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Introduction

In 2020, early childhood music classes were forced to adapt to virtual environments through the use of various video communication technologies, because of the social distancing restrictions imposed by the Covid-19 pandemic. The shift to distance learning was sudden and neither teachers, parents nor children were prepared (Marshall, Shannon & Love, 2020). This sudden switch to online environments due to crisis circumstances might be better described as emergency remote teaching which is defined as "remote teaching solutions for instruction or education that would otherwise be delivered face-to-face" (Hodges, Moore, Lockee, Trust & Bond, 2020).

In terms of early childhood education, the challenges and barriers associated with online learning were seen as even more significant, as younger children are not able to engage in distance learning independently and therefore require the support and active engagement of their parents or caregivers in the learning process (Spadafora, Reid-Westoby, Pottruff, Wang & Janus, 2023). Furthermore, there is a stigma attached to online learning, signifying it as inferior to face-to-face instruction (Hodges et al., 2020), primarily because of the absence of physical interactions (Papatzikis, 2021). Regarding early childhood music education, the effectiveness of distance learning posed a conundrum for both parents and preschool music educators (Koops & Webber, 2020), as the lack of musical on-site interactions and hands-on activities was the primary concern of educators, parents and/or caregivers, with the latter also having concerns about their children's extensive exposure to a screen (Kim, 2020; Papatzikis, 2021). Another concern had to do with the maintenance of the children's concentration for as long as possible, as well as the evaluation of remote

music instruction (Ilari, Koops, Andang'o, Bautista Arellano, Dean, Madalozzo, Madalozzo, Palmer & Yi, 2022).

This chapter discusses the experience of synchronous online music classes with children aged 4 to 6 years during the pandemic lockdown period that occurred in Greece between November 2020 and May 2021. The study described in the present chapter took place within the Baby Artist early childhood music program in Thessaloniki, Greece, which operates under the auspices of the University of Macedonia and is the first – since 2001 – music program to include infants. The online lessons were conducted by the first author, who is an early childhood music educator and Ph.D. student in the field of community music, and were under the supervision of the second author, who is the director of the Baby Artist program.

Setting the Scene: The Baby Artist Program

The Baby Artist early childhood music program is influenced by Edwin Gordon's music learning theory (Gordon, 2003; Stamou, 2005) and was adapted to the Greek cultural context by its founders, Lida Stamou and Christos Yermenoglou. The program's methodology is based on research findings about the development of musical aptitude in the early years of life (Gordon, 2003; Stamou, 2005; Suzuki, 1993) and employs a structured pedagogical approach for the effective musical instruction of infants, toddlers, and preschool children. Through the use of a well-prepared methodology that focuses on children's rhythmic and tonal development, children are guided to develop a natural relationship with music and to express themselves through music with the same naturalness as they speak their native language.

The methodology used is mostly based on E. Gordon's Music Learning Theory but also uses elements of the Orff and Kodaly approaches. The program places emphasis on the development of children's natural relationship with music, i.e. children feeling, understanding and responding to music at an instinctive level. At the same time, the program focuses on the development of children's 'musical readiness', which in the context of the Baby Artist program is defined as the ability to sing in tune and to feel and reproduce the beat and rhythmic structure of music, as this is considered essential for entering formal music instruction. The learning process is based on both group music activities and individualized instruction and includes live a cappella singing and chanting, movement, and playing with small percussion instruments. The repertoire is characterized by a variety of songs, rhymes, meters, tonalities and musical styles. To a great extent, the music activities include movement such as moving expressively or to the beat and alternate between low and high-energy movement activities so as to facilitate a balance in children's levels of energy throughout the class.

Although the music program is well-structured by the teachers, there is also enough space for improvisation and children are free to interact musically and socially in any way they feel like. Children are mostly non-verbally motivated through musical invitations, eye contact and body language to participate in class activities. Despite the structured lesson provided to promote children's musical development, the music teacher encourages music-making on the spot, and creates a playful and joyful musical and social environment that invites interaction, collaboration, and mutual learning.

In addition, the program places special emphasis on parental education and requires parents' active participation in the music classes. Parents sing, chant, move, and play at/with the small percussion instruments and are generally invited to act as role models for their children. Parental education sessions are periodically offered in the winter and spring semester. Parents are required to attend and actively participate in the music classes in all cases when children are younger than the age of 4. Children between the ages of 4 and 6 years old may attend music classes without their parents. Nevertheless, in all cases parents continue to participate in parental education classes and are encouraged to interact musically with their children at home.

It is also worth mentioning that the shift to distance learning has had an impact on the number of children participating in the program. Before the Covid era, more than 250 children (approximately 200 under the age of 4, and 50 aged 4 to 6) were enrolled in Baby Artist's music classes whereas during the period of the present study, this number was reduced to less than half (approximately 80 children under the age of 4, and 25 aged 4 to 6). The decrease in enrollment might be due to the challenges associated with the online format of the classes, as well as the parents' concerns highlighted in the relevant literature and discussed above.

Principles of the Baby Artist Program Online Instruction

The sudden restrictions imposed on face-to-face interactions because of the pandemic forced the adaptation of the content of the program and the learning process to an online environment overnight. First of all, we were very concerned about the barriers that might arise in the social, emotional, and musical interactions not only among the children but also between the children and the teacher. We considered the need to create meaningful distance learning environments that could simulate the classroom atmosphere of face-to-face instruction to be of uppermost importance. Although some adjustments were unavoidable due to the practical and technical features of the online environment, the basic philosophical and methodological principles of the program were maintained. Technology was used to bring the children of each classroom together virtually, even though they were physically separated. Despite this new web-based nature of the educational process, no

virtual music programs, instruments, software, or online educational music games were utilized for the sake of simulating the face-to-face music classes online.

Since the teachers, parents and children in the Baby Artist program were experiencing online instruction and distance learning for the first time, we felt it necessary to first hold an online parental session to guide parents on how to effectively support the online learning process. In this session, it was made clear to parents that online instruction would be treated with the same seriousness and preparation from our side – as face-to-face instruction used to be – and that we expected the same on their part. We pointed out the importance of them finding a special, quiet space in their home from which they would be regularly attending their music class. Parents were also asked to connect to the online videoconferencing platform at least five minutes early, in the same way that they were instructed to arrive at least five minutes early for their face-to-face music class. This would allow them to resolve any technical issues on time, and would provide them with the opportunity to socially interact with the other online participants before the beginning of the music class.

As for the technical aspects, we advised parents to connect through a computer or laptop with a camera and microphone, while we recommended they avoid connecting through a mobile phone, as the small screen would not allow either the child or them to follow the teacher easily and comfortably. Moreover, one important issue we had to deal with was that parents and children could not be heard to sing, chant, and play on instruments simultaneously during group activities, as our online live network could not efficiently support simultaneous group music-making. Parents were asked to keep their cameras open but turn off their microphones during group activities. They were instructed to open their microphones only when individualized instruction was taking place. However, we advised them not to let the children know that their reactions could not be heard during group music-making on account of the switched-off microphones.

While parents of children aged 4 to 6 years were not present and not actively participating in the face-to-face classes, we asked them to be by their child's side during the online lessons and either actively participate in the process or take care of any technical obstacles that might arise. We encouraged them to experience online music lessons with interest, seriousness and dedication and we highlighted their important role as role models for their child. As with the face-to-face lessons, music activities in this age group included a cappella singing, chanting, rhythmic movement, and playing on small percussion instruments. Parents were asked to purchase a pair of claves, maracas, and a small frame drum with a mallet for use at home and during online music classes.

Methodology

Synchronous online music sessions were unfamiliar to children, parents and teachers, and it was of utmost interest to us to investigate their impact on children's participation and music learning. Our main research questions were: (a) (How) Did the online environment of music class affect children's participation and learning? (b) Were the online music sessions meaningful for children? The study employed a multiple case study methodology and research instruments included parents' diaries and teacher's/researcher's log. After three months of weekly online music sessions, parents of children aged 4 to 6 years were invited to note their thoughts in a personal diary regarding the online music sessions and whether they found them meaningful for their children.

Some open-ended questions were also provided for the parents, and these questions could be used as a guide when writing their thoughts in their diaries. They were asked to point out the features of the online process that may have contributed to a meaningful learning environment and encouraged their children's engagement in the music process. They were also asked to comment on any obstacles their children may have encountered. During the same period, the teacher/researcher also recorded children's participation patterns and their musical and social behaviour, noting her thoughts in a personal log.

Six parents responded to the invitation; however, the diaries of two parents were excluded from analysis because their answers indicated that they lacked understanding of the scope of the questions. The cases under study included:

- a mother of a 5-year-old boy; participating in the program since the boy was 8 months old,
- a father of a 5.5-year-old girl; participating in the program since the girl was 1 year old,
- a mother of a 4-year-old girl; participating in the program since the girl was 1 year old, and
- a mother of a 5.5-year-old girl; participating in the program since the girl was 5 years old.

Findings

Each case study was first analysed separately and then cross-case synthesis was utilized. Thematic analysis of the data derived from parents' and teacher's reports revealed three basic themes that were either individual – but still worth mentioning – or common across all cases:

(1) the one-to-one social and musical online interactions that led to a relationship being formed between the child and the teacher as catalysts for the child's participation,

(2) the facilitation patterns implemented by the teacher being crucial for the creation of a meaningful learning environment, and

(3) the need to educate the parents so that they could efficiently support the process, but also understand the benefits derived from it.

(1) The One-To-One Social and Musical Online Interactions

The absence of face-to-face interactions and the physical separation between teacher and children as well as among classmates had been some of the main concerns regarding online instruction. Social and emotional interactions as well as interpersonal relationships between teachers and students have been highlighted by several researchers as important factors that facilitate meaningful learning experiences and promote student learning and achievement in both face-to-face and distance education (Hodges et al., 2020; Mainhard, Oudman, Hornstra, Bosker & Goetz, 2018; Pianta, Hamre & Allen, 2012; Sher, 2009; Song, Kim & Luo, 2016).

The specific purposeful efforts made to establish and maintain social contact between the teacher and the children throughout the online music sessions were explicitly noted in parents' diaries. Parents referred to instances when the relationship established between the teacher and the child was significant for the child's motivation to participate in the online class: *One thing that the child himself explicitly said was that he felt musically, socially, and emotionally connected to his teacher. And this became even more evident to us during the online lessons; a fact which positively surprised us. George (i. e. the child's name) considers himself and the teacher as a musical duo. Personal contact with the teacher, even if only for a few minutes before or after the lesson, is important so that the child feels relaxed and comfortable and then participates in the music lessons with greater interest and better mood.*

The social interactions before or after the lesson, as well as the one-to-one musical interactions during the lesson, not only seem to contribute to an emotional connection between the teacher and the children, but also give the children the opportunity to develop a sense of 'belonging' to the music class, even if they do not have the face-to-face experience. This finding is of particular interest, as children seem to adjust to and enjoy this online interaction without making any distinction between online and face-to-face interaction in the way that adults usually do:

The one-to-one musical interactions between the teacher and each child provide a sense that there are other members in the online community … Not only do the children interact musically with their teacher, they also have the opportunity to hear their classmates interact with her. Since the children are muted during group activities when individualized instruction is taking place, this is the only chance for them to hear the voices of their classmates and thus

realize that there are other members in the online community. Although I thought my daughter would not be able to remember the names of her classmates, she was able to recall all of them when I asked her (even though it had been two weeks since her last music lesson). She also made a drawing (Fig. 1) of her class and teacher, even though she has not had a face-to-face lesson in a long time.

Fig. 1: Drawing made by a girl who participated in Baby Artist program's online classes

2) The Facilitation Patterns Implemented by the Teacher

The second theme that emerged from the parents' diaries in conjunction with the observations from the teacher's diary was the importance of the facilitation patterns used by the teacher to create a meaningful learning environment that might resemble the 'atmosphere' of face-to-face instruction. The nature of distance learning inevitably creates barriers to communication by limiting physical connection and nonverbal communication such as eye contact and/or facial expressions (Song et al., 2016). According to Obizoba (2016), web-based learning environments require facilitation methods based on learners' characteristics and needs that actively engage them, either independently or in collaboration with other learners. However, in online group music-making and musical collaboration, simultaneous music interactions are considered challenging due to latency issues (Daffern, Balmer & Brereton, 2021).

Consequently, the facilitation patterns implemented in Baby Artist's online lessons focused on fostering not only one-to-one interactions between the teacher and each child, but also collaboration between children as much as possible. The following excerpt from the teacher's personal log describes some facilitation methods that seemed to promote children's engagement and interaction in the learning process:

We play a game with rhythmic cards. I show a card with a quarter note. I ask Vasiliki (i. e. the child's name) if she recognizes the card in question; she does not answer and I can guess from her facial expression that she does not remember it. I tell her that it's not a problem if she does not remember, because one of her classmates might remember it and help her. Then

I challenge the other children: "Everyone who remembers the card has to touch their nose and then help Vasiliki by whispering the answer to her. Let us see who touches his nose first and helps her". I choose George. George comes closer to the screen and whispers "quarter" to Vasiliki. Then I turn to Vasiliki: "Did you hear George's answer? Can you share it with me and your classmates?" Vasiliki smiles and says "quarter". And then I go on encouraging them to high five each other across the screen. They give each other a high-five and I see them smile at each other.

Additionally, the notes from the teacher's journal underline the need for the teacher to pay attention to every minor or major detail when it comes to how each child is engaged in the process. This is much more demanding in an online environment than a face-to-face class in which children's spontaneous musical responses are much more obvious:

We are learning a new song. I ask the children to open their ears and come closer, because I am going to sing the song 'Piano'. All I can see in the windows of my screen are eyes and noses. They are all so close to their screen, waiting to hear the song. I sing the song and then encourage them to all sing along at the same time. We also keep the beat while singing to accompany the song. The children's microphones are muted to avoid noise from latency issues. I can't hear them, but I can see their mouths moving and their bodies moving. As we clap and sing, I can see Nadia keeping the beat in a different way; with her feet. Then I say to everyone on the team: "Nadia has a wonderful idea! She suggests that we keep the beat with our feet. Nadia, can you please show us how to do it?" Nadia's face lights up […]

The importance of creating a playful and joyful learning environment for children was also a common point highlighted in all cases. As reflected in their statements, parents commented on the playful environment created in the lessons as being an important factor in the effectiveness of the process, and they also emphasized the importance of creating a learning experience that was compatible with face-to-face instruction:

Several factors contributed to making online music lessons a meaningful experience for Nadia (i. e. the child's name). It was the small group; the children had the opportunity and time to express themselves emotionally and musically … It was the playful way the teacher facilitated the process … Children were learning 'by doing'; they were continuously invited to actively participate in the process, even when microphones were turned off … […]

The music lessons are well organized on the part of the teacher, creating a playful environ-ment that follows the premise of on-site classes […] The child's participation in the online music class is influenced by the funny way the teacher facilitates the process and by her effort to engage each child actively when both group activities and individualized instruction is taking place.

(3) The Need to Educate the Parents

The last theme to arise from the research highlights the need to educate the parents so that they are both capable of supporting the process efficiently and understanding the benefits derived from it. Several researchers have described the importance of parental involvement, parent education and teacher-parent collaboration in early childhood

music experiences (Abad & Barrett, 2020; Koops, 2011; Stamou, Abad & Troulou, in press). In reference to online instruction in early childhood, parental support and involvement appear to be much more challenging compared to face-to-face instruction (Papatzikis, 2021; Spadafora et al., 2023). Parents have to take a much more active and participatory role (Ilari et al., 2022), and therefore parental guidance by professionals should be a priority for online early childhood programs. Parents are not only the child's first teachers, but also music facilitators (Abad & Barrett, 2020; Stamou et al., in press); they are also very valuable agents and partners in their children's learning and developmental process in either online or offline instruction, especially in the early years (Papatzikis, 2021).

Knowing and understanding the obstacles parents and children may face in distance learning is of great importance in designing online learning environments that encourage the child's participation in the process. The parents' statements and the teacher's/researcher's reflections in her personal log confirm the importance of meaningful communication between teacher and parent:

The teacher's willingness to talk with us about issues that arise from online instruction [...] This plays an important role in how the child participates in the lesson … The teacher uses the information received from the parents and approaches each child discreetly and individually in order to build a trusting relationship with them and thus achieve the child's active participation in the class.

I see George's name [i. e. my student] in the waiting room. I admit him and he is the first one connected. I greet his mother, but I do not see George. She secretly tells me that he is not in the mood to actively participate in the music class. She explains that he feels tired because he had online lessons all day. She asks me if they should disconnect and not attend the lesson. I explain that it's fine if George does not want to sit in front of the screen. He can be wherever in the room he wants … listening to the music lesson. His mother understands and supports my opinion [...] The other children are joining the meeting. I greet them and we sing the welcome song. We sing hello to everyone, including George, even though he is not sitting in front of the screen. We move on to the next music activity. I ask them to take their pair of claves. I am the conductor and they are the orchestra. But they have to be very careful, because the orchestra does not start playing on the claves until the conductor opens his hands, and they have to stop playing as soon as the conductor closes his hands. I am the first to take the role of conductor. Then I ask George to take over my role: "George, would you like to be the conductor? You can come closer so your classmates can see if your hands are closed or open.". George appears in front of the screen ready to conduct the orchestra [...] After the lesson, his mother thanks me for my approach towards her child.

The importance of understanding the benefits derived from the online music lesson also appears to be a significant factor in efficiently overcoming the challenges encountered in distance learning, such as lack of physical contact, internet connection problems, poor sound quality, and delayed video streaming (Kim, 2020; Papatzikis, 2021):

Of course, the natural music sound is different from that produced in the web-based environment, but I do not think the learning process was greatly affected by technical issues […] Despite the lack of physical interaction, my child has benefited from her participation in online classes … Distance learning has kept Vasiliki's motivation for making and learning music. The only thing the children need to do is to accept the teacher's invitation and join the music journey …

Discussion

The case of the Baby Artist online music classes presented in this chapter has the potential to contribute to sharing good practice for meaningful online early childhood lessons for children, parents and teachers. What came out of the findings of this study is that early childhood online instruction can be a worthwhile endeavour if some basic principles are followed. In the Baby Artist case, the initial one-to-one social and musical interactions between the teacher and each child proved to be an important factor in building an emotional and musical relationship between the teacher and child; this in turn seemed to contribute to the child's motivation to participate in the online lesson.

Secondly, the facilitation patterns implemented by the teacher and in particular the fact that the teaching methodology followed the premise of face-to-face instruction appeared to be crucial regarding the children's interest in the music class. Several factors seemed to play a crucial role in creating a meaningful learning environment for children; more specifically, the playful 'atmosphere' created in the online lessons and the fact that the teacher did not only pay constant attention to how each child was engaged in the process but also invited them to participate actively in both group activities and individualized instruction.

The findings of the present study suggest that the one-to-one social and musical interactions along with facilitation patterns implemented for this interaction to take place are not just characteristics of an inspiring teaching personality but are essential elements of the teaching methodology in early childhood online music instruction. Finally, these findings underline the need to effectively communicate with parents and educate them in the characteristics of online music instruction and how this can facilitate children's music learning. Educating parents may provide them with ways to overcome potential obstacles in online music instruction and reinforce their children's participation in it, thus contributing to meaningful distance learning experiences for their children.

Undoubtedly, the three emergent themes discussed in this chapter are strongly related; not only to online early childhood music instruction but to early childhood music education in general. This confirms the assumption that effective online music instruction should follow the premise of face-to-face musical instruction with the essential adaptations

required for distance-learning. It also seems that, although the lack of social contact in online environments has been highlighted as a major concern in previous studies, contact remained strong between both children & teacher and between classmates in the present study. This assumption is supported not only by the parents' comments, but also by the girl's drawing showing her teacher and classmates together. This may also suggest that although the children were physically separated during the online lessons, they still felt a sense of connectedness, in a broader conceptual sense.

The utilization of a multiple case study methodology doesn't aim at the generalization of the above findings; however, it uncovers a variety of issues that relate to the development of effective strategies for online music instruction in early childhood. The present study may also contribute to filling the gap existing in the literature about musical distance-learning & guidance in early childhood. Much of the research relevant to the agenda of online music education during the Covid-19 lockdown period was conducted with either school-age children, high school youth or, college students, or was related to individual music lessons. More field research is required if meaningful insights are to be provided for the development of effective early childhood online music classes that may operate regularly and not just as emergency solutions during uncertain times (for example the Covid-19 lockdown period).

In the Baby Artist program, distance-learning was initially used as an emergency solution during the pandemic because on-site music lessons were prohibited by law. However, the careful planning of the online lessons and collaboration & discussion with parents, along with the experience gained from the online teaching and the findings of the present study, have all contributed to our decision to continue offering online lessons – even after the restrictions associated with Covid-19 were withdrawn. Parents who could not attend classes in person (e. g., because they did not live in the region of Thessaloniki or even in Greece) now have the opportunity to participate in online classes through web-based environments. It is also worth mentioning that even parents who lived in Thessaloniki chose to participate in online classes. The experience gained from remote teaching also led to the decision to offer the Baby Artist-Hellenic Roots program, which is an online program aiming to bring together parents and children of the Hellenic diaspora while promoting a natural immersion in Greek music, language and culture.

Hopefully, the present study contributes to the expansion of our horizons by considering online music lessons for young children as a way to support the meaningful engagement of parents and children in music. Online music classes may also be employed to provide musical experiences and create connections through music-making between people who are physically apart or unable to attend classes in person for various reasons; these may include lack of accessibility because of geographical isolation, and life in institutionalized or hospitalized environments.

References

Abad, V. & Barrett, M. S. (2020). Laying the Foundations for Lifelong Family Music Practices through Music Early Learning Programs. In *Psychology of Music*, 51 (4) pp. 1059–1079.

Daffern, H., Balmer, K. & Brereton, J. (2021). Singing Together, Yet Apart: The Experience of UK Choir Members and Facilitators During the Covid-19 Pandemic. In *Frontiers in Psychology*, 12.

Gordon, E. (2003). *A Music Learning Theory for Newborn and Young Children*. Chicago: G. I. A. Publications.

Hodges, C. B., Moore, S., Lockee, B. B., Trust, T. & Bond, M. A. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*. https://er.educause.edu/articles/2020/3/the-difference-between-emergency remote-teaching-and-online-learning [19.11.2022].

Ilari, B., Koops. L. H., Andang'o, E., Bautista Arellano, A., Dean, B., Madalozzo, V., Madalozzo, T., Palmer, K. & Yi, G. (2022). Music Programs for Young Children during the COVID-19 Pandemic: Stories from across the World. In Pattnaik, J. & Jalongo, M. R. (eds.) *The Impact of COVID-19 on Early Childhood Education and Care*. Cham: Springer, pp. 475–492.

Kim, J. (2020). Learning and Teaching Online During Covid-19: Experiences of Student Teachers in an Early Childhood Education Practicum. In *International Journal of Early Childhood*, 52 (2) pp. 145–158.

Koops, L. H. (2011). Music Play Zone: An Online Social Network Site Connecting Parents and Teacher in an Early Childhood Music Class. In Burton, S. L. & Taggart, C. C. (eds.) *Learning from Young Children: Research in Early Childhood Music*. United States: The National Association for Music Education, pp. 181–212.

Koops, L. H. & Webber, S. C. (2020). 'Something is Better than Nothing': Early Childhood Caregiver–Child Music Classes Taught Remotely in the Time of COVID-19. In *International Journal of Music in Early Childhood*, 15 (2) pp. 135–156.

Mainhard, T., Oudman, S., Hornstra, L., Bosker, R. J. & Goetz, T. (2018). Student Emotions in Class: The Relative Importance of Teachers and Their Interpersonal Relations with Students. In *Learning and Instruction*, 53 pp. 109–119.

Marshall, D. T., Shannon, D. M. & Love, S. M. (2020). How Teachers Experienced the COVID-19 Transition to Remote Instruction. In *Phi Delta Kappan*, 102 (3) pp. 46–50.

Obizoba, C. (2016). Effective Facilitation Methods for Online Teaching. In *International Journal of Higher Education Management*, 2 (2) pp. 14–25.

Papatzikis, E. (2021). An Infant's Question on COVID-19 and Music: Should I Attend My Online Classes? In *Frontiers in Psychology*, 12.

Pianta, R. C., Hamre, B. K. & Allen, J. P. (2012). Teacher–Student Relationships and Engagement: Conceptualizing, Measuring, and Improving the Capacity of Classroom

Interactions. In Christenson, S.L., Reschly, A.L. & Wylie, C. (eds.) *Handbook of Research on Student Engagement*. Boston, MA: Springer, pp. 365–386.

Sher, A. (2009). Assessing the Relationship of Student-Instructor and Student-Student Interaction to Student Learning and Satisfaction in Web-Based Online Learning Environment. In *Journal of Interactive Online Learning*, 8 (2) pp. 102–120.

Song, H., Kim, J. & Luo, W. (2016). Teacher–Student Relationship in Online Classes: A Role Of Teacher Self-Disclosure. In *Computers in Human Behavior*, 54 pp. 436–443.

Spadafora, N., Reid-Westoby, C., Pottruff, M., Wang, J. & Janus, M. (2023). From Full Day Learning to 30 Minutes a Day: A Descriptive Study of Early Learning During the First COVID-19 Pandemic School Shutdown in Ontario. In *Early Childhood Education Journal*, 51 pp. 287–299.

Stamou, L. (2005). Music Learning Theory, Physiology of Learning, and the Suzuki Philosophy. In Runfola, M. & Taggart, C. (eds.) *The Development and Practical Application of Music Learning Theory*. Chicago: G.I.A. Publications, pp. 265–281.

Stamou, L., Abad, V. & Troulou, R. (in press). Parental Involvement in the Early Childhood Music Program: Themes and Variations. In Barrett, M.S. & Welch, G.F. (eds.) *Oxford Handbook of Early Learning and Development in Music*. Oxford: Oxford University Press.

Suzuki, S. (1993). *Nurtured by Love: The Classic Approach to Talent Education*. Suzuki Method International.