

Transitioning From Traditional To Online Piano Lessons: Perceptions Of Students, Parents And Teacher

A New Frontier In Teaching

In recent years, there has been an increase in the number of individuals offering online music lessons. With the advent of free video conferencing platforms such as *Skype*, *Face-Time* and *Google Hangouts*, teachers are finding ways to eliminate the barrier of distance and offer their pedagogical services to populations beyond their local areas.¹ One-on-one piano lessons are forming a large part of this trend. A basic set up for this type of lesson includes a laptop or tablet device, a webcam, microphone and speaker (the latter three items could be external equipment or built in to the devices) available at both the student and teacher locations. This arrangement allows the teacher and student to hear and see each other play and speak. Other technology has been developed attempting to recreate the learning environment of the traditional lesson with greater accuracy. Digital keyboards, Musical Instrument Digital Interface (MIDI) programs and Disklavier pianos can provide opportunities for an enhanced online lesson setting.² Nevertheless, a number of the teach-

ers who offer lessons online continue to use the basic setup due to financial constraints and the preference for students to play on acoustic pianos rather than digital keyboards.

Related Research

There have been a number of researchers who have examined the issues surrounding one-on-one online music lessons. K. Shoemaker and G. van Stam conducted an investigation that is most closely related to the objectives of this current study. Shoemaker served as the teacher. She provided piano instruction from a location in suburban North America to two students in Zambia through the use of synchronous (real-time lessons) and asynchronous (recorded videos) forms of communication. A combination of real-time lessons and pre-recorded videos were used as part of the learning experience for the students. In addition to the video conferencing software and other accessories, the instruments used were digital pianos and the software program, *Internet MIDI*. The study concluded that a combination of synchron-

ous and asynchronous modes proved to be a more effective learning experience rather than using each mode on its own. However, the study was inconvenienced with an unreliable Internet connection on the students' end that affected the real-time lessons.³

Researchers have looked at the benefits and challenges of teaching students at the collegiate level and whether it might be possible to offer online music lessons in higher education. N.B. Kruse, S.C. Harlos, R.M. Callahan and M.L. Herring conducted a study related to collegiate-level piano lessons over *Skype* involving one graduate piano student and one instructor. A number of further questions surfaced as a result of this exploratory investigation.⁴ Another study by R. Dammers investigated the possibilities of teaching trumpet lessons via videoconferencing using a basic setup. The one student involved had a musical background but had never engaged in trumpet instruction before. A number of advantages and challenges surrounding this online lesson environment were identified. However, due to the Internet connection and equipment limitations, the author concluded that online lessons were functional; though not a replacement for in-person les-

sons.⁵ Other researchers compared the use of time between online and in-person lessons. Although only one saxophone and two tuba students were involved, the researchers completed extensive data analyses. They identified trends and patterns in a number of non-verbal behaviors.⁶ There has also been an investigation regarding how online piano instruction affects the acquisition of sight-reading skills.⁷ Digital pianos, acoustic pianos and MIDI software were used. Pamela D. Pike also wrote an article about her journey related to incorporating online lessons into her teaching portfolio.⁸ She chronicled the milestones that occurred as she taught one student by *Skype*. The teacher and student started lessons on two digital pianos and then moved to two Disklaviers, a luxury not available to all teachers. In another recent study, the behaviors of six middle school-aged band students and three instructors were examined during online music lessons.⁹ This lesson setting has also been employed in the teaching of Indian classical music. Since notation is not a common feature of this non-Western tradition, the author J. Roy looked at how the use of technology affects learning with aurally based instruction.¹⁰

Other scholars have looked at the use of specific types of online resources and other technological tools to see if they can improve the learning experience for students. J. Brook and R. Uptis investigated whether an online tool can help students develop self-regulatory behaviors. They discovered that a web-based electronic portfolio, called ISCORE, helped students take ownership of their learning outcomes and development.¹¹ R. Cremata and B. Powell observed that students who used online tools such as *Synthesia* software, YouTube videos recorded by a professional music teacher and *eMedia* software were able to reach a level of mastery for their assigned skills faster than those students who had only traditional paper notation as a resource. They also discovered that the students who used the online tools had a higher level of retention seven days after they initially learned the skills.¹² Another study explored the possibility that a synchronous online teaching internship could help instructors increase their pedagogical aptitude. Through her investigation, Pike discovered that this type of internship helped the teachers increase their diagnostic techniques, problem-solving skills and explanations for their students. She also noticed the students involved took greater ownership of their learning trajectories.¹³

To this date, there has yet to be an investigation about online piano lessons involving the following combination: acoustic instruments, a basic setup of technological equipment and young, pre-college piano students. A scan of the advertisements offering online piano lessons quickly reveals that this type of setup is the most prevalent for students and teachers. This niche is as an area worth exploring since it is a common arrangement for online lessons.

Purpose Of This Study And Rationale

This study tracked the perceptions and attitudes related to the piano study of five young students (under 18), their parents and their teacher (myself) as we transitioned from traditional in-person lessons to synchronous online lessons using the basic set up of a lap-

top or tablet device, webcam, microphone and speaker. Although the practice of online lessons has been gaining significant momentum, there is still apprehension as to whether this learning environment can be considered a replacement for the traditional lesson setting. The absence of physical interaction, the sound quality and the inability to see the student play from different angles are all elements of contention.¹⁴ The purpose of this study was to gain first-hand insight regarding how the students and their teacher dealt with these limitations and adapted lesson behaviors as we transitioned to synchronous online lessons using a basic set up with strong Internet connections.

Methodology

I served as the teacher in this exploratory case study providing a unique internal view for this project. The students who participated in the project had already studied with me in the traditional lesson setting for a significant period of time, ranging from four to nine years. A strong sense of trust developed between the students, parents and myself that helped create an environment for honest and open responses between all parties. Additionally, this study reflected the objective of action research. It has been noted that one of the main purposes of this type of project is to "improve the quality of professional practice."¹⁵ The small sample group of five students is not unusual in this type of exploratory study. The research reports listed earlier all involved sample groups of nine or fewer students. Participants were chosen based on purposeful sampling strategies: criterion-based case selection and self-study.¹⁶

Five students, four sets of parents (two students are siblings) and I were involved in this study. Since this project required the involvement of children, the study received IRB approval. Parental consent was required and student assent was obtained. Parents were also asked to be present for the online lessons to help set up the laptop or tablet device and observe the interaction between the student and teacher.

Data Collection

The collection of data took place in three stages and in the following forms:

1. Prior to the start of online lessons
 - a. Interviews with students and parents
 - b. Written journals by the teacher
 - c. Review of past lesson notes, e-mail correspondence with parents
 - d. Review of external written evaluations
2. During the course of online lessons
 - a. Surveys completed by students and parents
 - b. Written journals by the teacher
 - c. Video recordings of the lessons
3. After completion of online lessons
 - a. Interviews with students and parents
 - b. Review of external written evaluations

Prior to the commencement of lessons, I interviewed the students and parents inquiring about their views regarding the traditional lesson setting. I also reflected and wrote a journal on my experience teaching these specific students. It was important to complete this portion of the data collection before the online lessons began so the impressions of the students, parents and teacher were not affected by the new lesson set up. Since human recollection can sometimes be uncertain and selective, I also consulted the copious lesson notes I took at each student's traditional lesson from previous years. Additionally, e-mail correspondence was a significant part of the communication between myself and the parents of the students during the years that lessons took place. Finally, each student participated in events that resulted in written evaluations by external individuals; these include music examinations, competitions and festivals. The compilation of these four sources of data (recollections through interviews and self-reflection, lesson notes, e-mail correspondence and external evaluations) served as the body of data for the traditional, in-person lessons.

After recollections of the students, parents and teacher were recorded, the students and I engaged in weekly piano lessons taught online through *Skype* or *FaceTime*, using fast Internet connections. Each student received a total of 15 lessons (free of charge) over the span of five months. A basic set up was used. For each party (student and teacher), this included a laptop or tablet device, a webcam, microphone and speaker—the setup used by many teachers who offer lessons online. Lessons were recorded so they could be reviewed at a later date. After each lesson, the students and parents completed a survey, and I wrote a journal entry to record my impressions of the lessons and the student's progress. Interviews were also conducted with the students and parents at the conclusion of the five-month lesson period. Also, most of the students participated in external evaluations, similar to the assessments during their traditional lessons.

Upon completion of the five months of online lessons, data were analyzed and common threads were identified. Since the author (myself) was also a subject in the research project (serving as the teacher), a number of strategies were used to uphold internal validity. These approaches included triangulation, member checks, long-term observation, peer examination and clarification of the researcher's biases.¹⁷

Student Participants And Teacher Profile

To provide perspective and a point of reference, a profile was created for each student prior to the commencement of online lessons. The students chose their own pseudonyms to protect their identities. I have also included a brief synopsis regarding my background. Information was gained through the review of external evaluations from previous competitions and examinations as well as the lesson notes I have written for each student on a weekly basis. These two sources provided reliable indicators of each student's progress throughout the years during in-person lessons. Additionally, as the teacher, I also reflected on my impressions of each student and my experience teaching all of them.

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Teacher Profile

BM, MM and DMA in piano performance; specialized in pedagogy during doctoral degree
 14 years experience teaching in-person private lessons to pre-college students
 No experience with online teaching in the synchronous or asynchronous format

Student Profiles

Student	Age	Length of Piano Study	Work Ethic	Progress in Lessons	Performance Experience	Previous External Evaluations
Bobbie	9	3 years with present teacher	<ul style="list-style-type: none"> » Has matured a lot this past year » Concentration span has increased significantly 	<ul style="list-style-type: none"> » Quiet student » I have to read non-verbal cues to determine his feelings and comprehension level 	<ul style="list-style-type: none"> » Gives accurate renditions of repertoire » Starting to play with greater musicality 	<ul style="list-style-type: none"> » Comments and grades reflect consistent performances » Could pay more attention to details
Gabrielle	10	3 years with present teacher; 2 years with another teacher	<ul style="list-style-type: none"> » Hard worker » Motivated to practice » Persistent drive to excel 	<ul style="list-style-type: none"> » Absorbs a significant amount of material quickly 	<ul style="list-style-type: none"> » Gets nervous prior to performances but usually always does well 	<ul style="list-style-type: none"> » Judges have complemented her ability to capture the character or mood of the piece
Jenuel	11	7 years with present teacher	<ul style="list-style-type: none"> » Accurately and conscientiously attends to the details of lesson assignments 	<ul style="list-style-type: none"> » Consistent progress each week » Accomplishes a lot in each lesson » Very quiet student; hardly speaks 	<ul style="list-style-type: none"> » Gives solid and confident performances » Playing style not flashy » Expression is more internalized 	<ul style="list-style-type: none"> » Adjudicators complement her reliable and secure playing, however, grades are low; this could mean that although playing is accurate and appropriately musical, it lacks a certain performance spark
Georgia	14	3 years with present teacher; 2 years with another teacher	<ul style="list-style-type: none"> » Has a very busy schedule so practice is minimal 	<ul style="list-style-type: none"> » Obedient student; a pleasure to work with; comments and suggestions are often repeated 	<ul style="list-style-type: none"> » Always ensures she completes the required work to give a competent performance 	<ul style="list-style-type: none"> » Has not participated in external evaluations

(cont.)

Student	Age	Length of Piano Study	Work Ethic	Progress in Lessons	Performance Experience	Previous External Evaluations
Amber	17	9 years with present teacher	<ul style="list-style-type: none"> » Challenging to motivate but if she is enthusiastic, a lot can be accomplished » Needs time to absorb, internalize and memorize repertoire 	<ul style="list-style-type: none"> » In her early years of lessons, progress was inconsistent » Since deciding three years ago that she wants to study music in university, her motivation levels and rate of progress have increased. However, there are still times when lots of encouragement is needed. » If she practices, we can get a significant amount of work accomplished 	<ul style="list-style-type: none"> » Musical student » Strong sense of rhythm and a steady pulse » Sensitive; responds well to nuance in phrase shaping » Gets <u>very</u> nervous when performing in public 	<ul style="list-style-type: none"> » Received compliments regarding her musicality

Perceptions Prior To The Start Of Online Lessons

Students

In general, I found all students had a very open and optimistic attitude toward the start of online lessons. All participants were between ages 9 and 17 during the study, so they were very comfortable with the use of technology since they grew up with it. Bobbie, Jenuel and Georgia all thought they would have the same level of motivation while taking online lessons, while Amber and Gabrielle anticipated they would be even more enthusiastic. The latter two students

expected they would practice more to make up for the shortcomings brought on by the online lessons. When the students were asked what they looked forward to the most with online lessons, all participants responded saying they liked the fact that they could continue on with their lessons but did not have to change to a different teacher. Jenuel stated she had no worries or reservations regarding the commencement of online lessons. The other students expressed concern about the visual aspect of the lesson.

In terms of anticipating how online lessons will be the same as in-person lessons, the

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students cited that since the teacher would be the same, many of the factors would also remain unchanged. The main difference identified by the participants was the lack of physical contact. In general, the younger

students expected the new mode of lessons would be harder while the older students anticipated the online lessons would only be a little harder than the in-person lessons they were used to.

Perception	Sample of Students' Comments
Students were looking forward to online lessons	<p>Amber—"I'm looking forward to gaining an understanding of having lessons online and trying something new!"</p> <p>Gabrielle—"I'm happy that I can still see my teacher."</p> <p>Georgia—"I want to get back into the swing of normal piano lessons. I'm looking forward to seeing how well I adapt."</p>
Concerns about online lessons	<p>Georgia—"I'm worried about the visual aspect. Will I be able to see the keys? Will the teacher be able to see my hands and what I'm doing properly?"</p> <p>Amber—"I'm nervous about not grasping a certain section of a piece as quick as I can in traditional lessons. We won't have the same connection as in person. I'm worried that my computer will act up."</p>
Anticipated similarities with in-person lessons	<p>Georgia—"The explanations my teacher gives will still be the same."</p> <p>Amber—"The whole process of learning a piece will be the same (just not the physical part). We'll still be able to count, clap rhythms, sing."</p>
Anticipated differences with in-person lessons	<p>Georgia—"The teacher won't be right beside me showing me what to do. It will be more verbal."</p> <p>Bobbie—"The teacher won't be able to take my hand and show me what to do."</p> <p>Amber—"There will be no physical contact. I won't be able to say, 'I got this at home' anymore because I'll already be at home!"</p> <p>Gabrielle—"My teacher will be far away and she won't be able to demonstrate things for me."</p>

Parents

Just like their children, all the parents involved in this project were optimistic, open-minded and excited about the prospect of online lessons. Generally, they had no reservations toward online lessons. They expected the same type of feedback, consistency, structure and method of teaching with online lessons. Many went as far to say they expected the same results—meaning their children would make the same amount

of progress as with in-person lessons. They did not anticipate many differences and any variances were seen in a positive light. The parents also anticipated the online lessons would be a little harder than the in-person mode but that it would get easier for the students as time went on. Most of them believed their children would be more motivated with online lessons. However, Amber's father stated she might be less motivated since she would not have to face the teacher in person.

Perception	Parents' Comments
Optimism toward online lessons	<p>Parents of Bobbie and Jenuel—"Looking forward to them becoming more responsible and independent. It's more challenging."</p> <p>Parents of Georgia—"We're looking forward to a different type of delivery that will perhaps help her prepare for post-secondary education."</p> <p>Parents of Amber—"We're looking forward to having the same teacher. We are familiar with her and we have already established a rapport."</p> <p>Parents of Gabrielle—"It will be a challenge but I think it's a good opportunity for her to search for her own initiative and her own way to learn by herself. It might be more time consuming but it's a challenge for her to be more productive, responsible, more creative in her own way. It's something new and cool for us too!"</p>
Concerns about online lessons	<p>Parents of Bobbie, Jenuel, Georgia, Gabrielle—No concerns</p> <p>Parents of Amber—"How long will it take to get the same result/response [Amber's progress]? Will it happen right away or not? What about electronic failure?"</p>
Anticipated similarities with in-person lessons	<p>Parents of Bobbie and Jenuel—"Same teacher, same method of teaching."</p> <p>Parents of Georgia—"The feedback, consistency, structure will be the same."</p> <p>Parents of Amber—"We anticipate the results will be the same over the long run."</p>
Anticipated differences with in-person lessons	<p>Parents of Bobbie and Jenuel—"We don't anticipate anything will be different."</p> <p>Parents of Georgia—"It will be nice for her to have the lesson recording and look back and refer to it during the week."</p> <p>Parents of Amber—"There will be a physical distance but perhaps this will strengthen the relationship between teacher and student even more."</p> <p>Parents of Gabrielle—"With traditional lessons, it's easier to see progress more quickly. Progress will happen for online lessons but there will be a different timing."</p>

Teacher

The prospect of teaching online lessons was very exciting for me. I never had the experience before, and with the rising popularity and prominence of this new lesson format, I was eager to see what it would be like. Additionally, I was also anticipating that my verbal explanations when teaching would need to be refined to impart my message to the student clearly. With the lack of the physical and tactile approach, I was hoping I could use the opportunity to improve my

other mediums of communication. However, the absence of being physically present with the student also brought me some apprehension. I have noticed that to help students understand the use of arm weight, their bodies and the concept of flow (both physically and musically), I rely quite heavily on physically manipulating their playing apparatus. I frequently adjust the positioning of their elbows, wrists and arms as they play through phrases, and I may also gently refer to points on their back so they understand how they are to

engage muscles in those areas. I was aware that I cannot do this during online lessons, and I was worried students would not understand what they would have to do physically since they would only rely on what they saw on the screen and my verbal explanations. I was also concerned they might develop tension in certain parts of their bodies while playing. They may look relaxed, free and supple on the screen, but I was not sure if I would be getting the whole picture since I would not be present in person. I was also anxious that I may not be as efficient when teaching through the online medium and that explanations would take a longer period of time. Due to these concerns, I anticipated teaching online would be more of a challenge for me than teaching in person.

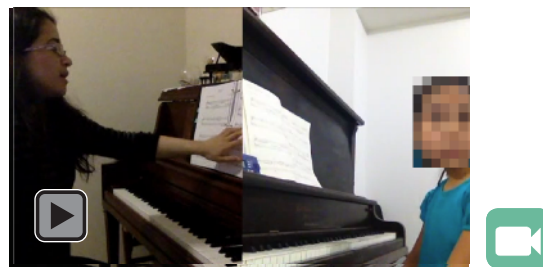
At the time, I anticipated the students would be more motivated to practice so they would be more prepared for lessons and help make up for some of the limitations we would encounter. As I prepared for the project, I thought about what would be the similarities and differences between the two mediums of teaching. Although I felt like I would be facing some challenges, I was reassured by the fact that I would likely be able to maintain the same rapport with the students since it had already been established with them for many years. Also, I would still be able to verbally provide explanations, which is often the dominant form of communication in lessons. I anticipated the most striking differences for me would be the fact that I would not be able to coach by gesture, physically adjust the student's playing apparatus or write in the student's score. Additionally, the students might not be able to hear me breathe, a factor in helping them learn about phrasing. I was mindful of the fact that both the student and I would need to be more patient as we experimented with the new lesson format.

It should be noted that I was very careful not to let my students and their parents know about my concerns about online lessons. I did not want to influence their views and expectations in any way.

Perceptions During The Course Of Synchronous Online Lessons Students

In general, all students maintained a positive mindset toward their new lesson setting but were still very mindful of the challenges that stood in their way. They felt they were settling in and feeling relatively comfortable with online instruction by week 3—about the same time I was exhibiting signs of increased confidence with my online teaching skills. They usually understood what they needed to work on. The two younger students, Bobbie and Gabrielle stated that they practiced somewhat more than they did with in-person lessons and Jenuel and Georgia said they practiced about the same amount as they did before. Unfortunately, Amber was practicing somewhat less than she did in the past. Nevertheless, all participants believed they could still increase their practice time to help ease the transition to online lessons.

When asked what aspect was the easiest to adapt to, they all cited the fact that they were able to annotate their scores effortlessly.



This excerpt demonstrates Gabrielle's ability to annotate a score with ease and efficiency.

The participants also indicated they could follow the teacher's directions with ease. They stated that the convenience of staying home, saving time from commuting and continuing lessons with the same teacher were the most advantageous aspects of online lessons. The factors identified as the most significant drawbacks were the lack of the teacher's physical presence to help guide their playing apparatus and the sound delay associated with the video conferencing platforms. They also missed that I could not count, play or sing along while they played.

All students except Georgia prepared for public performances in evaluative settings during this 15-week period. Amber was getting ready for university auditions and Bobbie, Gabrielle and Jenuel were preparing for two competitive festivals. In the few weeks leading up to their assessments, Gabrielle, Jenuel and Amber felt more prepared than Bobbie. Jenuel expressed concern that she had not played on a grand piano for quite some time

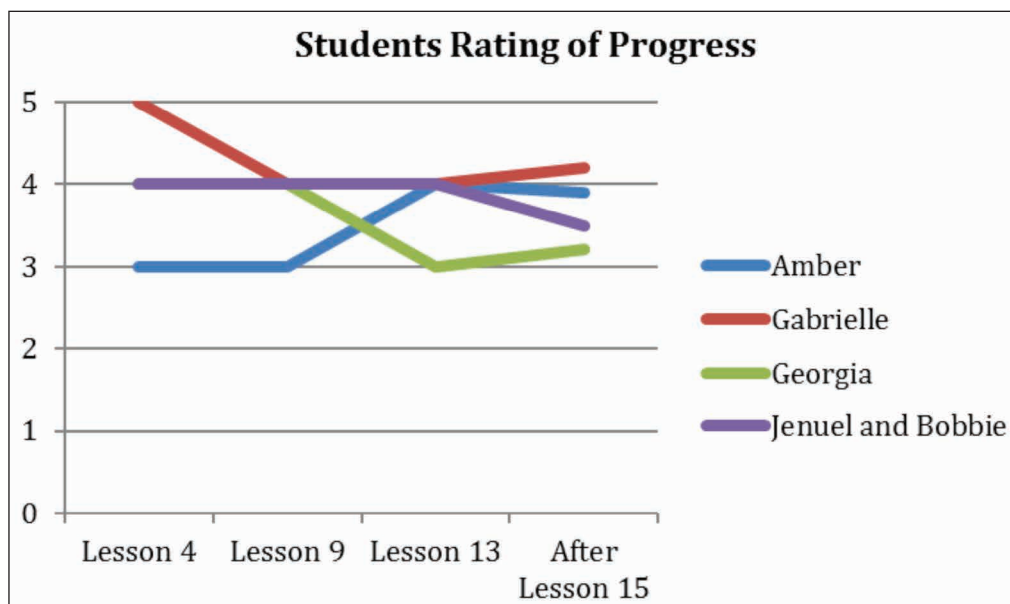
and Bobbie did not feel like he was playing as musically as he had in the past.

After lessons 11 and 12, all students responded to different hypothetical scenarios regarding returning to in-person lessons or continuing with the online format. Their responses are recorded in the chart below and demonstrate that most students were concerned about the teacher they would be working with rather than the lesson format.

Student	Switch back to in-person lessons with same teacher	Switch back to in-person lessons with different teacher	Online lessons with same teacher	Online lessons with different teacher
Bobbie	Yes	No	Yes	No
Gabrielle	Yes	Maybe	Yes	Maybe
Jenuel	Yes	No	Yes	No
Georgia	Maybe	No	Maybe	No
Amber	Maybe	No	Yes	No

Throughout the series of lessons, the students were asked to rank their level of progress on a scale of 1 to 5 with the higher value indicating they have made significant prog-

ress and the lowest value citing they made no progress. The results are summarized in the chart below.



With this graph, one can see that although the students seemed optimistic and satisfied with the quality of lessons through their qualitative responses, by the end of their

online lessons, most ranked their level of progress as only average or slightly higher than average.

Parents

For the most part, parents had very similar views about online lessons as their children. They all maintained an optimistic attitude toward the new format of piano study. Many did not notice a huge difference between online and in-person lessons, although they did note that the biggest drawback was the lack of the teacher's physical presence to help guide the students' hands and arms while playing. They also identified technological problems as a potential downside. However, they were equally eager to point out the main advantage: they no longer had to drive their child to another location for lessons—a significant convenience. Gabrielle's mother also noted that her child was developing the ability to learn in a more resourceful and patient way. Also, contrary to the students' opinion, the parents did not think the teacher's inability to count, play or sing along with the student's playing (because of the sound delay) hindered the quality of the lessons.

Amber's parents occasionally cited some concern that there was less of a personal touch with online lessons. Their responses regarding her motivation to practice as well as her overall progress might be linked to the fact that she was missing that connection. All parents felt that their children had a role in making sure the online lessons were successful, no matter their age. If a parent felt his/her child was not making significant progress, it was because the student was not practicing enough.

Teacher

Once we commenced with online lessons, I could tell that both the students and I needed some time to adjust to the new format. At times, I felt rather self-conscious of the camera and my explanations became a bit stilted. I was also unsure about how I would break down a concept or suggestion for a student based on the fact that I could only explain, ask questions and demonstrate. However, by the third week of lessons, I was feeling quite comfortable with the new set up. I quickly saw how I was able to make better use of the lesson time. Since the students were ready at

the piano with their scores, a pencil and their metronome when I called, we were able to start right away with only a few seconds of chitchat. With in-person lessons, sometimes the transition between students can eat away at lesson time (or make the teacher's schedule late). I found I could easily see the students' choice of fingering and make the appropriate suggestions. Throughout the 15 weeks of lessons, all five students made significant progress with gaining independence or at least finally coming to the conclusion that they need to become more self-reliant to succeed with online lessons. They took greater ownership of their work and understood that the amount of work they chose to do determined the final outcome. By the fourth week of lessons, each student was able to annotate his/her own score correctly, with my instructions. I could also see a noticeable improvement with reading skills, especially with Bobbie and Georgia. Since I was not physically present to point out notes in the score, they realized they would have to do it on their own. As the weeks went by, I could see that the effects of technological problems (for example, inconsistency of sound, spotty service) were actually mitigated if the student was better prepared; since we were both not experiencing frustration with poor playing, we were able to persevere and continue with the lesson's progress. Also, several of the students (Bobbie, Jenuel and Gabrielle) took advantage of the fact that all lessons were recorded and reviewed the footage every week. This definitely assisted them with their daily practice between our weekly sessions.

Quality Of Sound

The quality of sound was certainly an issue, and I believe it hindered the progress of each lesson. Although all parties used a service that provided a high internet speed, the quality of sound was still not at the level I needed to gain an accurate picture of each student's tone production. It was also difficult to judge how well the students were observing dynamic contrasts and shaping. To help mitigate these issues, I asked parents to record their child playing their pieces and

send the files to me prior to lessons so I could hear a more accurate representation of their sound quality and then provide feedback in the lesson. This helped to some extent but was not a perfect solution. The delay in sound also posed a significant impediment because I could not play along, sing or count while a student was playing. I find that this is often an important aspect of teaching. Certain concepts regarding phrasing and rubato are difficult to describe verbally. Students need to experience the timing of these expressive tools, and sometimes the only way to do that is with the teacher playing alongside. As we neared the end of the 15-week term of lessons, I also found I missed coaching the student while he/she was playing. With in-person lessons, very often, I could sing along while the student was playing and verbalize reminders regarding dynamics, tempo changes and the like. I found I could not do this with online lessons due to the sound delay and the fact that the students could not hear my voice through the speakers while they were playing at the piano. They would have to stop playing to hear me speak.



In this lesson excerpt, you can see how my instinct to count and sing while Bobbie is playing is inhibited by the sound delay. I am trying to help him play with more of a steady beat. I have often been able to impart the message by singing along while a student is playing. However, due to the sound delay, this is not possible.

Instilling Rhythmic Precision

I found it difficult to imbue a sense of rhythmic incisiveness and drive through the online medium. It was also tricky to help a student feel a steady beat. Normally, I would gently tap on the students' shoulder while they are playing or take them away from the piano and help them stomp their feet or swing their arms with a steady beat while singing the melody

from the repertoire. Since I cannot do that through video conferencing, I would resort to using verbal description, reminding the student of how the steady beat would feel when we had our in-person lessons.



In this clip, I struggle to explain to Jenuel how she can achieve greater rhythmic precision to improve her integration of the hands.

Lack Of Physical Presence

The lack of physical presence was definitely another concern for me. I truly missed not being able to guide the students' arms, elbows, wrists and hands so they could play in a more efficient way. Also, I think they were able to absorb certain instructions when I was able to demonstrate right in front of them, in person. However, this made me start to think I was using my tactile approach as a pedagogical crutch. Taking away that one aspect forced me to rethink how I might improve my didactic approaches and explanations. I do not think I was able to successfully identify areas of physical tension as students played. I was able to comment on posture (position of feet, back alignment, relaxed shoulders, hand shape and to some extent, position of arms and elbows). However, I did not notice that Amber was experiencing tension in her arms until she told me they were hurting whenever she played one specific piece.

Rapport With Students

Although I thought I was able to maintain a suitable rapport with each student, there were times when I noticed I was not able to match the same emotional connection I was able to achieve during in-person lessons. For example, as the weeks went by and we were closer to the competitive festival, I asked Gabrielle how she was feeling about her upcoming performances. I inquired because I knew

she often got nervous before performing in public. In the past, I thought I was able to successfully alleviate some of her anxious feelings by giving her a hug. Although we were able to talk about her emotions over the videoconferencing platform, I did not believe I was as effective since her face did not display the same look of relief as in the past. Another situation associated with making an appropriate emotional connection relates to Amber. Even during our in-person lessons, I have always found it a challenge to motivate her to practice. Every year, we would have serious discussions about why she would need to change her attitude toward daily practice and develop an internal sense of motivation. As we would get closer to her public performances, she would eventually realize the severity of the situation, practice intensively and be fully prepared. During the course of our online lessons, we still had those same serious discussions but they did not have the same impact as before. Amber never truly understood how ill-prepared she was for her upcoming university auditions for music programs.

At the conclusion of the 15-week term of lessons, I had the opportunity to hear Bobbie, Jenuel and Gabrielle play in person during an intimate master class setting. This was before they performed their pieces at the competitive festival. I observed that they were not projecting their sound as well as they had been in the past. Also, I was not entirely pleased with their quality of tone—it was not quite what I was expecting based on what I heard in our online lessons. Their performances were also a bit shaky—I could see their memory skills and confidence levels were a bit insecure. Perhaps this was because

they had not played in front of people for some time since we did not have studio recitals with the online lessons. However, we had a mini master class while I was physically present, and they were able to adapt quickly and regain their quality of tone.

Reflections After Synchronous Online Lessons

A few weeks after our online lessons concluded, all parties were asked to reflect on the experience. This gap of time provided the opportunity for the students, parents and me to look back on the lessons through a more objective lens, resulting in more open and varying responses.

Students

All participants believed they made at least some amount of progress. Those who ranked their accomplishments at a higher level (Jenuel and Gabrielle) said they became more independent and acknowledged that they practiced more. Those who ranked their progress at a slightly lower level admitted their progress was directly related to their reduced amount of practice.

The students identified the same benefits and drawbacks associated with the online format as they did during the course of the lessons. However, Bobbie commented that it was harder to learn a new piece. Amber added that it was difficult to remember when she had a lesson since she just had to stay at home.

All students said they would prefer to go back to in-person lessons, but they would continue with online lessons if the same teacher was involved.

Perception	Students' Comments
Level of perceived progress	<p><i>Gabrielle—"I made up for the fact that my teacher wasn't physically with me—like when she shows me how much arm weight I need to use. Now I have to do that myself."</i></p> <p><i>Jenuel—"I became more independent."</i></p> <p><i>Bobbie felt his progress was less significant because he "played one less piece than last year."</i></p> <p><i>Georgia—"I could have practiced more."</i></p> <p><i>Amber—"I don't think I hit rock bottom. I didn't hit the top potential."</i></p>
Effect on performances	<p><i>Gabrielle—"My teacher described how to make things more musical and with dynamics...so that helped me to play my pieces with more musicality."</i></p> <p><i>Bobbie—"I was less confident playing in festival because it was hard to adjust to online lessons and I wasn't sure if I was doing it right."</i></p> <p><i>Jenuel—"I was more confident because I was more independent."</i></p> <p><i>Amber—"I felt less prepared than I have in the past. I felt nervous but that comes naturally. If I motivated myself more, the outcomes could have become different."</i></p>

Parents

When asked whether or not their children made progress with the online lessons, the parents had differing views. However, all of them concluded that the best part about online lessons was the aspect of convenience.

Transitioning From Traditional To Online Piano Lessons

Perception	Parents' Comments
Level of perceived progress	<p>Parents of Bobbie and Jenuel—"They became more independent. They became more responsible and had to figure out more things on their own."</p> <p>Parents of Gabrielle—"Her progress was so-so. We can see the progress more with in-person lessons."</p> <p>Parents of Georgia—"She maintained her piano skills. Her online lessons helped to continue the foundational skills for her in-person jazz lessons."</p> <p>Parents of Amber—"Progress came in the form of realizing that she needed to organize her time better and that she's responsible for her outcomes."</p>
Benefits of online lessons	<p>Parents of Gabrielle—"She was able to self-manage lessons."</p>
Drawbacks of online lessons	<p>Parents of Bobbie and Jenuel—"Lessons were on our piano. It's old so the sound wasn't that good. Also, the student can't hear the teacher talk while he/she is playing."</p> <p>Parents of Gabrielle—"Sound delay. She has to wait before playing so that the teacher's explanation is complete. The quality of sound was also not that good."</p> <p>Parents of Amber—"Too many distractions at home. We missed the personal touch. Lessons felt more sterile. She didn't cry in Skype lessons. The teacher couldn't really look her in the eye and push the buttons that needed to be pushed. We were essentially sitting in on lessons, even if we were on the other side of the house. It made lessons more casual, which isn't necessary a good thing."</p>
Effect on performances	<p>Parents of Bobbie—"The online lessons might have negatively affected him since he wasn't always sure if he was playing steady, playing the right way, etc."</p> <p>Parents of Jenuel—"We don't think online lessons negatively affected her. Maybe it's because she's more mature and can handle new things."</p> <p>Parents of Gabrielle—"She has become more responsible and is taking ownership for her own learning. She was more nervous for festival this year. She wasn't used to playing on a grand piano."</p> <p>Parents of Amber—"She has realized she is lacking certain skills especially the self-discipline. On the positive side, she was starting to develop those self-discipline skills towards the end of the term of online lessons."</p>

Teacher

In general, I felt that adjusting to the new online format posed a challenge at the beginning of the 15-week session. After three or four weeks, I gained a comfort level with each student in the new setting and was comfortable with working on the rudimentary elements of their repertoire and technical exercises, such as accuracy of notes, rhythm, finding the appropriate tempo and basic dynamic levels. However, as the students gained a better understanding of their pieces, I found it more difficult to help them play with greater expression, tone colors and finesse to polish their performances.

I do not think any student met their full potential during this period of time since it was difficult for me to make high-quality observations and effectively communicate suggestions regarding their tone quality. Since I could not hear the actual sound they were making, and they could not hear the actual sound I wanted them to achieve, a gap in comprehension evolved. Nevertheless, comparing the students' level of progress and achievement, I believe the rate of success was proportionally the same as previous in-person lessons. For example, Jenuel and Gabrielle have generally exhibited consistent and high-level progress due to their solid work ethic, and this continued with their online lessons. Bobbie also made a comparable amount of improvement. As stated in her student profile, it has always been a challenge for me to motivate Amber to practice; this continued during this project but in a more magnified way. Georgia has limited time for practice due to her busy schedule and this continued with the new lesson format, yielding similar results for her success level.

The external evaluations related to their public performances confirmed my opinions. Jenuel received many compliments from the evaluators, however, she was told her rhythmic direction and phrasing could be more pronounced. Additionally, she was not chosen to receive any scholarships or trophies for her overall performance in the festivals, suggesting that she was still lacking that special performance spark. Bobbie received com-

ments encouraging him to focus on more of the musical details. Amber was moderately successful with her auditions. She received an offer to a music program, but it was not her first choice of school. Nevertheless, she is happy that she will be able to pursue her musical goals at the post-secondary level. Gabrielle received excellent comments from the adjudicators with a good amount of constructive criticism. She received a scholarship for her overall performance at one festival.

Findings, Discussion And Conclusions

The experience of teaching synchronous online lessons for an extended period of time has been an excellent learning opportunity for my students, their parents and me. Some students found it easier to adapt than others, but I believe all participants kept an open mind and positive outlook throughout the duration of the project. I was also able to perceive a sense of thoughtfulness and seriousness from all participants as they answered the survey and interview questions. As a result, a number of implications can be drawn from this exploratory case study:

1. The choice of teacher is really the number-one factor for students and parents and overshadows the effectiveness of the lesson environment. I found that the students and parents were more than willing to cope with all the drawbacks associated with online lessons, even if it was clear their level of success was not as high as with in-person lessons. Some of the students' responses alluded to the fact that they had a strong emotional attachment to the teacher and this may have strengthened their resolve to stay with the same teacher through online lessons.
2. Students need to be intrinsically motivated. Since the lack of the teacher's physical presence inevitably creates a different learning environment, students need to possess the resolve and determination to practice consistently throughout the week to heighten their preparation for lessons. This was especially noticeable in Amber's situation.

3. Through online lessons, students can learn to be even more independent and resourceful. This common theme was noted in the observations of the students and parents throughout the lessons. This finding concurs with the conclusion that Brook and Uptis, Cremata and Powell and Pike discovered in their studies. They determined that online tools and other technological aids can help students absorb material more efficiently and develop their self-regulatory skills.
 4. I found I had to frequently verbalize my musical suggestions far more than providing demonstrations for the students. This caused them to really internalize what they had to do at the piano and gave them a concrete description of the artistic intentions (as indicated by Gabrielle). As a result, they had something tangible to think about during their public performances.
 5. I can see that after more experience and investigation, and with certain types of students, I can make online lessons a successful learning environment. However, I am not sure how I would teach beginners using this format. The lack of physical presence would become an obstacle for developing a rapport with the student, teaching them how to use their bodies in an efficient manner that does not create tension and possibly fostering hand-eye coordination.
 6. Online lessons can provide teachers with the opportunity to strengthen and refine certain areas of their pedagogical approach including verbal explanations and diagnostic skills. Teachers using videoconferencing platforms need to have a keen ear and eye to spot problems and inconsistencies quickly. Their descriptions also need to be very precise to impart the correct message. Through this experience, I discovered that I heavily rely on the tactile approach while teaching. Although this can be one method for providing instruction, I can still improve my verbal explanations. This helped confirm the results identified by Pike in her study that examined an online teaching internship.
 7. It appears there can still be an emotional and personal disconnect between the student and teacher during online lessons. Non-verbal cues may be elusive, resulting in different expectations and impressions. As seen in the case of Amber, our "serious conversations" were not as effective as in the in-person lessons.
 8. Regardless of the lesson setting, the thoughts and views of the students, parents and teacher can be aligned but also strikingly different. It is very important that all lines of communication are open so all three parties can be satisfied. This was quite noticeable in the discrepancy between the opinions of the students and parents during the course of online lessons: the students regretted that I could not coach them simultaneously while they were playing. The parents did not see this as a hindrance in the lesson quality.
 9. It remains unclear whether tone quality can adequately be addressed in these types of online lessons. Based on the setup used in this study, it was difficult for the teacher and students to evaluate quality of sound.
- This study examined the experiences of a small set of students and their parents taught by an instructor who is new to this lesson setting. While the results of this exploratory project cannot be considered conclusive due to the small focus group, future studies involving a greater number of students would elicit more decisive findings. Since a number of individuals have been offering online lessons for several years now, it would be useful to examine their pedagogical practices to determine the effectiveness of this lesson format. As more teachers gain extensive insight regarding the phenomenon of online teaching, greater attention will shine light on refining the art of instruction with this new format. The potential of extending high-quality

ity teaching to an even greater number of students is a thrilling prospect for the world of piano pedagogy.

Notes

1. P.D. Pike & K. Shoemaker, "Online Piano Lessons: A Teacher's Journey Into An Emerging 21st-Century Virtual Teaching Environment," *American Music Teacher*, 65 (1) (2015): 12–16; C. Saint Louis, "With enough bandwidth, many join the band," *The International New York Times* (New York, NY), Jan. 10, 2012; E. Sussman, "Virtual Instruction: A look inside the growing field of online music lessons," *School Band & Orchestra*, 17 (4) (2014), 34–38.
2. MIDI programs allow different electronic instruments and computers to connect and interchange messages. An example of a MIDI program used in an online private lesson would be "Internet MIDI," which connects two MIDI instruments over the internet. A Disklavier piano is an instrument manufactured by the Yamaha company. It is an acoustic piano that incorporates technology, allowing it to connect with a MIDI interface and thereby another MIDI instrument or computer.
3. K. Shoemaker & G. van Stam, "e-Piano, A case of music education via e-learning in rural Zambia," *Web Science Conference*, Raleigh, NC, USA, April 26–27, 2010
4. N.B. Kruse, S.C. Harlos, R.M. Callahan and M.L. Herring, "Skype music lessons in the academy: Intersections of music education, applied music and technology," *Journal of Music, Technology & Education*, 6 (1) (2013): 43–60.
5. R. Dammers, "Utilizing internet-based videoconferencing for instrumental music lessons," *UPDATE: Applications of Research in Music Education*, 28 (1) (2009): 17–24.
6. E.K. Orman & J.A. Whitaker, "Time usage during face-to-face and synchronous distance music lessons," *American Journal of Distance Education*, 24 (2) (2010): 92–103.
7. P.D. Pike & K. Shoemaker, "The effect of distance learning on acquisition of piano sight-reading skills," *Journal of Music, Technology & Education*, 6 (2) (2013): 147–162.
8. Pike & Shoemaker, "Online Piano Lessons: A Teacher's Journey Into An Emerging 21st-Century Virtual Teaching Environment," 12–16.

9. K. Dye, "Student and instructor behaviors in online music lessons: An exploratory study," *International Journal of Music Education*, 34 (2) (2016): 161–170.

10. J. Roy, "The Internet Guru: Online Pedagogy in Indian Classical Music Traditions," *Asian Music*, 47 (1) (2016): 103–135.

11. J. Brook & R. Uptis, "Can an online tool support contemporary independent music teaching," *Music Education Research*, 17 (1) (2015): 34–47.

12. R. Cremata & B. Powell, "Digitally mediated keyboard learning: Speed of mastery, level of retention and student perspectives," *Journal of Music, Technology & Education*, 9 (2) (2016): 145–159.

13. P. Pike, "Using a synchronous online teaching internship to develop pedagogical skills and explore teacher identity: A case study," *Journal of Music, Technology & Education*, 8 (3) (2015): 227–242.

14. M. Ajero, "Random Access: Helping Out Piano Students Online," *American Music Teacher*, 64 (1) (2014): 45–57.

15. H. Altrichter, A. Feldman, P. Posch and B. Somekh, *Teachers investigate their work* (2nd ed.) (London & New York: Routledge, 2008).

16. M. Patton, *Qualitative Research & Evaluation Methods* (4th ed.) (Los Angeles: Sage, 2015), 264–267.

17. S. B. Merriam, *Qualitative Research and Case Study Applications in Education* (2nd ed.) (San Francisco: Jossey Bass, 1998); S. Mathison, "Why Triangulate?" *Educational Researcher*, 17 (2) (1988): 13–17.

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