on a very casual level, and also features James Kelly, an Irish fiddler who also teaches through videoconferencing via accessible means such as Skype, iChat, and Google Chat.¹²¹ By having an organized approach to teaching, and a special talent to offer their students, these videoconferencing teachers are able to appeal to a broader international audience looking to perfect a specific skill.¹²² This collection of articles shows the influence of distance learning technology, from the earliest forms of distance learning technology to the more sophisticated technology used now.

Other influences of technology on string studios are the use of online forums, blogging, and websites to maintain studio unity and the sharing of ideas. The American Viola Society has facilitated this with the AVS Studio Blog for the last three academic years.¹²³ Quoted from the website:

“From the Studio.” Hosts for the blog’s inaugural season will be the Juilliard viola studio of Heidi Castleman, Misha Amory, Hsin-Yun Huang, and Steven Tenenbom. These teachers, their students, teaching assistants, and recent alumni will address issues of technique, repertoire, interpretation, pedagogy, and outreach. Their thoughts, experiences, and discussions on specific topics will appear daily throughout the academic year, Monday through Friday.¹²⁴

For the 2013–14 academic years, the viola studios of Ivo-Jan van der Werff and James Dunham from the Shepherd School of Music at Rice University were profiled, and for

¹²⁰ Erin Shrader, “10 Ways a Digital Recorder Can Improve Your Technique,” *Strings Magazine* 25, no. 2 (2010): 59.

¹²¹ Rory Williams, “Long-Distance Learning: The Benefits of Internet Video,” *Strings Magazine* 25, no. 2 (2010): 55–56.

¹²² Ibid.

¹²³ “Studio Blog,” American Viola Society, accessed January 28, 2015, <http://www.americanviolasociety.org/Education/Studio-Blog.php>.

¹²⁴ Ibid.

2014–2015 the blog is featuring the viola studios of Professors of Carol Rodland, George Taylor and Phil Ying from The Eastman School of Music.¹²⁵

The American Viola Society is doing a great service by creating an online community that showcases the studios of these competitive schools. The blogs feature young violists taking the time to think and express their ideas in written form on a public forum.¹²⁶ The blogs showcase music students using real-life applications and skills outside of the practice room, and a higher level of thinking while having to reflect on their education, passions, and experiences.¹²⁷ The association the studios have with the American Viola Society gives this type of blogging credibility and an elite forum. These discussions are important and a good chance for students to share ideas with their colleagues and professors and to engage with the outside world. The blogs exist as student profiles and experiences, and the students write with authority, develop confidence in their ability to communicate about a topic, and share their ideas with the world without hesitation.¹²⁸ Because it is a blog and therefore colloquial, the topics covered deal with pedagogy, community service, technique, and repertoire.¹²⁹ This American Viola Society blog looks to be successful and continuing, and the social media connection makes this a very progressive forum.

¹²⁵ “Studio Blog,” American Viola Society, accessed January 28, 2015, <http://www.americanviolasociety.org/Education/Studio-Blog.php>.

¹²⁶ Ibid.

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Ibid.

Social media has a stronger presence than ever before in many instrumental studios in many American music schools through the use of websites such as Facebook and Twitter.¹³⁰ Recitals, master classes, and studio gatherings are often advertised via social media and reflect the trends of social media use by current students. World-renowned soloists like violinist Ray Chen have embraced social media, both through Facebook, videos, and Instagram, and he also writes a blog on SoundCloud, with 1.8 million followers, reflecting on being a violinist on tour.¹³¹ Hilary Hahn has had a Twitter account for years (<http://twitter.com/violincase>) that shares her travels and experiences as a soloist with her fans.¹³² Many American symphony orchestras use social media such as Facebook, Twitter, YouTube, and blogs to reach patrons of all ages with constant updating of current information and behind-the-scenes perspectives on concerts and tours.¹³³ Many major string quartets and music ensembles take the same approach with blogs, Twitter, and websites that keep their audience up to date on their whereabouts, and thus we see the influence of new media from all angles of classical music.¹³⁴

We assume that more social and new media will appear in higher education instrumental studios as it becomes a vital connector for professors and students to each other, and to the outside world.¹³⁵ Although the basics of string pedagogy will always be rooted in the history of

¹³⁰ “Northwestern Bienen School of Music: Office of Student Affairs,” Facebook, accessed July 15, 2015, <https://www.facebook.com/pages/Northwestern-University-Bienen-School-of-Music-Office-of-Student-Affairs/43446507336>.

¹³¹ “Biography,” RayChenViolin, accessed May 30, 2015, <http://www.raychenviolin.com>.

¹³² “Hilary Hahn Violin Case,” Twitter, accessed May 30, 2015, <https://twitter.com/violincase>.

¹³³ “The Philadelphia Orchestra,” accessed May 12, 2015, <https://www.philorch.org/?gclid=CPPuwqDCzsUCFUGXHwodLA0Atw#>.

¹³⁴ Dave Headlam, “Re-Drawing Boundaries: The Kronos Quartet,” *Contemporary Music Review* 19, no. 1 (2000): 113–115.

technical studies and repertoire that is passed down from generation to generation, it is inevitable that new media will influence how information is passed along. With the popularity and interest in incorporating technology into higher education teaching and thereby expanding the pedagogical possibilities, distance learning will become more and more common in higher education string education as a method to expand upon traditional pedagogy. Professors Almita and Roland Vamos whose careers have spanned fifty years and were featured in the Teaching the Violin and Viola course, which is discussed in the next chapter, commented that distance learning initiatives are less about the personal connections, and more about the possibilities and potential.¹³⁶ Almita Vamos advised that perhaps what is most relevant when considering teaching over distance learning technology is the teacher's technique of teaching.¹³⁷ There is a difference from a teacher who approaches teaching with a pedagogically based preplanned lesson compared to a teacher who prefers to respond to a student's live playing.¹³⁸ Vamos said, specifically with violin and viola, it is harder to respond in the moment over a video connection, and harder to not be able to view the three-dimensional angles around a student.¹³⁹ This angle challenge applies more so with the violin and viola because, as compared to a guitar or cello which faces the camera, the angle of a violin or viola is higher, and therefore the three-dimensionality is helpful, which is often lost in video.¹⁴⁰ Other challenges the Vamoses discussed were with how they see

¹³⁵ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

¹³⁶ Almita Vamos and Roland Vamos, interview by author, Chautauqua, NJ, July 14, 2015.

¹³⁷ Ibid.

¹³⁸ Ibid.

¹³⁹ Ibid.

¹⁴⁰ Ibid.

pedagogy: it is important to spend time with a student in person, and giving a lesser lesson over video because of the technological limitations unfortunately takes time away from a better in-person lesson.¹⁴¹ Video can work for intonation and advice, but responding to the sound of a student in the context of the venue they are performing in, and in the reality of the performance situation, is hard to reconcile.¹⁴² Roland Vamos teaches a lot through demonstration and gesture, and especially with the viola he finds nuances of physical teaching vital to having the student understand bowing subtleties.¹⁴³ The Vamoses' teaching philosophy with distance learning varies greatly from the approach marketed by ArtistWorks, but at the same time, not every student can come to Chicago for in-person lessons. What should be the compromise that motivates quality of instruction, and how can this standard be maintained in distance learning? This question should be relevant to any pedagogue or musician who seeks to incorporate distance learning into how he or she teaches.

There are positive influences from secondary music schools offering instruction on stringed instruments through online teaching.¹⁴⁴ The books and articles I reviewed for this document reveal that new media provides methods of interaction and inspiration for music teachers and orchestra directors.¹⁴⁵ There is research on how bringing in technology like iPads to elementary music classrooms can help make music more accessible and introduce concepts like

¹⁴¹ Almita Vamos and Roland Vamos, interview by author, Chautauqua, NJ, July 14, 2015.

¹⁴² Ibid.

¹⁴³ Ibid.

¹⁴⁴ Gail V. Barnes and Stacy M. Wiley, "An Online Community for String and Orchestra Teachers," in *Collaborative Action for Change: Selected Proceedings from the 2007 Symposium on Music Teacher Education*, ed. M. Schmidt, 223–229 (Lanham, MD: Rowman & Littlefield, 2009).

¹⁴⁵ William I. Bauer, Sam Reese, and Peter A. McAllister. "Transforming Music Teaching Via Technology: The Role of Professional Development," *Journal of Research in Music Education* 51, no. 4 (2003): 289–301.

composition at an earlier point in music education.¹⁴⁶ Perhaps the most relevant model to these questions about the future of pedagogy is the article about distance music education in *Music Education Research* that discusses guitar pedagogy and the possibilities for using online technology and videoconferencing for remote geographic locations.¹⁴⁷ The pros and cons are discussed in this article, and distance learning is embraced as a possibility.¹⁴⁸ An article in the *Journal of Music, Technology and Education* supports the conclusions reached in the previously mentioned articles, with new media having a positive effect and serving as a forum for inspiring music education and music theory courses.¹⁴⁹ Embracing new technology does allow for more interactive opportunities for both students and faculty.

¹⁴⁶ Patricia E. Riley, "Teaching, Learning, and Living with iPads," *Music Educators Journal* 100, no. 1 (2013): 81–86.

¹⁴⁷ S. Brändström et al., "Developing Distance Music Education in Arctic Scandinavia: Electric Guitar Teaching and Master Classes," *Music Education Research* 14, 4 (2012): 448–456.

¹⁴⁸ Ibid.

¹⁴⁹ Frederico Alberto Barbosa Macedo, "Teaching Creative Music Technology in Higher Education: A Phenomenological Approach," *Journal of Music, Technology and Education* 6, no. 2 (2013): 207–219.

Chapter 3

Online Courses for String Players

The history behind MOOCs (massive online open courses) helps to provide a framework for a type of distance learning that has existed within a strong community for seven years.¹⁵⁰

Diver and Martinez’s article explains:

MIT began releasing all of its course materials online, for free, in 2001, 7 years before MOOCs came on the scene in 2008. It is incorrect to consider MOOCs as a wholly different entity, outside and apart from other types of online and distance learning environments. . . . Specifically, he cites the problem of the massive student enrollment relative to the number of course instructor(s). This makes it increasingly important to understand the role of students and how they act within a MOOC.¹⁵¹

In the fall of 2014, I took my first class through Coursera, “an education platform that partners with top universities and organizations worldwide, to offer courses online for anyone to take, for free.”¹⁵² Coursera courses differ from other distance learning previously discussed, because they are structured as a course, have a start and end date, are open and participatory, and people who care about a topic can get together and talk about the course in a structured way through the forums on the course.¹⁵³ It promotes independent learning and then networking through a shared interest area.¹⁵⁴ The course I took was taught by Professor Stacia Spencer from Northwestern

¹⁵⁰ Paul Diver and Ignacio Martinez, “MOOCs as a Massive Research Laboratory: Opportunities and Challenges,” *Distance Education* 36, no. 1 (2015): 5–25.

¹⁵¹ Ibid.

¹⁵² “Teaching the Violin and Viola: Creating a Healthy Foundation,” Coursera, accessed November 4, 2014, <https://www.coursera.org/course/teachingstrings>.

¹⁵³ “What Is a MOOC?,” Dave Cormier, YouTube, December 8, 2010, accessed June 2, 2015, <https://www.youtube.com/watch?v=eW3gMGqcZQc>.

¹⁵⁴ Ibid.

University's Bienen School of Music; Spencer is senior lecturer in string pedagogy and string coordinator for the Northwestern Music Academy.¹⁵⁵ She designed a ten-week course that covers a step-by-step approach to pedagogy for the fundamentals of teaching violin and viola for early beginners.¹⁵⁶ The course was split up over ten weeks, and each week featured short video lectures highlighting specific principles, lesson demonstrations, handouts, quizzes, and discussion prompts.¹⁵⁷ Diver and Martinez's make the assertion that "video lectures lie at the heart of most contemporary MOOCs."¹⁵⁸ What was effective was that the length of each video was less than five minutes, as is Coursera's format, and then concepts were reinforced by downloadable worksheets to strengthen specific pedagogical concepts. Stacia Spencer and her three string teaching assistants would respond to questions and clarify content and teaching methods in the forums, and they moderated the synchronous elements, helping to create accountability in the course.¹⁵⁹ There were ongoing discussions with weekly prompts, and then encouragement to ask questions and engage in forum conversations with other topics relevant to teaching. A synchronous element that was most rewarding about the course was the live Google Hangout chats, which were moderated by Stacia Spencer and her team, either with them answering course questions, or by inviting other pedagogues to join as a weekly guest pedagogue. The Google

¹⁵⁵ "Faculty," Northwestern University Bienen School of Music: Community Education, accessed December 15, 2014, <http://www.music.northwestern.edu/community/music-academy/strings/faculty.html>.

¹⁵⁶ "Teaching the Violin and Viola: Creating a Healthy Foundation," Coursera, accessed November 4, 2014, <https://www.coursera.org/course/teachingstrings>.

¹⁵⁷ Ibid.

¹⁵⁸ Paul Diver and Ignacio Martinez, "MOOCs as a Massive Research Laboratory: Opportunities and Challenges," *Distance Education* 36, no. 1 (2015): 5–25.

¹⁵⁹ "Meet Your Instructors," Teaching the Violin and Viola: Creating a Healthy Foundation by Stacia Spencer, Coursera, accessed November 4, 2014, <https://class.coursera.org/teachingstrings-001/wiki/meet>.

Hangout chats were the most synchronous element to the course, and to watch a synchronous video with live questions, even if watching an archived chat, made the course feel more personal and allowed the participants to feel that they had interaction with the pedagogues.

Coursera offers courses that are free to the public, and the participants in this course ranged from seasoned string teachers to some interesting ambitious adults who wanted to self-teach themselves the violin. Because of the course design, it quickly became apparent that this course was not designed for amateurs, and as the title states, it was for people interested in pedagogy with a string background.¹⁶⁰ The discussion forums always featured a variety of responses and experiences that were shared, and sometimes it was obvious that an open enrollment course created some questionable interactions from people with differing objectives.¹⁶¹ As Diver and Martinez commented about MOOCs,

The forums are potentially a very important tool in MOOCs. In a traditional classroom, students can seek help during office hours or talk to classmates to clarify a troubling concept; the forums play that role in MOOCs. The forums are not only a place where students ask questions about the material and quizzes, but also a place to socialize with peers.¹⁶²

The course had well-moderated discussions, and participants took the participation grade and the chance to earn a certificate very seriously. Therefore, it kept the level of discussion appropriate and at a high caliber.

The cultural differences and conversations that are facilitated through MOOCs are interesting because as an at-home student, one can overlook the fact that the course is available

¹⁶⁰ “Teaching the Violin and Viola: Creating a Healthy Foundation by Stacia Spencer,” Coursera, accessed November 4, 2014, <https://class.coursera.org/teachingstrings-001>.

¹⁶¹ Ibid.

¹⁶² Paul Diver and Ignacio Martinez, “MOOCs as a Massive Research Laboratory: Opportunities and Challenges,” *Distance Education* 36, no. 1 (2015): 5–25.

to an international audience. Therefore, global conversations became more interesting, especially due to cultural differences and factors that could be discussed regarding pedagogical approaches. These differences end up being a really interesting blend of perspectives to add to one's own experiences. The ability to learn with colleagues from around the world is now very common, and it is vital for global citizenship and lifelong learning.¹⁶³

What was challenging about this type of course, as would be the case with any online course, was the importance of self-motivation and holding oneself accountable for completing course work satisfactorily and on time. Without direct contact and interaction with the professor, one has to connect to the instructor through the video lectures. The realization of this separation and the fact that the videos were made a long time ago and not in real time do indeed have an effect and create a sense of detachment on the part of the students. Diver and Martinez say about videos in MOOCs,

We show that students who drop out interact with videos and forums less than students who continue. Moreover, the dropouts also procrastinate more. We finally propose experiments that would help sort out whether a causal effect exists between the dropout rates and the course design, and we try to identify what may ultimately improve student achievement.¹⁶⁴

There were times when I would question the videos and whether the teaching methods were realistic. This was because it was obvious that the demonstrating students were at a higher level than the music they were demonstrating. This made for a very effective teaching demonstration, but it was harder to relate to for students trying to master the same content. This type of concern came up in the discussion forums, and it allowed Spencer to comment and discuss these reactions

¹⁶³ "What Is a MOOC?," Dave Cormier, YouTube, December 8, 2010, accessed June 2, 2015, <https://www.youtube.com/watch?v=eW3gMGqcZQc>.

¹⁶⁴ Paul Diver and Ignacio Martinez, "MOOCs as a Massive Research Laboratory: Opportunities and Challenges," *Distance Education* 36, no. 1 (2015): 5–25.

and how they could be applied to the concepts being taught.¹⁶⁵ The short video lectures very efficiently showed the process of teaching a concept, how a teacher should assist the student on the concept, and how the student could apply the concept.¹⁶⁶ The length of the videos, along with the ability to play it back, pause it, and watch it again, is another benefit of an online course. Additionally the course content is kept on Coursera's site so that participants from the course can go back and access all the content at any point after having participated in the course. These archives are perhaps the most unique and best part of the online course experience. They allow the participants to have a library of content at their fingertips and an effective resource for the collection of course content.

The archived material and video demonstrations, together with the archived Google Chats available on Coursera, are all treasure troves of information that are available in a format that would not have been available if this were an in-person class. There were many guest lecturers who appeared both in pretaped video master classes, and then a second time through Google Chats. The guest lecturers included top professors known for their pedagogy from universities across the United States, including Mimi Zweig from Indiana University, Hal Grossman from the University of Oklahoma, Almita and Roland Vamos from Northwestern University, and Brenda Brenner from Indiana University.¹⁶⁷ These names may not mean as much to people outside of string pedagogy, but for string players, these renowned professors worked to heighten the level of the material presented.

¹⁶⁵ "Week 1: Beginning Stages," Teaching the Violin and Viola: Creating a Healthy Foundation by Stacia Spencer, accessed November 4, 2014, https://class.coursera.org/teachingstrings-001/wiki/Week_1.

¹⁶⁶ Ibid.

¹⁶⁷ "Stacia Spencer, Teaching Violin and Viola Hangouts," YouTube, accessed November 4, 2014, <https://www.youtube.com/user/staciaspencer>.

Paul Diver and Ignacio Martinez's article provides important perspectives into issues that plague every course. They address student commitment through an example of a course taught through the University of Virginia, offering a helpful perspective for this type of course.

Before thinking about dropout rates, it is important to understand what enrollment means in a MOOC. In order to be enrolled in a traditional university classroom, there is a relatively high bar of requirements that must be satisfied. For example, in order to enroll in Economics 2010 at the University of Virginia, a student must be admitted into the university and pay tuition. The selection process is formidable: admitted students typically have high SAT scores and high school GPAs. By contrast, to enroll in any MOOC, a student only needs to click on a link; there is no need to have earned a degree, complete an admission process, or pay tuition or any fees. Hoxby argued that high dropout rates in MOOCs may simply reflect trial and error since the cost of signing up is very small.¹⁶⁸

¹⁶⁸ Paul Diver and Ignacio Martinez, "MOOCs as a Massive Research Laboratory: Opportunities and Challenges," *Distance Education* 36, no. 1 (2015): 5–25.

Chapter 4

Foundations of Distance Learning: Manhattan School of Music

The leading music conservatories that use distance learning never hesitate to cite the Manhattan School of Music (MSM) as the exemplar and pioneer, and the first source to turn to when discussing distance learning.¹⁶⁹ Since 1996 there have been articles published about Pinchas Zukerman's pioneering his performance program at the Manhattan School of Music in a program championed by the current dean of distance learning, Christianne Orto.¹⁷⁰ Distance learning was established at the Manhattan School of Music as a response to faculty members who were traveling or on tour, or who lived in other places, and who expressed a need to maintain contact and continue lessons with their students.¹⁷¹ Other faculty wanted to be able to pursue videoconferencing and class exchanges.¹⁷² Since 1999, an additional benefit of distance learning is virtual outreach, which included partnerships with schools in rural locations that lack music instructors for every possible instrument reaching out to have students work with an instructor at the Manhattan School of Music.¹⁷³ Filling this need for an expert to coach more unique instruments in these rural schools, and using the technology that is readily available in

¹⁶⁹ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

¹⁷⁰ "About Us," Distance Learning @Manhattan School of Music, accessed January 15, 2015, <http://dl.msmnyc.edu/about>.

¹⁷¹ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

¹⁷² Ibid.

¹⁷³ Ibid.

these schools, which are supported by state government programs, seem to be the key factors to making this partnership successful.¹⁷⁴

Zukerman's Performance Program at the Manhattan School of Music is the most prominent example of string distance learning that has been published in the last twenty years.¹⁷⁵ *Strings Magazine* featured an article written by Rory Williams on videoconferencing in which he documented the Zukerman Performance Program at the Manhattan School of Music.¹⁷⁶ As described by Williams, the students apply to study with Zukerman, but they are in-person students of his assistant, Patinka Kopec, and study with Zukerman when he is in town.¹⁷⁷ They have lessons with Zukerman via distance learning when he is on tour, and their online lesson is recorded so they can watch it again later.¹⁷⁸ The prestige of studying with an exclusive teacher like Pinchas Zukerman is no doubt the reason to join this program, but one has to wonder if the distance learning element ever seems to take away from the personal bond one would have with a similarly big-name teacher who is available more often in person? At the time Williams wrote this article, he made it very clear that Zukerman himself had very little understanding of the technology involved.¹⁷⁹ However, this is not an obstacle for any faculty member at the Manhattan School of Music, because they have experienced technological support engineers who help to

¹⁷⁴ Ken Smith, "Virtual Teaching," *Strad Magazine* 107, no. 1277 (1996): 912.

¹⁷⁵ Rory Williams, "Long-Distance Learning: The Benefits of Internet Video," *Strings Magazine* 25, no. 2 (2010): 55–56.

¹⁷⁶ Ibid.

¹⁷⁷ "Pinchas Zukerman Performance Program," Manhattan School of Music, accessed May 15, 2015, <http://www.msmnyc.edu/Instruction-Faculty/Academic-Departments/Pinchas-Zukerman-Performance-Program>.

¹⁷⁸ Ibid.

¹⁷⁹ Ibid.

facilitate the distance learning technology.¹⁸⁰ The *Strad Magazine* did a feature in 1996 that discussed how Zukerman needed this program to allow him to keep his performance and touring schedule, and how he could easily find videoconferencing centers from which to hold his lessons with his students.¹⁸¹

Zukerman said in this article,

“It’s an old Galamian technique of using objectivity and subjectivity,” he says, “except that he used a mirror. What we want to do is to bring students out of themselves. If I tell you to lower your shoulder, that’s subjective; if you can see yourself do it in the mirror, that’s subjective. Seeing yourself on the screen is even more distancing because it’s not a mirror image. Kids this age have been brought up with the screen, so they respond to it immediately. It’s only people between 40 and 60 who have any trouble.”¹⁸²

The Manhattan School of Music mission statement for distance learning is as follows:

Through the development and creative use of broadband videoconferencing and related instructional technologies, Manhattan School of Music Distance Learning provides access to artistic and academic resources that enhance students’ awareness and participation in the musical arts. As the first conservatory in the nation to use videoconferencing technology for music education, Manhattan School of Music features the Distance Learning program to build audiences for the future; preserve and expand our musical heritage; to foster leadership, creativity, and technical innovation in support of new performance and educational opportunities; and to facilitate cross-cultural communication, understanding, and appreciation through music.¹⁸³

The Manhattan School of Music’s distance learning program provides a list of historical highlights with the following timeline. The significance of this timeline provided from the Manhattan School of Music’s website is to show the growth from 1996 to the present and also the significance of the technological advances brought to the program, as well as renowned

¹⁸⁰ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

¹⁸¹ Ken Smith, “Virtual Teaching,” *Strad Magazine* 107, no. 1277 (1996): 912.

¹⁸² Ibid.

¹⁸³ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

pedagogues who were in attendance or participating in the distance learning events. The main themes from the historical highlights emphasize eliminating travel, outreach, the use of Internet2, webcasts, the switch to Polycom, international partnerships, live streaming concerts, and the global conservatory.¹⁸⁴ Further expansion includes digital libraries, virtual music studios, rural outreach, a YouTube channel, and more expansion from more funding.¹⁸⁵

DISTANCE LEARNING PROGRAM HISTORICAL HIGHLIGHTS¹⁸⁶

1996

Manhattan School of Music inaugurates the first-ever music videoconference program at a major United States conservatory. First international videoconference to Paris—Composer Henri Dutilleux appears live from Paris in Borden Auditorium during the New York premiere of his work *Timbres, espaces, mouvement* as performed by the Manhattan School of Music Philharmonia.

1997

Honorary doctorate conferred upon Mstislav Rostropovich and Clark Terry via international videoconference—President Marta Istomin confers honorary doctorates upon Maestro Mstislav Rostropovich and jazz trumpeter Clark Terry live from Evian, France, via videoconference during the seventy-first commencement exercises. Pinchas Zukerman offers master class to Hong Kong for students at the Academy of Performing Arts. Isaac Stern is in attendance.

1998

Creation of Mischa Elman Distance Learning Center to support the growth and development of videoconference music programs and applications. The center joins the aesthetic tradition of a conservatory music studio with twenty-first-century technological capabilities in a one-of-a-kind virtual music studio.

1999

Manhattan School of Music establishes a Distance Learning Partnership with the New York City School system to expand its Arts-in-Education program, Music Teaches, to underserved students in the five boroughs.

2002

Manhattan School of Music becomes affiliate member of Internet2, the national research and education consortium dedicated to creating next-generation Internet applications. “Arts in Education and the Virtual Classroom” becomes the first elective

¹⁸⁴ “About Us,” Distance Learning @Manhattan School of Music, accessed March 14, 2015, <http://dl.msmnyc.edu/about>.

¹⁸⁵ Ibid.

¹⁸⁶ Ibid.

course to offer students comprehensive training in how to design, create, and present interactive educational outreach programs via videoconference to classrooms throughout the United States.

2003

Manhattan School of Music presents first webcast, Zukerman Interactive, featuring Maestro Zukerman conducting an orchestral reading of the Elgar String Serenade, op. 20, with student string chamber orchestra.

2005

Manhattan School of Music collaborates with Polycom to create “Music Mode” videoconferencing technology specifically designed for live music education and interaction.

2006

Manhattan School of Music establishes first-ever US-Chinese music distance learning program with Shanghai Conservatory of Music. Manhattan School of Music constructs fiber-optic network connected to Internet2 via Columbia University. Manhattan School of Music Distance Learning Director receives IDEA Award, Internet2 Driving Exemplary Applications, Interactive Music Education. Manhattan School of Music Distance Learning Program connects to Seoul, South Korea, for first-ever International Student Showcase, with MSM students performing live for their friends and families in Seoul.

2007

Manhattan Connects: An Internet2 conference for New York’s cultural institutions. In collaboration with Internet2, Columbia University, and Nysernet, MSM presents a conference for New York’s cultural institutions on the power and potential of advanced networking for the arts from the William R. and Irene D. Miller Recital Hall.

2008

Manhattan School of Music Distance Learning inaugurates live web streaming of student concerts from the William R. and Irene D. Miller Recital Hall.

2009

Manhattan School of Music Distance Learning Program is named 2009 Computerworld Honors Laureate in an awards ceremony at Mellon Auditorium, Washington, D.C.

2010

Manhattan School of Music Distance Learning launches Global Conservatory, a new initiative aimed at connecting with institutions around the world to engage in group lessons, private instruction, and ensemble coachings, as well as academic and professional seminars, with MSM’s world-renowned faculty. Manhattan School of Music Distance Learning partners with InstantEncore to present a master class with renowned baritone Thomas Hampson as the first live video stream of a classical music event across an iPhone/iPod touch application.

2011

Manhattan School of Music and Polycom build on their decade-long relationship and sign a strategic partnership agreement that, among other important points, expands the Polycom network that powers the Distance Learning Program to reach more students throughout the United States and the world with a broader set of offerings, thereby ensuring that children of all ages are given the opportunity to be exposed to top-notch arts

education despite their socioeconomic status or geographic location. Manhattan School of Music and the Australian National University announce the formation of an international distance learning partnership that sees the formation of a unique relationship using state-of-the-art music videoconferencing facilities and the high-speed networks of Internet2 for one-on-one lessons, master classes, ensemble coachings, professional development sessions, virtual staff and student exchanges, and collaborative research into best practice in music performance and education over long distances. Manhattan School of Music launches a new online digital library that promises instant access to the Distance Learning Program's extensive video archive of all past events, classes, and lessons.

2012

Manhattan School of Music launches the Virtual Music Studio pilot program designed to reach home-based learners via desktop videoconferencing for music.

2013

MSM partners with the Nebraska Arts Council and Educational Service Unit Coordinating Council to create a new distance learning model in which credit-based music instruction is delivered to students throughout the state of Nebraska.

2014

MSM launches its official YouTube channel, featuring seven seasons of Thomas Hampson Voice Master Class video excerpts and receiving nearly twenty-five thousand hits in three months. Coupled with its Facebook and Twitter presence, the Distance Learning Program is now fully engaged in social media.

2014

The Manhattan School of Music Distance Learning Program establishes an endowed fund "The Melos Fund for Distance Learning Innovation at Manhattan School of Music" with a cornerstone gift from the Ervika Foundation.

The Manhattan School of Music had a number of articles written about their K–12 partnerships, including one detailed article about a school in Nebraska that uses Polycom videoconferencing technology, which has high-quality omnidirectional microphones that cut out background noise.¹⁸⁷ In 2013, the Nebraska program had 1,800 individual sessions with the teachers in New York, and the Nebraska state government funded the program.¹⁸⁸ Another article by Josh Moody talked about the importance that these sessions brought to states where there was

¹⁸⁷ Matt McFarland, "The Technology That Helps Band Kids in Rural Nebraska Unlock Their Potential," *Washington Post*, November 15, 2013.

¹⁸⁸ *Ibid.*

more difficulty finding instructors for rare instruments.¹⁸⁹ “What the teachers really like is that they get really high-quality instruction, but they also get help with really hard-to-find lessons,” said Gordon Roethemeyer, a distance learning director with the Educational Service Unit Coordinating Council.¹⁹⁰ Roethemeyer added that often in rural communities, there are few options for students who study certain instruments. “They love to get instruction for the oboe, the French horn, the bassoon, some of those really hard-to-find lessons,” said Roethemeyer.¹⁹¹

Gordon stresses that what makes distance learning master classes so successful at the Manhattan School of Music is the technical support that gives the faculty member the power to control the format, the repertoire, and how many students are heard.¹⁹² The audio and video engineers and the systems engineer all collaborate to make sure all facets of the technology will work out, and this makes the situation much easier for the faculty, who can act as if they are giving a live, synchronous master class.¹⁹³ Another success of distance learning for the faculty members is the opportunity to collaborate and share ideas and students with other members of the distance learning community.¹⁹⁴ The Manhattan School of Music also uses the “distance learning teaching artist” for outreach, which is becoming a vital part of music performance education, and includes master class videoconferencing opportunities throughout the United

¹⁸⁹ Josh Moody, “Distance-Learning Classes Allowing Students to Receive Top-Notch Instruction,” *Kearney Hub*, November 19, 2013.

¹⁹⁰ Ibid.

¹⁹¹ Ibid.

¹⁹² Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

¹⁹³ Ibid.

¹⁹⁴ Ibid.

States.¹⁹⁵ This program has been successful because the students are enthusiastic about teaching, and this is the perfect opportunity for the students to work on these important skills.¹⁹⁶ Gordon made a great point that there can never be collaborative performance over video technology.¹⁹⁷ He stresses that live performance programs are not being replaced by distance learning programs because of this, and distance learning opens the doors for more opportunities for teaching and feedback.¹⁹⁸ Gordon also pointed out that some instruments are better suited for distance learning technology.¹⁹⁹ The way strings resonate and appear on camera works well, whereas trombones, with the overtone series, are more difficult on video to accurately capture the sound.²⁰⁰ In distance learning, many efforts are made to capture a closer visual angle, as well as multiple visual angles, so that the three-dimensional element of teaching is preserved as much as possible.²⁰¹

¹⁹⁵ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

¹⁹⁶ Ibid.

¹⁹⁷ Ibid.

¹⁹⁸ Ibid.

¹⁹⁹ Ibid.

²⁰⁰ Ibid.

²⁰¹ Ibid.

Chapter 5

Royal Danish Academy of Music Research Project

The Royal Danish Academy of Music (RDAM), with Jesper Andersen as program manager, pursued a pedagogical research project with distance learning.²⁰² This project, in collaboration with the Cleveland Institute of Music and the New World Symphony, featured eleven faculty members and sixty students.²⁰³ Also participating were three researchers from Aalborg University alongside a project manager, engineers, and project coordinators.²⁰⁴ From December 2012 to 2013, lessons were documented between professors and students at RDAM and professors and students at the other various institutions, including master classes and joint lessons with the Manhattan School of Music, Northwestern University, and the Lithuanian Academy of Music and Theatre.²⁰⁵ RDAM has a very active YouTube presence and demonstrates their distance learning sessions on YouTube by showing coachings with chamber music groups, uploading lesson clips, and sharing the synchronous possibilities between the students of RDAM and professors at other institutions.²⁰⁶

According to RDAM's website, there were three main assumptions behind this study:²⁰⁷

1. The very small time delay makes simultaneous singing, conducting, and playing along

²⁰² Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²⁰³ "Research Project," The Royal Danish Academy of Music, last modified 2015, accessed April 22, 2015, <http://english.dkdm.dk/International/ProjectsandActivities/DistanceLearning/Research-Project>.

²⁰⁴ Ibid.

²⁰⁵ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²⁰⁶ Ibid.

²⁰⁷ "Research Project," The Royal Danish Academy of Music, last modified 2015, accessed April 22, 2015, <http://english.dkdm.dk/International/ProjectsandActivities/DistanceLearning/Research-Project>.

- impossible.
2. The lack of physical presence.
 3. The possible discomfort of being on air.

The research project was designed to “map out the possibilities for a development of the pedagogical/technical platform for instrumental distance learning.”²⁰⁸ The project featured forty sessions and observations, followed by interviews with the participating students and teachers, and finally reflections and workshops.²⁰⁹ The method was pairing RDAM faculty with the same students from either the New World Symphony or the Cleveland Institute of Music, every two weeks on a regular schedule.²¹⁰ The observation team watched every lesson, and the sessions were recorded for future analysis.²¹¹ Following the lesson, the session was analyzed and suggestions were made on how to improve on the session for the next lesson.²¹² RDAM had the faculty members attend workshops in between sessions to further improve and gather ideas on how to improve their distance teaching. The two outputs from this research project were, first, the “development of the teachers, engineers and student skills and awareness within distance learning” and, second, “scientific papers/presentations presenting the research results on the development of new teaching methods in distance learning.”²¹³ The website shows that the research team included the following:

²⁰⁸ “Research Project,” The Royal Danish Academy of Music, last modified 2015, accessed April 22, 2015, <http://english.dkdm.dk/International/ProjectsandActivities/DistanceLearning/Research-Project>.

²⁰⁹ Ibid.

²¹⁰ Ibid.

²¹¹ Ibid.

²¹² Ibid.

²¹³ Ibid.

Karin Levinsen (Assoc. Prof.), Mie Buhl (Prof.) and Rikke Ørngreen (Assoc. Prof.) from the Faculty of Humanities, Aalborg University, working within IT and Learning in an educational design perspective.

In general, they have a strong interest in digital productions in a multimodal learning perspective, in both a-synchronic and synchronic forms. Their collective research and educational experience within the videoconferencing field includes university level teaching in various formats such as: Supervision (group and individually), class teaching (opponent seminars, dialog based lectures, Q&A, student project presentations, student arranged learning session with supervision), and project and problem based learning.²¹⁴

RDAM has a comprehensive guide that introduces their sixteen faculty members and includes advice for the teacher, the student, and the sound engineer.²¹⁵ Having access to this guide is invaluable as it approaches every possible question that comes up in distance learning situations.

Text from RDM Manual²¹⁶

When working with Distance Learning the experience is, that teaching using Distance Learning technology requires a slightly different way of instruction. This is due to some of the technological challenges that the new technology still faces in example time delay making it difficult to sing or conduct simultaneously with the student playing. The following is a small description of issues that may be addressed when working with Distance Learning.

Time delay

The teacher and student will always experience a delay in the reception—approximately 0.5–1 seconds. This will of course have an effect on the method of teaching as we know it. The delay is similar to the delay experienced when using a cellular phone. Picture and sound will always be synchronized, but very important communication should not be influenced by this delay. However small the time delay is, it is not possible to play together with the student or to sing and conduct the student.

Sound between the two spaces

The sound from the space in which the teacher is teaching and the sound from the space in which the student is present cannot be heard simultaneously. The sound from the student will be lowered when the teacher is giving instructions and the teacher has to speak up to interrupt, when the student is playing. It is of course possible to interrupt each

²¹⁴ “Research Project,” The Royal Danish Academy of Music, last modified 2015, accessed April 22, 2015, <http://english.dkdm.dk/International/ProjectsandActivities/DistanceLearning/Research-Project>.

²¹⁵ “Distance Learning Faculty 2014-2-15,” The Royal Danish Academy of Music, September 2013, accessed April 22, 2015, <http://english.dkdm.dk/~media/Files/Kunst%20og%20udvikling/DL/Faculty%20Presentation%20and%20DL%20-%202013-14.ashx>.

²¹⁶ Ibid.

other and have a “quick” conversation. In general, teacher and student will not notice difficulties with cut-outs during normal verbal communication.

Practical advice to the teacher

1. Please place yourself at a distance from the screen similar to the distance you usually have when teaching. You are not instructing a movie, but a reproduction of the daily work.
2. Do not be surprised by the fact that the classes will seem more intense, and 30 minutes might be sufficient.
3. Note that you *cannot* control the rhythm while the student is playing and you will not be able to play along, sing or conduct.
4. When you want to communicate to the student, you have to wait until you have your student’s attention. The best way to get the student’s attention is to wave your arms. This may affect the communication flow you usually have during your classes. On the other hand you might also enjoy not being interrupted by eager students while instructing.
5. Ignore the eventual image of yourself on the screen. You might view yourself with half a second’s delay, which can seem very distracting.
6. Make sure the student is comfortable with the method by giving him/her the opportunity to let you know if the picture and/or the sound are working well enough. Also make sure to inform the student that he/she should let you know if he/she encounters any problems.

Practical advice to student

1. Do not place yourself too far away from the screen—however the teacher should be able to see your figure.
2. Do not expect any help while playing—there will be no applause or accompaniment. You may experience your performance as if it is more of a performance[*sic*].
3. If you wish to comment on any of the instructions, you should get your teachers attentions [*sic*] by either waving your arms or by facial expressions—or wait until the teacher has finished his/her instruction.
4. Forget all about being recorded and focus on the music. Ignore it, if you see yourself on the screen—the image will be delayed and it will affect both the flow in the teaching and your concentration.
5. If you experience any problems with the sound or image it is important that you inform the teacher right away.

Due to these special conditions the classes may take on a different form than the ordinary classes. The rhythm between the student and the teacher will be slowed down, but the Distance Learning method opens up for reflection.

Practical advice to the technician

1. In the beginning of every class the camera should be turned to shoot the entire room, so both the teacher and student will know who else are [*sic*] present in the room. This approach will affect both the atmosphere and the mutual understanding of the new method.

2. The technician should start out by welcoming the participants, while trying to make them comfortable with the situation. In this situation relevant questions could be: “Are you comfortable?”, “Does the light bother you?”, “Do you prefer sitting or standing?”—It’s important that the musicians are comfortable while playing.
3. Make sure to do the sound check before the classes begins. It is important that the technician underlines the significance of the test, so the participants will understand its importance.
4. Another important requirement is that the teacher can see the student’s facial expressions. Therefore the setting of the light is important—especially for singers. Too much light or not enough light on the face will influence the way the teacher perceives the students facial expressions. The teacher has to be able to see the singer’s entire figure, so he can see every movement of the body.
5. The sound image should be genuine (and not manipulated in any way by the technician).
6. Keep an online communication with the other side in order to make continuous adjustments.

Andersen discussed a few points about the project and his hopes for distance learning.²¹⁷

He described the history of distance learning at RDAM as follows:

We started investigating the possibilities in November 2009. In May 2010, we had a research trip to the Manhattan School of Music and looked more into technology after that. In January 2011, we bought our first Polycom codec and started a small research/development project for our teachers in March 2011. In August 2011, that project culminated in a small conference, where Adrian Daly and Eric Bower attended.²¹⁸

RDAM participates in the Global Audition Preparation Program, which was started by the Manhattan School of Music and is in partnership with the Cleveland Institute of Music.²¹⁹ They regularly have fifteen teachers and fifty students participating during the academic year.²²⁰

Andersen says that there is no pressure put on teachers to participate, and he does not see any

²¹⁷ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

²¹⁸ Ibid.

²¹⁹ “About Us,” Distance Learning @Manhattan School of Music, accessed January 15, 2015, <http://dl.msmnyc.edu/about>.

²²⁰ “Distance Learning Faculty 2014-2-15,” The Royal Danish Academy of Music, September 2013, accessed April 22, 2015, <http://english.dkdm.dk/~media/Files/Kunst%20og%20udvikling/DL/Faculty%20Presentation%20and%20DL%20-%202013-14.ashx>.

generational gap in the participating teachers.²²¹ Instead, it is up to the teachers' personal preference whether or not they participate.²²² Another point Andersen makes is that technology is a huge factor in distance learning:

We try to make sure that when we talk about distance learning, it is always concerning a very high-quality Polycom or LOLA session, so there is never any doubt about the quality of what we are doing. For that reason, we do not support things like Skype sessions in our distance learning studio, even though it sometimes could be convenient for meetings and so on.²²³

Andersen noted that distance learning is not mentioned in their curriculum, yet it functions as a special and rare way of having lessons.²²⁴ Although many students at RDAM are becoming very actively involved in distance learning, he foresees that in the future it will become more of a common element in the curriculum.²²⁵ Finally, in response to a question about distance learning in non-higher-education settings, he responded with a very interesting statement:

It is our and our researchers' experience that instrumental distance learning works very well for expert-level teaching. But for lessons on a lower level and especially for children, the technical barrier is too big. Yes, I have a very strong opinion against the type of teaching that you mention (e.g., Skype teaching or YouTube teaching). I think that for distance learning to work, the demands of the pedagogical skills of the teacher and the personal relation between the teacher and student are even more important. I think that sessions like that as well as YouTube videos can work very well for inspirational inputs, but for a long-term teacher/student relationship to work, you will need something else.²²⁶

²²¹ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

²²² Ibid.

²²³ Ibid.

²²⁴ Ibid.

²²⁵ Ibid.

²²⁶ Ibid.

The research project results contained eight distinct findings, with each one linked to a YouTube video. The findings were that students are more active and reflective, physical contact is replaced by verbalization, visual opportunities are expanded, and the teaching room plays a new role.²²⁷ Also, visual expression is of great importance, new teaching forms can be developed, there is increased attention to pedagogical issues, and the technician is involved in the learning situation.²²⁸

Andersen says in the results video that he knows that some of these findings are obvious or should be reflective of the feelings people have about this project.²²⁹ The important point is that these findings are supported by the research project, and therefore the differences from in-person lessons are worth noting. The research was qualitative with interviews and feedback about distance learning.²³⁰ Andersen stated that there was no real use for quantitative research for the academy, and instead their focus was to raise awareness and the skills of the faculty at the academy.

Each session in this study was conducted with a premeeting for the teacher and researcher, then the first lesson where the student could comment in writing about the video recording, and then the teacher and the researcher would view the video recording together.²³¹ The second lesson was a Skype interview with the student, and again, the teacher and researcher

²²⁷ “Research Findings,” The Royal Danish Academy of Music, accessed April 22, 2015, <http://english.dkdm.dk/International/ProjectsandActivities/DistanceLearning/ResearchFindings>.

²²⁸ Ibid.

²²⁹ Jesper Andersen, “Distance Learning in Higher Education: Research Project Results,” accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²³⁰ Ibid.

²³¹ Ibid.

would meet.²³² The third lesson had a pretalk and debriefing interview with the engineer, with another meeting with the teacher and researcher.²³³ Finally, the last lesson for these observations was held with a pretalk and a debriefing.²³⁴ Alongside the distance learning, the researchers would also observe the teachers teaching in-person lessons, which allowed them to make comparisons of the teaching as enacted in person versus through distance learning.²³⁵ This study also allowed for a discussion of teaching methods and approaches.

In the presentation, Andersen states that the student participants claim there is no difference between distance learning and being in the same room with the teacher, similar to a master class.²³⁶ But the teachers say there is a difference, and distance learning is not as good as conventional learning.²³⁷ Andersen states that the teachers were the ones who felt the difference. In the presentation, he talks about the five stages of taking lessons, which are reproduction, production, perception, interpretation, and reflection.²³⁸ In distance learning the balance point between the five points changes, which of course is dependent on the teacher and the instrument.²³⁹ The interaction between the teacher and student can vary greatly based on the

²³² Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²³³ Ibid.

²³⁴ Ibid.

²³⁵ Ibid.

²³⁶ Ibid.

²³⁷ Ibid.

²³⁸ Ibid.

²³⁹ Ibid.

student's "hyperfocus."²⁴⁰ The distance learning experience requires more effort and focus, and the teacher has to be superfocused on the verbalization of the lesson and less on the physicality or other forms of teaching.²⁴¹ Andersen says in the presentation that distance learning can feel like an exposed master class, as all the focus is on the student and the student has to figure out solutions on their own, versus having a teacher physically fix a "problem."²⁴² In this research project, it was obvious that the stakes were very high, and Andersen pointed out that he was very aware of the pressure this added to the teacher and student.²⁴³

Andersen noted that each instrument has its own differences based on the physicality of the instrument, which creates its own challenges between distance learning and in-person lessons.²⁴⁴ He talks about how cellists are more stationary than singers, and therefore the images transmit more clearly because of less physical movement.²⁴⁵ Andersen said he noticed less of a generational gap than expected in the teachers' participation and in their comfort in front of the video camera.²⁴⁶ He said it was the personality of the teacher that influenced the experience, similar to a teacher giving a master class; the dynamic of the teacher and their personality is what was notable from observing the sessions.²⁴⁷ He also talked about the student participants' comfort

²⁴⁰ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²⁴¹ Ibid.

²⁴² Ibid.

²⁴³ Ibid.

²⁴⁴ Ibid.

²⁴⁵ Ibid.

²⁴⁶ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

²⁴⁷ Ibid.

in live performance and how they reacted to being in front of a crowd, which was another factor to be aware of about this experience.²⁴⁸

Andersen clearly pointed out the pros and cons of the research project in his presentation, which was very helpful despite his statement that some of the observations were perhaps obvious points. The cons he listed of the distance learning project were that the teacher and student are not able to play together, there is no bodily physical contact, it is harder to have eye contact, and there are staging restrictions.²⁴⁹ Andersen made the point that for the participants there is the distinct difference of looking at the camera, which is usually above the screen, versus looking right at the screen where the image of the other participant is projected.²⁵⁰ What was explained about staging is that it can be restrictive and feel impersonal.²⁵¹ Staging includes elements like the lights being very bright and multiple cameras, which is not a normal situation for most lessons and feels perhaps more like a performance than the lesson that it was.²⁵² Sometimes even the clothing color worn on camera matters, because it affects the image projection on the screen.²⁵³ This would matter for instruments where the physicality is more important, such as with a bow arm, or perhaps even black clothing blending into a piano and therefore making it harder to see the details of the student playing.²⁵⁴ Participants noted that how they looked on

²⁴⁸ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²⁴⁹ Ibid.

²⁵⁰ Ibid.

²⁵¹ Ibid.

²⁵² Ibid.

²⁵³ Ibid.

²⁵⁴ Ibid.

camera could be dramatically different from their in-person appearance.²⁵⁵ Finally, Andersen talked about the personality that comes from physically being inside a teacher's studio, and how that has an influence on how both the teacher and student feel.²⁵⁶ Elements like being able to retrieve books quickly in person, or the sense of history and warmth projected by a teacher's studio are all influential elements in pedagogy.

Andersen also talked about the advantages that the researchers and participants reported in distance learning: heightened concentration and focus, empowerment of students, realization of new teaching forms, and enhanced collaboration.²⁵⁷ He talked about how helpful it was for teachers to observe other teachers and learn from each other. Also, distance learning helped to enhance collaboration between teacher colleagues from different schools without distance being an issue.²⁵⁸ An additional benefit was that each session was recorded, and therefore students could go back and review their sessions at any point after their lessons took place.²⁵⁹

The Royal Danish Academy of Music has a series of interview videos available on YouTube that reinforce the topics brought up in the YouTube presentation as well as the findings, which are reported on the website.²⁶⁰ Andersen acknowledges the difference in doing this type of research study between scientific publications and distance learning as it takes place

²⁵⁵ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²⁵⁶ Ibid.

²⁵⁷ Ibid.

²⁵⁸ Ibid.

²⁵⁹ Ibid.

²⁶⁰ "Research Findings," The Royal Danish Academy of Music, accessed April 22, 2015, <http://english.dkdm.dk/International/ProjectsandActivities/DistanceLearning/ResearchFindings>.

in the music world.²⁶¹ Therefore, they look forward to more research being done and more publicity brought to this topic.²⁶² The more experiences these distance learning collaborative schools share, the hope is that this will promote more growth in distance learning programs in music.²⁶³ Hopefully this will also become a catalyst for a larger collection of video archives of distance learning to be created in the future.

²⁶¹ Jesper Andersen, “Distance Learning in Higher Education: Research Project Results,” accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

²⁶² Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

²⁶³ Ibid.

Chapter 6

Distance Learning Leaders in the United States: Cleveland Institute of Music and New World Symphony

Cleveland Institute of Music

An aspect of distance learning that is unique to the Cleveland Institute of Music and the New World Symphony is their partnership with the Global Institute in partnership with the Royal Danish Academy of Music. The Cleveland Institute of Music (CIM) started their distance learning program in 1998 with funding from the state of Ohio.²⁶⁴ According to Director Greg Howe, “Ohio was looking for people to create content to be delivered by videoconference into schools and said there was funding available. Eleanor Holt, who was director of community outreach, thought it was an interesting idea and sold it as an experiment to the senior management.”²⁶⁵ At CIM, students and faculty participate in interactive videoconferencing, which means that sessions happen in real time, and both groups can see and hear the other immediately.²⁶⁶ Howe describes CIM’s history and some of the technology used as follows:

CIM started doing IVC (interactive videoconferences) with K–12 schools thanks to the grant of funds from Ohio. The systems back then were pretty good, but optimized only for talking. High and low frequencies got dropped or compressed. Network bandwidth (at that time it was on phone lines that were very expensive) was very limited. Our early experiments with IVC for conservatory music performance teaching were awful. Freezing video as someone bows quickly, high frequencies gone or distorted, low frequencies amplified into noise. It wasn’t until about 2005, when IVC was migrating onto devices that used computer networks, that the audio reproduction improved and available bandwidth became broader and less expensive. The Polycom corporation, whose founder is an audio engineer, created “live music mode” with the main collaboration of Christianne Orto at Manhattan and us as a junior “reality check” partner. That invention completely changed the game.

²⁶⁴ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

²⁶⁵ Ibid.

²⁶⁶ Ibid.

Now there is a multiplicity of solutions available. Polycom's is still the best, but other companies are finding ways to do it cheaper and on diverse platforms.²⁶⁷

Howe states that most faculty are interested, but at CIM the participation is very generational.²⁶⁸ All professors and pedagogues at CIM seem to understand distance learning, but they do not think it is as good as being in the same room as the student.²⁶⁹ Howe acknowledged "that for teachers when using IVC devices with acoustic instruments and teachers who are used to hearing the inner voices of instruments, you lose much of the deeper nuance of playing an instrument."²⁷⁰ He further stated, "We're really good at this; but our microphones and audio reproduction will never be as good as their ears."²⁷¹ He also mentioned that many faculty members do attempt to do IVC from their homes, but the truth is that IVC with fancy software is very hard to do correctly from someone's home.²⁷²

A success for CIM is their K–12 educational program where they bring interactive videoconferencing into the classrooms. They aim to create a unique experience for their students and have a program open to all students, with the goal of promoting an interest in music and creating opportunities to bring music to students who may not be exposed to classical music.²⁷³ For example, it is possible that hearing an oboe student from CIM through IVC is the first and

²⁶⁷ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

²⁶⁸ Ibid.

²⁶⁹ Ibid.

²⁷⁰ Ibid.

²⁷¹ Ibid.

²⁷² Ibid.

²⁷³ Ibid.

only experience the student will ever have of hearing an oboe and learning how it works.²⁷⁴

The K–12 program helps to fund the distance learning program, which exists largely on grants.²⁷⁵

Welsh showcases a story about a viola student who studied with Jeffery Irvine, professor of viola at CIM, weekly from her home state of Washington for two years through distance learning before matriculating as an undergraduate at CIM.²⁷⁶ Previously the student was commuting up to seven hours on a weekly basis to study with a teacher, but because she was so serious about going to a conservatory, it was suggested that she try distance learning in order to experience a higher level of teaching.²⁷⁷ Howe commented that it still takes equal or more dedication and commitment from the distance learning student to show up at the appropriate location with the right technology to take lessons as for an in-person lesson.²⁷⁸ Howe also noted that Professor Irvine’s biggest surprise after finally meeting this student in person was how much better her instrument sounded in person.²⁷⁹ To be a part of the distance learning prep program, students pay the same fees and enroll as if they are in-person students with CIM prep.²⁸⁰ At the conservatory level, all students must attend CIM and live in Cleveland.²⁸¹ Therefore, distance learning at CIM

²⁷⁴ Sarah Welsh, “The Pros & Cons of Long-Distance Learning,” *Strings Magazine* 27, no. 2 (2012): 61–62.

²⁷⁵ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

²⁷⁶ Sarah Welsh, “The Pros & Cons of Long-Distance Learning,” *Strings Magazine* 27, no. 2 (2012): 61–62.

²⁷⁷ Ibid.

²⁷⁸ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

²⁷⁹ Ibid.

²⁸⁰ Ibid.

²⁸¹ Ibid.

includes both conservatory and preparatory students and enhances their experiences to provide opportunities with other faculty from schools around the world.

New World Symphony

The New World Symphony located in Miami Beach, Florida, is a training orchestra with a purpose:

Dedicated to the artistic, personal and professional development of outstanding instrumentalists. The NWS fellowship program provides top graduates of music programs the opportunity to enhance their musical education with the finest professional training. A laboratory for musical education and expression, the New World Symphony, through a wide range of performance and instructional activities, seeks to develop in participants the full complement of skills and qualifications required of twenty-first century first class musicians. Under the artistic direction of Michael Tilson Thomas, the program offers in-depth exposure to traditional and modern repertoire, with the active involvement of leading guest conductors, soloists and coaches. The relationships with these artists are extended through NWS' pioneering experimentation with distance learning via Internet2.²⁸²

According to Justin Triegeer, the New World Symphony's first experiments with Internet2 happened in the early 2000s due to interest from the artistic operations staff and their artistic director Michael Tilson Thomas.²⁸³ The New World Symphony, because of its extensive use of distance learning, has had one staff member dedicated to distance learning for the last ten years.²⁸⁴ The New World Symphony has conducted over one hundred distance learning projects each year.²⁸⁵ Triegeer speculates that the reason there is not much press about distance learning is because of the rigorous technical demands for high-level distance learning sessions, which

²⁸² "New World Center: Home of NWS," New World Center: Home of NWS, accessed February 18, 2015, <http://www.newworldcenter.com/HomeOfNWS.aspx>.

²⁸³ Justin Triegeer, interview by author, Miami, FL, February 18, 2015.

²⁸⁴ Ibid.

²⁸⁵ Ibid.

therefore do not allow it to be used commercially.²⁸⁶ He says that eventually if the technological requirements are lowered to work with commodity Internet, then distance learning may become more prevalent.²⁸⁷

What is especially successful about the New World Symphony's distance learning program is that in addition to their orchestral training, because they do not have in-house faculty, they instead offer their eighty-five fellows opportunities to continue their personal development by calling on visiting faculty members, former teachers, and top symphony and orchestral musicians to connect and teach classes and master classes on a weekly basis through distance learning.²⁸⁸ Trieiger says, "The broad consensus is that it's not as good as in-person teaching, but it works quite effectively."²⁸⁹ It does speak to the useful nature of distance learning because both the teacher and the student in these situations can supplement their daily occupations with this type of learning, and it does not affect a symphony job. New World Symphony fellows are obviously at a high level of mastery in their performance abilities. This, coupled with being graduates of leading conservatories, means that fellows are already comfortable with master classes, and therefore can adapt readily to the differences that video teaching can offer, and benefit from having the opportunity for performance and feedback.²⁹⁰ Trieiger talks about how important the technology a program uses is, mentioning how with better technology there is less delay. He also mentions that with continuing improvement in higher-quality audio and higher-

²⁸⁶ Justin Trieiger, interview by author, Miami, FL, February 18, 2015.

²⁸⁷ Ibid.

²⁸⁸ "New World Center: Home of NWS," New World Center: Home of NWS, accessed February 18, 2015, <http://www.newworldcenter.com/HomeOfNWS.aspx>.

²⁸⁹ Justin Trieiger, interview by author, Miami, FL, February 18, 2015.

²⁹⁰ Ibid.

definition visuals, the experience of distance learning will continue to get better for everyone.

The New World Symphony measures the “success” of their program by the level of interest and by the number of students who utilize the video opportunities.²⁹¹ Trieger says, “We see distance learning as a complement to traditional teaching, which is to say it’s neither distinct nor the same.”²⁹² Also, the strongest reason for having distance learning is “access to knowledge anywhere in the world.”²⁹³

Another benefit of distance learning for the New World Symphony is the way it allows global access to their program and spreads both awareness and publicity about the symphony and the fellows through their connections to the world.²⁹⁴ Distance learning showcases the talent of the fellows and therefore acts as the best kind of publicity for the products of the orchestra.²⁹⁵ Additionally it is important to point out that the New World Symphony is one of the pioneers in using video as part of performance to engage the audience.²⁹⁶ They do not hesitate to explore the ideas of using visual accompaniment added to the traditional symphony experience.

Many American symphony orchestras are pursuing the reality that in order to engage a more diverse audience, publicity from social media and visual media work really well to connect the audience to a more engaged experience and are necessary to keep the orchestral experience

²⁹¹ Justin Trieger, interview by author, Miami, FL, February 18, 2015.

²⁹² Ibid.

²⁹³ Ibid.

²⁹⁴ Ibid.

²⁹⁵ Ibid.

²⁹⁶ Ibid.

alive.²⁹⁷ The New World Symphony is constantly promoting engaging experiences like “New World Symphony WALLCAST™ concerts which allow you to experience select events throughout the season at Miami Beach SoundScape through a striking use of visual and audio technology on a soaring, 7,000-square-foot projection wall.”²⁹⁸ Wallcast has twelve concerts that are presented in this way, combining large projection screens with a picnic experience, therefore combining the formal and the casual in symphonic experiences.²⁹⁹ Additionally they champion media projects, and their websites feature “hangouts” with members of the orchestra divided up by instrument.³⁰⁰ These hangouts are very casual, like an online conversation between a couple of orchestra members and students of all ages.³⁰¹ They videoconference in a conversation to talk about relevant issues to orchestral musicians, such as auditions, practicing, and performing.³⁰² This type of technology taps into a familiar form of communication that younger generations of musicians and students use, and shows how age and experience have no bearing on the comfort of bonding over a common interest.³⁰³ Also, to reiterate Trieger’s earlier point, the best publicity for the New World Symphony is having their musicians engage with audiences of all levels

²⁹⁷ Erica Miner, “Orchestras ‘Going Social’: A Comparison across the Atlantic,” *Bachtrack*, accessed May 25, 2015, <http://bachtrack.com/social-media-orchestras-article>.

²⁹⁸ “Wallcast Concerts,” New World Symphony, accessed February 18, 2015, <http://www.nws.edu/Wallcasts.aspx>.

²⁹⁹ *Ibid.*

³⁰⁰ “Virtual Hangout Series,” New World Symphony, accessed February 18, 2015, <http://www.nws.edu/VirtualHangouts.aspx>.

³⁰¹ *Ibid.*

³⁰² *Ibid.*

³⁰³ *Ibid.*

through all means of technology in order to sell their brand.³⁰⁴

³⁰⁴ Justin Trieger, interview by author, Miami, FL, February 18, 2015.

Conclusion

Documenting the current state of distance learning in higher education and therefore the implicit challenges of distance learning in general education is important because it is a topic that is becoming increasingly relevant to instrumental instruction and will be a learning method that we should expect to see grow in the future. There is no doubt that distance learning has and will continue to have a strong influence on the future of one-on-one string instruction and traditional pedagogy. To question how it will affect one-on-one instrumental instruction is important because we as pedagogues want to have control over what happens to the future of our field. Distance learning is occurring at many different levels, and the Royal Danish Academy of Music's research study provides an honest look into the questions and concerns that might come up for anyone approaching distance learning for the first time.³⁰⁵ The researchers have thought through all variables simple to complex, and therefore taking the time to understand the study can also allow for more awareness and acceptance of the expansions possible in distance learning.³⁰⁶ The directors of distance learning at the Manhattan School of Music, the Cleveland Institute, and the Royal Danish Academy of Music have created collaborative relationships both personally and with their schools, and they are excited about growing these projects to a wider level both in the United States and globally.³⁰⁷ Similarly, the New World Symphony provides post-higher-education distance learning experiences that take advantage of the symphony's

³⁰⁵ Jesper Andersen, "Distance Learning in Higher Education: Research Project Results," accessed April 22, 2015, <https://www.youtube.com/watch?v=uknyr0z3FoM>.

³⁰⁶ Ibid.

³⁰⁷ Gregory Howe, interview by author, Cleveland, OH, February 13, 2015.

strong connections to music schools, conservatories, and symphony orchestras and expands the possibilities of distance learning technology from a symphonic orchestra perspective.³⁰⁸

The concerns and criticisms I have about distance learning are at the general education learning level. General education music enthusiasts are hoping that free Internet content is interchangeable with traditional one-on-one pedagogy. My hope is that some of the ideas that are addressed in the examination of these case studies can help guide pedagogues to understand what currently exists, where change can happen, and what to expect in the future. Since the idea of distance learning done through the home is so popular and appealing, musicians at all levels need to understand the positive aspects, but also the limitations of learning an instrument through the Internet.³⁰⁹ Some distance learning experts say that we should encourage any form of distance learning because it still promotes music and the arts, and anything is better than nothing.³¹⁰ Although that point may be true, consumers need to understand on a greater level what results to expect from this type of teaching.³¹¹

What this paper does not explore is the financial details behind distance learning, and how tuition-paying students should have different expectations from informal distance learning because of tuition and affiliation with a major university compared to someone learning from home for free. In higher education, distance learning students are still taught by a major teacher in their instrument, and in-person guidance is still there, so this form of distance learning simply

³⁰⁸ Justin Triegeer, interview by author, Miami, FL, February 18, 2015.

³⁰⁹ Robin Kay Deverich, "Distance Education Strategies for Strings: A Framework of Violin Instruction for Adult Amateurs" (DMA diss., University of Southern California, 1998).

³¹⁰ Justin Triegeer, interview by author, Miami, FL, February 18, 2015.

³¹¹ Ibid.

provides an additional opportunity for performance and learning for the student.³¹² I did not get into the details with my survey of how teachers are compensated for distance learning teaching and projects, and whether it falls into a paid or unpaid endeavor. Another challenging question is how distance learning is compensated (value-wise) compared to in-person teaching, and whether it adequately values the pedagogue's time and experience. Also, I did not challenge if distance learning is a cost-saving initiative for institutes of higher learning, and if so, what this may reflect in future budget decisions concerning music instruction. Issues of ownership of material and property are another controversial element of distance learning, and another consideration that has to be explored, including its ethical connotations.

The largest takeaway from this paper is that traditional pedagogy, along with the history and legacy that pedagogues bring to teaching, especially in strings, is something that should be cherished and hopefully will never be lost.³¹³ Technology has allowed us to preserve this legacy and archive these inspiring moments.³¹⁴ Traditional one-on-one lessons are the ideal, and the relationship between teacher and student is one that is sacred, and therefore one that does not have to be replaced.³¹⁵ However, there is great hope for distance learning positively expanding on the ideal methods of instrumental teaching, as was reinforced by the Royal Danish Academy of Music study. With proper guidance, distance learning can really be an asset to the future of higher education pedagogy.³¹⁶ I still have reservations despite the evidence that suggests the

³¹² Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

³¹³ Gabriel Gordon, interview by author, New York, NY, October 14, 2014.

³¹⁴ Ibid.

³¹⁵ Ibid.

³¹⁶ Jesper Andersen, interview by author, Frederiksberg, Denmark, April 22, 2015.

power distance learning can have for higher education students. So much is dependent on the pedagogue and their personality that at all levels of string instruction, the consumer must be vigilant and constantly evaluating the result to see if there is growth in the student's playing. Hopefully this paper will spark an interest in continuing the conversation about distance learning and inspire more pedagogues to take an active approach to understanding how this technology will influence our futures.

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