RISKS AND REWARDS OF INDIVIDUAL ONLINE MUSIC LESSONS: TEACHERS' PERSPECTIVES

Running head: Teacher Perspectives of Individual Online Music Lessons

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When the coronavirus pandemic compelled national lockdowns and physical distancing protocols, music teachers turned to synchronous online teaching out of necessity. Formal and informal teacher groups shared information about teaching online through platforms such as online discussion boards, Facebook, and webinars, but anecdotal evidence suggests that many teachers were not following best practices of online teaching, nor did all students and teachers have access to high-quality Internet.

This article reports findings from a regional survey and highlights two cases (drawn from the larger survey sample) that explore teacher experiences and perceptions of instructing instrumental and vocal music online in one American state. Teachers were surveyed and subsets of two groups were interviewed: teachers who successfully adapted to online instruction and teachers who returned to face-to-face teaching during the pandemic. Following triangulation of the data, constant comparison was used to identify themes within and across cases. A representative case from each group is highlighted. Both groups reported that more physical exhaustion and preparation time was required for online lessons. Online teachers demonstrated flexibility, growth mindsets, and changed teaching philosophies. Teaching adaptations included changes in lesson preparation, planning, activities, scheduling, and pacing during lessons. Inability to adapt to the online teaching medium was unrelated to teaching experience or age. We discuss positive and negative implications of the findings with respect to musical training in tertiary institutions.

KEY WORDS: growth mindset, instrumental teaching, online music pedagogy, online teacher preparation, synchronous online instruction

1. INTRODUCTION AND BACKGROUND

1.1 Before the Pandemic

National and international professional music organizations do not track online teaching; thus, it is difficult to ascertain how many teachers conducted synchronous online instrumental and vocal lessons before the coronavirus pandemic. Due to the relatively small number of published articles on the topic, we assume that only a small number of teachers were exploring online teaching practice. Although relatively nascent, some music researchers did report about online instrumental music teaching (e.g., King et al., 2019a).

Since 2009, much of the published research on synchronous online instrumental teaching has focused on precollege teaching practice. Most of the research explored and reported on the following general categories: viability, possibilities, and practicalities associated with online teaching (Duffy and Healy, 2017; King et al., 2019b; Kruse et al., 2013; Pike and Shoemaker, 2013); behaviors and differences (or similarities) observed between online and face-to-face (F2F) lessons (Dammers, 2009; King et al., 2019a); and teacher and student behaviors during online applied lessons (Comeau et al., 2019; Orman and Whitaker, 2010; Pike, 2020b). Throughout the past decade of research into online music instruction, an often-cited benefit of online music study was the ability to bring high-quality music instruction to students living in remote areas and to those without access to specialized tutors for their particular instrument (Bennett, 2010; King et al., 2019a; Pike, 2015; Stevens et al., 2019).

1.2 During the Pandemic

Despite the reported viability of teaching instrumental lessons online, published research (as noted above) indicated that teaching online remained a niche category of instrumental music teaching, mostly conducted by precollege music teachers out of necessity or by university practitioners and researchers interested in its potential and viability. Furthermore, synchronous online instruction had not gained a foothold among applied faculty in higher education due to latency and sound-quality concerns. Once the coronavirus pandemic compelled national lockdowns and physical distancing protocols, most college-level and precollege music teachers turned to synchronous online teaching out of necessity.

Suddenly, instrumental and vocal music instructors needed to learn how to teach online, with little time for study and research on best practices. Formal and informal teacher groups shared information about teaching online via quickly published articles (Cooperstock, 2020; Phillips, 2020; Pike, 2020a), online discussion boards, Facebook groups, webinars (FCC, 2020), and other media. Yet, anecdotal evidence suggests that teachers were not necessarily following best practices of online teaching, and not all

students and teachers had access to high-quality Internet or appropriate devices (computers, tablets, microphones, and headphones) that are necessary for effective online music lessons (Doiron, 2020; King et al., 2019b).

1.3 Musings and Questions about the State of Online Instrumental Music Teaching

By June 2020, we heard anecdotal reports of teachers in the community of Baton Rouge, Louisiana, who had returned to teaching in person, and in August 2020, we witnessed applied faculty at Louisiana State University returning to F2F teaching. In Louisiana, the academic year begins in August, and at most universities in the state, individual faculty members and their department chairs needed to decide whether to teach music lessons online or in person (no state mandate was in effect that required teaching online during the 2020–21 academic year). Online lessons were provided for students who opted for online classes for the academic year, and precollege music academies and studio teachers made individual choices on whether to teach lessons online.

We were curious about teachers' experiences with online teaching and how the forced switch to online music teaching in March 2020 had affected those who were unprepared for or unable to adopt recommended online teaching practices. Had the quick switch to online lessons hindered or helped progress made in the online teaching movement? Were teachers cognizant of potential benefits and drawbacks of working online? How did teaching online alter subsequent teaching practice, both online and F2F? We thus designed a study of instrumental and vocal teachers at Louisiana precollege and university levels to learn more about individual teachers' experiences of instructing online in 2020 and 2021. The study explored teacher experiences in Louisiana only, because the experience of coronavirus outbreaks and closures varied greatly among US regions.

2. METHODOLOGY

A brief online survey was completed by 80 precollege and college-level teachers in Louisiana, a southern US state that borders Texas, Mississippi, Arkansas, and the Gulf of Mexico. See Table 1 for survey questions. The short survey was designed to discover the following:

1. Did teachers continue teaching online throughout the 2020–21 academic year?

2. Did teacher age, teaching experience (including number of years teaching F2F), and educational background influence the decision to continue teaching online?

3. What did teachers believe regarding benefits, drawbacks, opportunities, and challenges with respect to instrumental/vocal teaching online?

TABLE 1: Survey of online teaching experiences (of teachers)

Check the response(s) that apply to your teaching experience:

    1. When the state locked down in March 2020:

        a. I taught 100% online___

        b. I stopped teaching for 3 weeks ___

        c. I stopped teaching for the remainder of the semester ___

        d. I taught some of my students online, while others paused lessons ___
          If (d), please give the number of students who studied online and the number who dropped out.

    2. Had you taught online music lessons prior to March 2020?
      Yes ___ No ___
      If yes, please describe these experiences (number of students, length of time, dates, level of students, etc.)

    3. If you taught online in March 2020, did you alter your teaching schedule? (i.e., change the length of lessons, lesson days/times).

    4. For August 2020, please give the percentage of time that describes each teaching situation listed below (i.e., 0% for never/not applicable; 50% for half of my students; 100% for all of my students)

        a. In-person teaching ___

        b. Online teaching ___

        c. Hybrid teaching (some online; some in person) ___

        d. I stopped teaching ___

        e. Precollege students ___

        f. College/university students ___

        g. One-on-one lessons ___

        h. Group lessons ___

    5. In August 2020, which best describes your studio enrollment?

        ○ Far lower than usual ___

        ○ A little below normal ___

        ○ About the same as usual ___

        ○ A little above normal ___

        ○ Far higher than usual ___

6. For January 2021, please give the percentage of time that describes each teaching situation listed below (i.e., 0% for never/ not applicable; 50% for half of my students; 100% for all of my students)

    a. In-person teaching ___

    b. Online teaching ___

    c. Hybrid teaching (some online; some in person) ___

    d. I stopped teaching ___

    e. Precollege students ___

    f. College/university students ___

    g. One-on-one lessons ___

    h. Group lessons ___

7. In January 2021, which best describes your studio enrollment?

    ○ Far lower than usual ___

    ○ A little below normal ___

    ○ About the same as usual ___

    ○ A little above normal ___

    ○ Far higher than usual ___

8. If you taught hybrid lessons during the pandemic, please describe activities that took place in-person and the activities that took place online.

9. If you taught online during the pandemic, please list any benefits that you and/or your students experienced.

10. If you taught online during the pandemic, please list any challenges that you and/or your students experienced.

11. If you taught online during the pandemic, please describe any asynchronous (time-shifted, not real-time) activities that you set up for your students.

12. If you taught online (for fall and/or spring semesters), describe any scheduling changes that you made to accommodate your teaching and students' needs.

13. If you taught online (for fall and/or spring semesters), how many students did not return?

14. If you taught F2F during the fall 2020 and spring 2021 semesters, list any benefits that you or your students experienced.

15. If you taught F2F during the fall 2020 and spring 2021 semesters, list any challenges that you or your students experienced.

16. If you taught F2F in August or January, how many students did not return for fall and/or spring semesters?

17. If you have additional thoughts about teaching during the pandemic or teaching online, please describe those here.

18. Please check the statement that best describes your feelings about online music teaching (check one only):

    ○ It's impossible to teach voice or an instrument online ___

    ○ It is very challenging to teach online but it can work in a pinch ___

    ○ It is neither better nor worse to teach online, just different ___

    ○ It is possible to teach online much of the time, with adaptations ___

    ○ It is possible to teach well online (with adaptations and good teacher/student online setup) ___

19. Please note anything else that you would like to share with the researcher about your teaching experiences since the pandemic.

20. Indicate which of the following applies to your teaching situation (give percentages where possible and indicate all that apply). I:

    a. Teach voice ___ instrumental ____. Please list the instrument(s) that you teach.

    b. Run my own studio from home ___

    c. Run my own studio from a stand-alone location ___

    d. Employ other piano teachers: Yes ___ No ___

    e. Work for another teacher (in an institution/academy/larger studio, etc.) ___

21. My students pay tuition monthly ___ by the semester ___ other ___

22. How many students did you teach during the following months?
    January 2020 ___March 2020 ____ August 2020 ___ January 2021 ___

23. Please list the percentage of your total income derived from teaching. ____

24. Are you the primary bread winner in your household?
    Yes ___ No ___

25. Please list your highest degree and date attained.

26. Please list the number of years that you have been teaching.

27. Please indicate your age (from the ranges listed below):

    ○ age 35 or under ___

    ○ age 36–59 ___

    ○ age 60 or older ___

28. Please indicate if you are available for an interview about your 2020–21 teaching experiences.
    Yes ___ No ___

From the 80 responses, nine individual teachers were interviewed. Four of these teachers had returned to F2F teaching between June and September 2020, and five continued to teach online throughout the academic year. In each group (online and F2F), at least one teacher worked independently (in a home studio), and one worked for an institution or music academy. Each group included one university-level instructor, one new teacher (with less than 5 yr of experience), and one experienced teacher (with 25 yr or more of teaching experience). Teachers indicated availability for interviews on the survey. Of the teachers who continued to provide online lessons, interviews and supplemental resources explored the following questions:

- How did teachers who continued to teach online adapt and/or improve their teaching practice?

- What (if any) aspects of online teaching would they bring to the F2F environment moving forward?

Interviews were transcribed and themes for each teacher were discovered using the constant-comparison method (Creswell, 1998). Data were triangulated using the following additional resources: member checks; ancillary materials including physical and/or online resources, lesson plans, recital programs; and sample teaching videos or lesson observations. Teachers in the case studies, highlighted below, reflect themes that were found to be similar to those of other teachers in their group. They were chosen for presentation here, because on the surface, they were similar in terms of educational background, teaching experience, number of students taught each week, and age/level of students in their studios. Although findings of case studies are not generalizable, they offer some insights into each teacher's mindset and experience of online instrumental teaching and provide questions for further research and possible changes that might be implemented in future tertiary music training.

3. FINDINGS

3.1 Context of Instrumental Music Teaching and General Results

The pandemic arrived in Louisiana early in 2020 due to the known robust national and international travel to New Orleans throughout the festive Mardi Gras season. Like many states, Louisiana school and business shutdowns were regional until March 2020, when the state mandated a 3-wk lockdown, and all teaching moved online. By varying degrees, localities opened by May and June of 2020, but surges in coronavirus cases spiked in July 2020 and December 2020–February 2021 (*The New York Times*, 2021). Throughout the 2020–21 academic year (in Louisiana, the academic year begins in early August and ends mid-May), most primary, secondary, and tertiary schools throughout the state were open for both F2F and online learning, with the choice of whether to attend in person left to the parents and students.

Almost all study participants were members of a national and affiliated state music teachers' association, the Music Teachers National Association (MTNA) and the Louisiana Music Teachers Association (LMTA), respectively. Although MTNA and LMTA provided guidelines for teaching online or suggestions for safely teaching in person (MTNA only), no mandates existed for moving instrumental and vocal teaching online. At the tertiary level, state and private universities were open for F2F, hybrid, or online teaching, with students making the choice of learning environment that suited their needs. Vaccines became available in the state in February 2021 for those aged 75 and older and by April 2021, vaccines were available to all adults. By early May 2021, only 28.71% of the state population was vaccinated fully and a daily average of over 500 new coronavirus cases were reported (*The New York Times*, 2021). Thus, the risk of infection for both students and teachers remained throughout the 2020–21 academic year.

3.2 Theme 1: Many Unable to Adjust to Effective Online Teaching

The surveys indicated that both precollege and college-level music lessons began at the start of the school year (August 2021) in both formats (online only and F2F), depending on the individual teacher's perception of the risk and their ability to adapt to online teaching. Although tertiary instructors had more institutional resources available to enable online or hybrid teaching, most preferred to teach F2F and only taught online lessons if a student did not return to campus for the year or if the teacher was immunocompromised. At some institutions, faculty were required to demonstrate medical need to be granted permission to teach online only. Both precollege and college-level teachers cited slow Internet speeds (for both teachers and students) and inability to hear accurately through the Internet as reasons for resumed F2F teaching before the pandemic was deemed to be under control in the state. Additionally, the precollege teachers also noted that they were unable to cover as much content in online lessons and cited online fatigue as reasons for abandoning online lessons.

Indeed, by the end of the academic year (April or May 2021), only 15 of those surveyed were still teaching online (despite low vaccination rates and relatively high infection rates in the state). Although younger people are thought to be more comfortable in an online environment, younger teachers in this study did not continue teaching online more than their slightly older peers. However, a higher percentage of teachers who were older than age 60 moved to F2F teaching before the end of the academic year (i.e., 21% of teachers under the age of 35, 24% of teachers aged 35–59, and 13% of teachers older than 60 were still teaching online by the end of the academic year). Age or teaching experience (measured in years) did not have a significant role in a teacher's decision to return to F2F teaching. Specifically, chi-squared tests for each age group revealed that attitudes about online teaching efficacy were not evenly distributed (χ^2 = 30.8, degrees of freedom [DF] = 4, and α = 0.05 for teachers aged 34 and younger; χ^2 = 29.9, DF = 4, and α = 0.05 for teachers aged 35–59; and χ^2 = 32.3, DF = 4, and α = 0.05 for teachers aged 60 and

older), nor were the younger teachers more likely to believe that teaching online was viable. Teachers under the age of 35 and older than 60 were more likely to report that teaching lessons online was "impossible" or "very challenging" than those between ages 35 and 59, who reported that teaching online was "possible much or all of the time, with accommodations." Prior online music study or experience appeared to play only a minor part in teachers' ability to adapt to online teaching. Only two of those still teaching online had significant prior experience with online teaching (i.e., they taught students online for more than 5 yr before the pandemic), whereas two others had some previous online lesson experience (i.e., they had formal pedagogy classes in university).

As noted above, frustration with the online medium, inability to hear acutely, and inability to adapt lesson plans and teaching strategies online were most often cited as reasons for returning to F2F teaching, and these were unrelated to age or teaching experience. For the most part, F2F teachers wore masks (even when teaching voice) and made accommodations to the teaching space, including opening windows and/or using air filtration units to improve ventilation, teaching in larger spaces or outside (depending on the instrument), physically distancing during the lesson, and disinfecting teaching studios and shared surfaces between lessons (using ultraviolet wands, sanitizing wipes, and hand sanitizers). Any personal risk to health was outweighed by the reward of returning to familiar teaching patterns and settings. Teachers reported that most students returned to F2F lessons; those who were uncomfortable with in-person lessons either paused lessons or found a teacher willing to work online.

Open-ended questions revealed that of those who resumed teaching in person before the pandemic ended, 11 (26%) were adamantly opposed to teaching online and felt that it could not be done effectively. It is notable that teachers in the latter group were both early- and late-stage professionals, all held advanced music performance degrees (master of music or doctor of musical arts degrees), and teaching was their primary source of income. Although many were engaged in high-level advanced teaching, this was not the case for all. The following case of Linda (pseudonyms are used to preserve anonymity) illustrates common themes among teachers who returned to F2F teaching at the beginning of the academic year.

3.2.1 Case Study 1: Linda, Precollege F2F Teacher

Linda had 25 yr of piano teaching experience at the precollege level, BMus and MMus degrees in performance, and MTNA teaching certification. Her studio was located in her home. All of her students participated in local and state performance competitions and performance was a high priority in her studio. She believed that competitions are motivational for students and measured her success as a teacher by how her students performed.

During the early days of the pandemic, Linda taught via Zoom and Facetime. Although neither of these platforms fully met her needs, she was unaware of other platforms that

might have been useful, nor did she leverage potentially useful features of either platform. Linda felt that she experienced little success online and was often left frustrated following lessons. She taught lessons much as she had prepandemic (did not alter lesson plans, pacing, or provide asynchronous instructional resources) and was unwilling to invest in upgrading her technology to improve the teaching and learning experience. She did not use external microphones or headphones, nor did she require her students to use them. She did not use online tools or supplements to support online teaching, found that she could not hear her students online, did not require students to send asynchronous videos of their playing for easier evaluation, and believed that student motivation waned online. She cited exhaustion and inconvenience with the online medium as major reasons for returning to F2F teaching in her home by June 2020.

3.3 Theme 2: Traits of Teachers Who Adapted to Teaching Online

Johnson (2017) noted that accommodations and pedagogical changes must be made to adapt teaching to the online medium. Linda represents teachers who were unable and/or unwilling to make the requisite changes and thus resumed teaching in person after less than 4 mo into the pandemic. However, teachers who were able to continue teaching using the online medium throughout the pandemic demonstrated greater flexibility in terms of both their teaching philosophies and teaching strategies. Psychologist Carol Dweck (2006) has researched and written about individuals who are and are not able to cope with, and adapt to, challenge and failure. She notes that individuals in the latter category have a fixed mindset and believe that many traits associated with learning and development are set, or fixed. Thus, they tend to undervalue the benefits of effort and meeting challenges in certain areas of their lives (Dweck & Ehrlinger, 2006). Considering this viewpoint, it can be suggested that in online instrumental or vocal music teaching, instructors who have a fixed mindset are unable to rise to the challenge of adapting to online teaching because they can only imagine lessons unfolding much in the way they have for centuries. In traditional music teaching, the pupil sits or stands next to the master and learns from coaching and demonstration; few people have experienced a lesson that differs from this model. However, those with a growth mindset value challenge and effort and recognize that certain individual traits related to learning new skills are not fixed (Dweck, 2006). In online music instruction, teachers with a growth mindset may be open to exploring new ways of teaching and learning, despite inherent challenges and differences from a traditional music lesson. Furthermore, if they try a new teaching technique and it is unsuccessful, rather than giving up or reverting to the traditional teaching method, they will likely reflect on what did not work and try another approach (or approaches) to engage the student in meaningful learning.

Of the 15 teachers in the study who adapted to the online medium and continued to teach online, the following common themes emerged: flexibility; teachers' growth mindset; changes in teaching routines (i.e., including in-lesson activities), lesson pacing, and

lesson scheduling; use of asynchronous resources; and increased use of supplemental and online resources (during and outside of lessons). Teachers reported typical student retention in the online medium, and students engaged in some traditional-type performance activities (such as online recitals and festivals), although modifications and differences from F2F students occurred in this regard. Most teachers who adapted well online were at midcareer (between ages 36 and 59). Four of the 15 had experience teaching two or more students online only before 2020, and all made changes to their teaching practice online during the course of the year.

3.3.1 Case Study 2: Suzanne, Adaptable Precollege Online Teacher

Suzanne has 23 years of piano teaching experience, a BMus in performance, an education degree, and MTNA teaching certification. She taught from her home studio and, like Linda, had not considered teaching online before the lockdown. Initially, she experimented with several different platforms for online lessons but quickly settled on Zoom because it met her teaching needs, and she learned to use it effectively and efficiently. Early in the pandemic, she consulted Facebook groups and other free, reputable online resources (such as those from MTNA and the Frances Clark Center) but she also invested in a short, paid, online course from Carly Walton, an experienced online piano teacher and studio business coach. She believed that this investment in professional development improved the online experience for her students.

When teaching, she regularly availed her students of numerous online supplemental resources, especially those that allowed them to be in control of their learning. During the year, she created "take-home" kits of manipulatives for each of her younger students that allowed them to engage in game-like learning activities during lessons. Suzanne continued to offer monthly group lessons to all of her students in the online format, because group teaching was an important musical and motivational feature of her studio culture. She noted that students enjoyed seeing one another; were able to engage in carefully chosen game-like movement, theory, and musical activities; and performed for one another during group classes.

Throughout the pandemic, Suzanne continued to refine her teaching plans and strategies, noting that although this took considerable time, it was worth the effort when she saw her students experiencing success. She adapted her philosophy throughout the course of the year, moving from a competition and performance evaluation mindset for her students to one of valuing the creation of lifelong music participants. Although some of her students continued to participate in festivals and performance competitions, she no longer required participation for all students. She changed her teaching routines and schedule to fit the online medium—and to provide her with adequate rest—and she altered pacing of lessons to allow students more time to engage with and build autonomy and competence when exploring new techniques, skills, and repertoire. She suggested that her students become more autonomous in the online environment, and she quickly recognized benefits of

student autonomy. For example, she noted that students were more motivated and engaged in music making, both during and outside of lessons, than they had been previously. Developing and achieving autonomy and competence are core components in student motivation to learn and persist in learning (Ryan and Deci, 2000). In short, Suzanne demonstrated flexibility and exhibited a growth mindset throughout the year. She acknowledged the rewards of her online teaching experience and believed that many of the changes that she implemented, including remaining flexible, fostering student autonomy, and changing lesson pacing, would carry over into her F2F teaching once it resumed.

4. DISCUSSION AND IMPLICATIONS FOR TEACHER TRAINING

4.1 Performance Orientation and Teacher Training in Higher Education

The question of whether advanced music training creates less flexible teachers with fixed mindsets may need to be explored in future research. Certainly, the success of students pursuing advanced degrees in music performance is measured by their individual performances. Precollege students—and their teachers—are generally recognized as successful based on student performance outcomes at festivals, competitions, and recitals, too. However, other important measures of precollege student and teacher success may be discovered and explored by those who teach precollege students in the future.

Many music performance majors become precollege teachers (Fredrickson, 2007; Fredrickson et al., 2013). If performance students have opportunities within the university curriculum to explore student-centered teaching and different philosophies about the purpose and benefits of precollege music learning, they may be more likely to embrace online and alternate styles of music teaching on graduation. Although findings of this regional study are not generalizable, the fact that teachers who were most opposed to teaching online and unable to adapt their teaching practice to online lessons held advanced performance degrees is notable. Perhaps, finding ways to examine teaching philosophy and ideas about student-centered teaching could be explored beyond music education and pedagogy classes in which many students undertaking advanced performance degrees do not participate.

4.2 Meaningful Professional Development throughout the Teaching Life Span

Engaging in professional development activities and maintaining teaching credentials are recognizable ways that teachers demonstrate their commitment to the profession; however, all professional development engagement is not equal. Although both teachers highlighted in the above case studies attended presentations and webinars and

maintained their national teaching certifications, the teacher who was able to maintain her online teaching and effectively engage students in online lessons throughout the 2020–21 academic year exhibited a greater commitment of time, effort, and money. Both teachers initially researched platforms for online piano teaching, but Suzanne experimented with several video-conferencing platforms and quickly settled on one that would meet her teaching needs. Then, she further researched methods to use it effectively and efficiently with her students. She made a monetary investment in additional education, taking a short online teaching course, so that she could learn best practices from an expert and then engage her students in more meaningful ways.

Suzanne also purchased a plan that improved Internet speed in her studio, invested in a new camera so students could see her keyboard from multiple angles, and purchased a high-quality microphone and headphones to hear her students better and transmit higher-quality audio to them. She encouraged her students to invest in better Internet connections and headphones, too, but was flexible when they could not afford to do so. Indeed, some of her teaching accommodations (such as using online tutorials and asynchronous materials) resulted from students who had less socioeconomic means than others. In the end, she discovered that the asynchronous tools benefitted all of her students.

4.3 Creating Meaningful Learning Experiences Online

In this study, teachers who included diverse music-making experiences (e.g., movement activities, aural skills, online games, physical manipulatives, and applied theory) in weekly lessons (engaging students in more than just performance activities) and whose teaching philosophies included creating autonomous lifelong music participants were better able to adapt lesson pacing and plans, teaching strategies, and music-making activities to the online environment. For example, Suzanne found online tutorials and created shared worksheets that permitted students to add their work to a group project during online group piano classes. She noted that older students were more engaged when they could physically add to the group folder than when she typed in the notes or answers for them (which was how group projects initially worked). She engaged her more advanced piano students in keyboard theory, harmonization, and other activities such as realizing lead sheets that she had not done before the pandemic. She reported that her students enjoyed and appreciated diversification and inclusion of new activities and musical styles (beyond performing classical pieces for the recital and local festival).

Midway through the autumn 2020 semester, Suzanne realized that her younger students were missing out on benefits of using manipulatives that they worked with in F2F lessons, so she assembled small plastic containers that were filled with all the manipulatives needed for games and activities throughout the semester and delivered these to each student's home. She noticed an improvement in both engagement and understanding of

important concepts once students were able to use the manipulatives during their private and group lessons, and she created a new manipulative kit for the spring 2021 semester.

In this study, the teachers who adapted well to teaching online and who were able to maintain online teaching throughout the academic year exhibited flexibility as they prepared for lessons and in online teaching situations. They used a growth mindset to learn about and improve their teaching, thus creating a more student-centered learning environment for their pupils by incorporating new activities and musical styles and empowering student autonomy and success in every lesson. During the course of the year, the teachers reevaluated their teaching philosophies and reported that these had forever changed to become less dependent on performance and competition results. The successful online teachers placed increased emphasis on student engagement, learning, and autonomy during lessons and expected the changes to carry over into their future F2F teaching. They adapted in-lesson presentation and used asynchronous resources to reinforce new concepts, altered lesson pacing, and changed their teaching schedules to allow downtime for preparation and rest between lessons. Importantly, they expected to use the newly discovered benefits of reinforcing and pacing lesson activities during future F2F lessons. Effective changes that they made during the pandemic suggest that online teaching will be sustainable for as long as needed by those teachers, and positive effects of online teaching will be carried forward once F2F teaching resumes.

5. CONCLUSIONS

The results of this small regional study suggest that teachers who were unwilling or unable to make changes in their teaching philosophies in their teaching practice or teaching routines (evidence a fixed mindset) assumed greater personal and student risk to health by resuming F2F teaching during the coronavirus pandemic. Our findings show that teachers who hold advanced degrees in performance may be particularly susceptible to maintaining a fixed mindset, in which adaptations to teaching cannot be made, regardless of student needs.

To help support the development of a growth mindset, applied instructors and educators in tertiary institutions might examine the curriculum and individual courses to determine where students could explore teaching philosophy, concepts related to student-centered learning, and preparation activities related to teaching individual music lessons. Traditionally, these ideas are explored in music education or pedagogy classes, but many performance majors (i.e., those who will eventually teach beginning, intermediate, or advanced lessons) do not take pedagogy coursework during their degree. Because tertiary performance faculty may not have experience in these matters themselves, administrators might consider professional development opportunities so that all higher-education faculty might explore these topics. Additionally, including a music pedagogy course in all graduate curricula would be beneficial for graduate-level music students. Creating F2F or online service learning opportunities in which graduate students could

develop skills associated with effective teaching (e.g., lesson preparation and teaching and philosophy development) might be particularly meaningful for performance majors who may have little prior experience in teaching students with differing learning proclivities, motivations, and musical or educational backgrounds.

Engaging current music teachers in meaningful professional development is another way that instructors might become better equipped to teach music online. If teachers can be encouraged to cultivate a growth mindset—even before they embark upon teaching, when they are students—they may be better positioned to embrace the creative aspects of teaching music. Regardless of prior experience, teachers who enjoy the challenge of creating learner-centered lessons, where students engage in diverse musical activities, including but not limited to prepared musical performance, may be more likely to continue to seek out meaningful educational opportunities throughout their careers. Instead of simply joining a teacher's organization and possibly attending a conference when convenient, serious and curious teaching professionals with a growth mindset might avail themselves of the numerous opportunities for deep reading, studying, reflecting, and learning that abound, both online and in person. Teachers who expect to continue learning and trying new teaching techniques throughout their careers may be more flexible and adaptable to online teaching—whether for an occasional lesson or an extended period of time.

Indeed, although performance remains the primary metric for evaluation in higher education, this should not necessarily be the case in precollege music teaching. If, upon graduation, music majors will work with precollege students in private lesson settings, this would behoove tertiary educators to provide meaningful exposure to alternate philosophies about the value and purpose of instrumental music study. Researchers must study the viability and value in providing such experiences in higher education and beyond, with both formal and informal professional development opportunities for music teachers. With the threat of future pandemics and the prevalence of Internet-based learning, musicians should also learn about and experience best online teaching practices. Offering opportunities for instrumentalists and vocalists to study online with qualified and skilled teachers, even for just a 3- to 4-wk module in a pedagogy course, might provide future teachers with a valuable experience upon which they could draw should they be forced to teach online in the future.

Giving tertiary performance students opportunities to observe exemplary F2F and online precollege teaching could provide them with new insights into diverse philosophies of teaching and student-centered teaching approaches that go beyond mere coaching and performance preparation. Providing similar professional development opportunities to current music teachers through certificates and other programs wherein teachers can explore and receive feedback for their efforts to provide student-centered teaching experiences and engaging musical activities might also help teachers move into effective online music instruction. Indeed, teachers with a growth mindset, who want to reach

broader populations of students and create meaningful musical engagement during learning, may find that online teaching is a rewarding venture.

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