

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF
MUSIC FACULTY

A Dissertation
Presented to
The Faculty of the
Moore School of Music
University of Houston

In Partial Fulfillment
Of the Requirements for the Degree of
Doctor of Musical Arts

By
Dan M. Littles
August 2014

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ABSTRACT

The purpose of this study was to determine the perceptions of music faculty toward course suitability for online delivery, the pedagogical practices of online music faculty, and the current predominate characteristics of online music courses. A review of the literature found no studies that surveyed music faculty to find the current characteristics of online music courses. A researcher-designed survey was completed by participants ($N = 230$) from 160 randomly selected institutions accredited by the National Association of Schools of Music (NASM). The majority of participants were from large universities (10,000 or more students) and did not have previous experience teaching music online. Most universities offering undergraduate and graduate courses online have done so for 4 or fewer years. Music history, music appreciation, and religious studies in music were the most commonly offered online undergraduate courses, and music education, music research, and music technology were the most common graduate courses.

Participants also rated the suitability of given course types for online delivery. Music Appreciation, Music Business, Music History, and Music Research were found to be somewhat suitable for online delivery, while courses such as Composition, Music Education Methods, Sight Singing & Ear Training, and Applied Instrumental/Vocal Lessons were not considered suitable for online delivery. Additionally, participants with previous online teaching experience rated courses as more suitable for online delivery than those without

previous experience ($p < .05$), and they indicated that written assignments, quizzes, and discussion posts were their most used online assessment strategies.

Faculty perceptions of online music courses resulted in a wide range of opinions from positive to strongly negative, indicating that this topic remains a polarizing issue in the field of music. Based on the findings of this survey, a holistic approach to online course development is presented that includes the institution, faculty, and student. Suggestions for further research are presented and include a) developing a theoretical framework for online music course delivery, b) developing best practices for online music learning c) developing faculty training in online course design and facilitation, and d) developing a holistic approach to online course development.

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Dedicated to Michelle, Meghan, Michael, and Joshua.

Without your love and support this accomplishment would not have been possible.

CHAPTER 1: INTRODUCTION

Current education practices, regardless of level, are inextricably connected to technology. Technology's rapid growth now allows instant access from home computers and mobile devices via the Internet to vast amounts of information on any topic. Colleges and universities have invested significant financial resources on technology integration in their programs. In the present day higher education system, appropriate pedagogical application of technology is necessary for the delivery of a quality online education to any student with Internet access, regardless of his or her physical location. Therefore, this study sought to understand the characteristics of current online music courses, based on faculty experience and perceptions.

Technology Integration in Music Instruction

A review of published literature in music education between 1989 and 1995 finds limited scientific research specifically addressing distance learning (DL) in music. Journal publications during this era focus primarily on describing applications of technology in music learning (Rees, 2002; Walls, 1997), while doctoral dissertations focused on the integration of developing technologies in applied music instruction (He, 1995; Ho, 1990; Young, 1990). Young (1990) sought to determine how keyboard and computer technology was being employed in independent piano studios and the perceptions of music teachers' use of such technology. A research-designed questionnaire was created to collect data from select participants ($N = 278$) possessing an interest in integrating computer and keyboard technology in their teaching, and participants demonstrating extensive use of technology in

their teaching were interviewed ($n = 6$). Young found that most participants utilized computers in their teaching for music theory fundamentals, note reading, and ear training. Additionally, 95% of participants utilized keyboard technology to teach ensemble skills while 80% used technology to assist in development of traditional keyboard skills.

Ho (1990) sought to develop a computer assistive device for assessing the critical parameters of violin tone production, allowing students to learn without a teacher present. Ho indicated that most students receive input from instructors through verbal communication and from instructors modeling appropriate techniques and posture. The Violin Monitoring System (VMS) was designed and focused on four primary violin techniques: bow pressure, bow velocity, bow position, and sounding point. The project required a) developing a system to be used as a teaching and learning tool, b) evaluation of the resultant system, and c) testing and applying the device. Ho concluded that the system was capable of graphing performances before and after instruction, showing the differences in assessed criteria, and provide tangible evidence that instructors could use for future instruction. Ho stated the project, as a prototype, met its objective. However, he believed the teacher should remain integral to student development.

He (1995) concluded that computer-based music instruction (CBMI) could be successfully delivered via the Internet. However, adult piano students encountered difficulties accessing learning materials via the Internet, which He considered a result of students lacking computer literacy skills—an issue that may be less likely today. Despite such findings with student computer literacy, He recognized the potential of Internet technology for distance learning as “limitless” (p. 111). He further stated, “With the powerful features of the Internet, it is foreseeable that all instructional activities which used

to occur in the classroom will be deliverable to every place in the world as long as that place is connected to the Internet” (He, 1995, p. 111). The present study sought to find if He’s perception of the capabilities of Internet in music instructional delivery still exists within the field of music after nearly 20 years of technological development.

Music Instruction and the Internet

An understanding of the diversity of studies found in the literature shows a need for the current study. The following studies show such diversity (their methods and results are discussed in chapter 2). Taylor and Deal (1997), Deverich (1998), and Reese and Hickey (1999) explored the feasibility of delivering music instruction using the Internet. While Taylor and Deal studied administrators’ view of distance learning, Deverich (1998) discussed a DL approach to violin instruction, while Reese and Hickey (1999) explored a DL approach music composition. Taylor and Deal (1997) found that a majority of university music administrators had no experience with distance learning; however administrators viewed music appreciation, history, and music business most adaptable to distance learning, while considering composition and performance least adaptable.

Deverich (1998) sought to create a framework for distance learning adult violin instruction for amateurs. The framework included considerations for course design, program implementation, and four levels of technologies. Reese and Hickey (1999) compared pedagogical approaches of two technology-based composition projects using the Internet and found both methodologies feasible with technology and resources available at most universities. The findings of Taylor and Deal (1997), Deverich (1998), and Reese and Hickey (1999) show a lack of agreement in the perceptions of course suitability for online

delivery. Composition and instrumental performance were found both least adaptable and feasible to DL methodologies according to Taylor and Deal, yet feasible by Deverich and Reese and Hickey. However, central to each study is the development of pedagogical practices in online music teaching. Reese and Hickey (1999) described this saying that “the full potential for learning technologies cannot be realized by merely automating traditional models of teaching and learning” (p. 26).

In addition to Reese and Hickey’s (1999) study, other authors contributed to the developing core of online teaching methodologies in music using Internet technology of their time, but from different perspectives. Such perspectives included music education research, professional use of the Internet (Bauer, 1999), and instruction (Isaacson, 2001; Isaacson & Findlay, 2000; Reese, 2001; Rees, 2002; Waters, 1999). The continuous development of Internet technology impacts the relevance of previous studies to online teaching practices today. Since 2005, the literature surrounding music-related distance learning and online courses focused on teacher licensure (Greher, 2007), teaching music appreciation online and on campus (Wright, 2007), graduate music education (Groulx & Hernly, 2010; Walls, 2008), perceptions of high school online learning (Stefanov, 2011), and professional development among student teachers (Slotwinski, 2011). Each of these studies is reviewed in chapter 2.

Exploring the historical foundation of how music content was delivered via previous distance learning models provides insights for understanding the current characteristics of online teaching practices. Historical DL models, including the quality of their outcomes, assist in providing such a foundation. The absence of an understanding of either the historical or current characteristics dramatically impacts future research. The literature

reviewed for the present study establishes the historical trajectory of DL music courses and findings showing the effectiveness of previous models.

Simply automating traditional teaching methodologies does not utilize the full potential of technology (Reese & Hickey, 1999). Thille (2012) stated, “Without continuous, robust assessment of instructional strategies aimed at articulating the underlying mechanisms, we will continue to ‘one-off’ success with little understanding of what works and what doesn’t, and how to bring effective strategies to scale” (Kindle Location 1216). Student success should not be haphazard or left to the chance of a “one-off” success in the online environment. Such chances are unlikely and are a disservice to the future of all disciplines within the field of music. Therefore, online music course design should be intentional, with grounded theory in best practices as the foundation for student success.

Theoretical Framework

The present study sought to holistically examine characteristics of online music course instruction. To holistically view online music course instruction requires an understanding of the relationship between multiple environments that include society, culture, academic institutions, faculty, and students. Tomlinson (1984) discussed musical understandings based on the intricate web of culture. Herein, music and culture are inseparable because culture influences music while music influences culture. Neither culture nor music develop in isolation, but develop together while being influenced by the other. So too, in the present context, the development of online music learning has not developed, nor will it continue to develop, in isolation. Therefore, online music instruction will continue to

develop through the interrelated influences of society, culture, academic institutions, faculty, and students.

The development of online music instruction necessitates an understanding of the interactions between these environments as an ecological phenomenon. An adaptation of Urie Bronfenbrenner's ecological model (1979) was used to examine online music instruction from the holistic view previously mentioned. Bronfenbrenner's ecological model examined human development within three levels of interaction, including the microsystem, exosystem, and macrosystem.

At the center of Bronfenbrenner's (1979) ecological model is the microsystem, which he defined as the "pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics" (p. 22). Within the context of online music learning the roles include both faculty and student. Of importance is the relationship between each role, the relationship with peers in their respective roles, and the pattern of activities experienced by each role in the online environment. The online environment creates unique situations within the microsystem. Such unique situations may include geographic and cultural differences between faculty and students. Each student and faculty microsystem contains different elements, including family, work, educational setting, and beliefs, thus impacting the online interactions.

In Bronfenbrenner's exosystem the developing person exists and is influenced by events they do not control. Adaptation of the exosystem to the online environment relates to institutional policies that affect the student, and some faculty, and is unidirectional. That is, students, and faculty not responsible for policy creation/implementation are influenced by

institutional policies that they do not have influence in creating or regulating. For example, these policies may include whether or not institutions choose to offer online learning as part of their programs. Other elements within the exosystem include a) institutional policies supporting students, faculty, online programs, and technology, and b) NASM guidelines for distance learning programs. In these elements, students and faculty do not create the policies, but the policies impact them.

The “macrosystem refers to consistencies, in the form and content of lower-order systems (micro-, meso-, and exo-) that exist, or could exist, at the level of the subculture or the culture as a whole, along with any belief systems or ideology underlying such consistencies” (Bronfenbrenner, 1979, p. 26). The macrosystem includes areas not specifically addressed in the present study but would include cultural and societal perceptions of online learning. For example, a 2013 study conducted by Gallup and Lumina Foundation found 37% of 1,000 random participants agree or strongly agreed that colleges and universities offered quality online education, while 27% disagree or strongly disagree. These findings showed an increase of 4% since 2012 and 7% since 2011. The same population found 77% agreeing or strongly agreeing that universities of high quality education on their campuses (Gallup, 2014). The findings of this poll suggest a cultural increase in the acceptance of online education.

Further, within Bronfenbrenner’s ecological model, human development is defined as “...a lasting change in the way a person perceives and deals with his environment” (Bronfenbrenner, 1979, p. 3). The present study adapts Bronfenbrenner’s ecological theory of human development to the development of online course instruction. Therefore, the development of online music instruction, as a continually developing phenomenon,

represents lasting change in the mode of online music learning. This change, whether perceived positively or negatively by music faculty, is irreversible. Previous online methodologies in music cannot be ignored, because they influenced the trajectory of online music learning from past, to present, and to the future. The development of online music instruction will continue to evolve. This evolution necessitates the scientific inquiry of best practices in online music instruction.

Purpose Statement

Previous studies add to a developing body of literature focused on online teaching methodologies in courses with a music emphasis (Bauer, 1999; Deverich, 1998; Isaacson, 2001; Isaacson & Findlay, 2000; Greher, 2007; Reese & Hickey, 1999; Slotwinski, 2011; Stefanov, 2011; Walls, 2008). These studies further show the possible acceptance of music courses taught within the online domain and that unique challenges are present in teaching music courses online. No studies were located that survey music faculty in an effort to find the current predominant characteristics of online music courses. Therefore, the purpose of this study was to determine the perceptions of music faculty toward course suitability for online delivery, the pedagogical practices of online music faculty, and the current predominate characteristics of online music courses.

Research Questions

This study sought to answer the following research questions:

- 1) What undergraduate and graduate online music courses are offered at colleges and universities accredited by the National Association of Schools of Music (NASM)?
- 2) What factors or rationale do music faculty use to support the offering of music courses online?
- 3) What music courses are considered to be suitable for online delivery by college and university music faculty?
- 4) What are the assessment practices among current music faculty in online courses?
- 5) How do music faculty perceive the quality of online music courses versus on-campus music courses?
- 6) What are the current online instructional delivery practices in use today?

Definitions

Clear definitions of key terms assists in providing clarity between the researcher and reader, although likely known by most readers. Each of the terms is used throughout this study in a manner consistent with their use in literature on the present topic.

Distance Learning

Distance Learning (DL) is conceptualized as a service to students unable to travel to campuses or institutions able to provide desired expertise (Rees, 2002). DL courses were first identified as rural education, televised instruction, and eventually included education through the Internet (Dirr, 1999).

Asynchronous Learning

Rees (2002) stated that asynchronous learning occurs when students and instructor meet at different times. There is no common meeting time; materials and content are delivered via an archived means, such as video, narrative lecture, and other streamed file formats.

Synchronous Learning

Rees (2002) defined synchronous learning as learning occurring where the teacher and student meet at the same time regardless the location of students and faculty.

Blended/Hybrid Courses

Bender (2003) defined the hybrid course as a virtual location students log into and find additional resources for class. This can include, but is certainly not limited to, class lecture notes and videos, additional readings, and supplemental activities and materials not presented in the physical classroom.

Internet2

Internet2 is a community of international researchers from academic institutions, government agencies, and the private sectors utilizing innovative technologies for research and education (Internet2).

CHAPTER 2: REVIEW OF LITERATURE

Introduction

The present study sought to determine the perceptions of music faculty toward online course suitability, the pedagogical practices of online music faculty, and the current predominate characteristics of online music courses. However, understanding the current teaching practices within the online environment requires a historical foundation of how music content was delivered via previous distance learning models and how these models ultimately influenced present online teaching practices. The following chronological review of literature seeks to provide an understanding of how technological developments affected DL in music over time. The developments include the mode of distance learning delivery, undergraduate and graduate online courses, and student perceptions of online learning. Throughout the literature the use of the terms “distance learning” (DL) and “online,” were often used interchangeably. Over time, the use of “DL” appeared to shift more to “online” as instruction increasingly moved to delivery via the Internet only.

Distance Learning, Correspondence courses, and Integrative Television

Prior to advanced technological development, DL was primarily thought of as education obtained through correspondence courses, which often were courses completed by mail (Walls, 1997; Wright, 1997; Dirr, 1999). The development of Interactive Television (ITV), one of the first major technological advancements toward a new synchronous mode of DL delivery, allowed for the transmission of music, text, graphics, and audiovisual information via a fiber-optic network (Rees & Downs 1995; Wright, 1997; Isaacson, 2001).

As an interactive technology, ITV allowed for two-way communication between network-connected sites.

The state of Iowa identically equipped 450 classrooms with ITV capabilities in K-12 public schools, libraries, community colleges, and universities across the state (Wright 1997). On September 13, 1993, the University of Northern Iowa utilized the Iowa Communications Network (ICN) to begin offering the first graduate level music education course, Foundations of Music Education, transmitted to select sites throughout the state via ITV. This mode of delivery allowed working music teachers, in a largely rural area, to begin graduate education that otherwise would have been nearly impossible for them (Rees & Downs, 1995). Although technologically advanced in their time, ITV systems had low bandwidth (the pipeline through which information is transferred), which limited the audio and video quality (Wright, 1997).

As introduced in Chapter 1, Taylor and Deal (1997) focused on the state of distance learning in music courses with a specific emphasis on the relationship between such courses and administrators' opinions. NASM-accredited college and university administrators ($N = 200$) received surveys, and 71 responded. Taylor and Deal found that a majority of university administrators had no experience with distance learning. However, administrators viewed music appreciation, music history, and music business as most adaptable to distance learning, while viewing composition and performance as least adaptable.

Distance Learning and the Internet

As the use of Internet technologies developed researchers began to study and develop online teaching practices. Reese and Hickey (1999) studied technology-based music

composition by comparing the Musical Internet Connections (MICNet) and the Network for Technology, Composing, and Music Mentoring (NETCOMM) projects. The NETCOMM and MICNet projects focused on developing pedagogical approaches to technology-based composition through one-on-one interaction between teachers and students (NETCOMM) and through an open-forum structure (MICNet). The NETCOMM project paired students ($n = 5$) from 3 Chicago suburban schools with volunteer mentors ($n = 5$) familiar with the Internet and MIDI. NETCOMM compositions were electronically submitted via email to mentors, where mentors listened to each composition using MIDI technology and suggested methods to improve the compositions. Mentor responses to students were sent via the Internet. In post-project surveys and interviews the preservice music educators (mentors) felt they had improved their ability to provide quality feedback. However, an analysis of student written feedback data found that mentors feedback abilities did not improve as was hoped by the project administrator. The student participants were pleased to receive feedback from the mentors; however, the expected change in students' compositions based on mentor feedback was not evident.

MICNet participants included K-12 schools ($n = 12$) and pre-service music teachers enrolled in a *Teaching Composition in the Schools* course ($n = 18$). Student compositions were uploaded to an open-forum where any participating pre-service music teacher could listen to the composition and provide feedback to the student. Not only did this study consider the feasibility of technology-based composition instruction but also sought to develop the teaching skills of preservice music teachers through their use of Internet software to assess student compositions and offer suggestions for improvement. In this project, mentor feedback improved over time and became more closely related to that of a

professional composer. Reese and Hickey (1999) found the projects were technically feasible using technologies available at many universities and that future pre-service teachers could benefit from increased opportunities to interact with K-12 students utilizing technology.

Bauer (1999) sought to determine how music educators used the Internet in both their personal and professional lives.. The participants completed a researcher-designed survey hosted on the Internet. Bauer found that 75% ($n = 53$) of participants “expressed [an] interest in continuing education/professional development offered via the Internet” (p. 59), and 90% ($n = 63$) indicated a desire to learn how to use the Internet as an instructional tool about topics “such as music history and composers, music theory, jazz, music composition and aural skills, instrumental music, general music, and MIDI” (p. 58). However, Bauer cautioned that the results of this study may not be generalizable to other music educators because the participants were already Internet users, and the results did not indicate how non-Internet users would respond to such questions.

Development of Online Learning Methods

Undergraduate Courses

As technology advanced, the use of DL methods in music education branched in different directions, including self-contained online interactive undergraduate remediation (Isaacson & Findlay, 2000; Isaacson, 2001), and pre-service music educator development (Greher, 2007; Reese, 2001). The Music Fundamentals Online project (Isaacson & Findlay, 2000; Isaacson, 2001) was not designed as a formal research study but shows innovation as a self-contained web-based course in music fundamentals that aimed “to provide pedagogically

effective, low-cost remediation for high school students planning to major in music in college” (Isaacson & Findlay, 2000, p. 182). The purpose of creating such a program was to allow incoming students to complete remedial coursework in music fundamentals, primarily music theory. This course combined verbal, visual, and aural components that Isaacson and Findlay deemed necessary in the absence of an instructor. Students received immediate feedback that guided them to correct solutions to problems. Additionally, students stated they found the time goals, combined with increasing difficulty, as motivators to succeed.

The program was designed to be interactive, allowing students to complete only the portions of the program in which they were deficient. This interactive characteristic differentiated Isaacson and Findlay’s program from “traditional classroom instruction, CD-ROM based, correspondence study, and instructor-based web courses” (p. 185). Although the program was still under development at the time of publication (and no follow-up study was found), student volunteers using the system responded positively to the user interface, challenge, freedom to work at their own pace, and effective goal/challenge relationship. These findings suggest the importance of testing new methodologies during development. The student-volunteer feedback was valuable because the program was self-contained and lacked instructor interaction. Volunteer feedback ensured quality assurance during program development.

Isaacson (2001) presented “Music Learning Online: Evaluating the Promise” to the 2001 National Association of Schools of Music (NASM) convention. As a foundation for his presentation, Isaacson stated that the term “distance learning” was general and lacked adequate potential for use in music courses, and that the development of the Internet provided additional potential for student success in music through content acquisition and

interaction between instructors and students. Isaacson presented an overview of technologies available via the Internet, including streaming audio and video, interactive video, web-based course management systems, and web-based delivery of content. Isaacson also presented the Music Fundamentals Online project (Isaacson & Findlay, 2000; Isaacson, 2001).

Following a previous study (Reese, 1999), Reese (2001) sought to further examine the feasibility of integrating on-line mentoring in a university music teacher education course. Pre-service music teachers ($n = 17$), including both undergraduate and graduate students enrolled in a music technology course, mentored 8th-12th grade music composition students ($n = 43$) via an online format. Data were collected from pre-service mentor pre- and post-experience surveys, two open-ended narrative essays, interviews of mentors and public school teachers, and mentor logs. Survey data, time logs, and mentor-mentee messages were analyzed using descriptive statistics and frequency distribution. Analysis of mentor pre/post written feedback found significant improvement in mentors' post-test feedback writing skills over a 14-week time period. Reese concluded that mentors receiving classroom instruction on mentoring and independent online-mentoring practice improved their ability to write constructive feedback. However, Reese stated that since the study was not a controlled experiment it is unknown if the experience caused the result, it is only known that feedback abilities significantly improved.

In *The New Handbook of Research in Music Teaching and Learning* (Colwell & Richardson, 2002), Rees (2002) when focusing on distance learning and collaboration in music education, stated:

The music education community has been slow in adopting these [ITV and the Internet] processes, probably because of a combination of skepticism, lack of access

to technology, and discomfort with learning how to use computer-based applications. However, new generations of more accommodating music hardware and software, more powerful computers, and improved audio/visual resources over the internet are addressing some of the concerns that may have kept music educators from employing them. (p. 257)

Through 2002, online learning in music education research primarily consisted of student and faculty perceptions of DL and tracing the two major modes of DL delivery: Interactive Television (ITV) and the Internet. However, Isaacson (2001) and Rees (2002) pointed to a newer mode of delivery, Internet2, a community of researchers and educators integrating innovative technologies. Upon becoming widely available, Internet2 possessed the potential to fix one problem commonly addressed in music education online learning: limited audio and video quality. Additionally, Rees maintained that future music education online learning research should examine best online teaching practices and student learning processes.

Greher (2007) received a technology-related professional development grant to develop an online test preparation website for on-campus classroom students preparing for state exams. Greher created an online state-licensure review website in an effort to resolve scheduling and course load difficulties for students. Through coordination between music faculty, the technology department, and graduate assistants, a self-contained website was designed that offered students sample questions in music theory and analysis, music history and literature, and music education. In a pilot study, 11 of approximately 30 students were asked to participate by using the practice and test modes of the website, emailed suggestions, and completed a Likert-scale survey. Greher found that, despite some users experiencing

technical difficulties, most preferred the new method of test preparation rather than in-class preparation.

Following the pilot study and prior to launching the website live, Greher and colleagues updated computer equipment and repaired non-playable audio files. During the first semester of use positive results were found with the initial limited students ($N = 7$) using the site in preparation for the state licensure exam. Greher stated the findings were not generalizable to larger populations based on the limited number of students using the online website. However, Greher indicated that, “[I]t is possible to create a test environment that is completely asynchronous and can provide instant feedback for both the student and the teacher without taking time away from class” (p. 70).

Graduate Courses

As described earlier, music teachers desired more professional development opportunities gained through graduate study offered as asynchronous online learning (Bauer, 1999). Groulx and Hearnly (2010) stated that working music educators desired to earn advanced degrees without relocation requirements. The advent of online graduate degree programs in music education met this need for professional development. Although asynchronous online graduate degrees in music education became available in 2005, no formal reviews of the programs were available until years later (Groulx & Hearnly, 2010; Walls, 2008).

Walls (2008) sought to determine in-service teacher perceptions of professional development obtained through a graduate DL music teacher education program. The graduate teacher education program was synchronously offered to on-campus students and

DL students. Walls explored whether program goals were met and how DL delivery assisted in meeting the goals. Data were collected through phone interviews with program graduates ($n = 16$), and questionnaires completed by current students ($n = 29$) and graduating students ($n = 10$). Walls found that the DL graduate program promoted participant satisfaction through a) program technology pedagogies, b) professor–student and student–student interactions, c) academic demands, and d) real-world applicability.

As complete asynchronous graduate degree programs become more available, prospective students have more options when selecting a university program in which to enroll. Groulx and Hernly (2010) conducted a comparative study of online learning programs available as of 2008. Their study focused on nine graduate music education programs with at least 80% of the program content in an online format. The nine universities offering DL in music education programs examined in this study included Auburn University, Boston University, East Carolina University, Ohio University, Stephen F. Austin University, the University of Hawaii at Manoa, the University of South Florida, the University of Montana, and the University of Southern Mississippi. Data were collected from publicly available resources, including school advertisements, institution websites and admissions office data. Following data collection, the research article was submitted to professors directing each online program for verification.

Groulx and Hernly (2010) stated, “There were notable differences among the schools’ curricula that may be indicative of a different philosophy behind the degree being offered” (p. 64). Such possible philosophical differences were inferred because the only subject consistently required in all programs examined was research or research methods. The remaining degree-required courses were different between institutions and if students only

attended online, customization of their degree program was limited to online course offerings.

An examination of the data indicated differences in required on-campus courses for degree completion. Five of the nine universities examined did not require on-campus participation, while the remaining four universities required between two days each summer and full summer semesters completed on-campus. The time required for degree completion ranged from one to two years, including summers. The approximate number of students enrolled in seven of the programs was 20-30, while 50 enrolled at Auburn University and 100 enrolled at Boston University. Nearly all enrolled students, regardless of institution, were full-time teachers. Groulx & Hearnly (2010) concluded that online graduate degrees, although not right for all music educators, filled a need within the field of music education by providing graduate music education for individuals not able to attend brick and mortar universities because of logistical barriers.

Perceptions of Online Learning

Slotwinski (2011) examined student music teachers' perceptions of using an online forum for reflective practice, with a goal of improved teaching. Slotwinski created the Trading Fours Wiki Discussion Board as the foundation for online discussion, and studied the experiences of 16 student music teachers. Data were collected from participant posts on the discussion board, an interview following their student teaching assignments, and a hand-written response to a question given to them following the interview. Nine participants who contributed the majority of the data were interviewed. The interviews were analyzed and emergent themes were found. First, students benefitted from a "professional, respectful,

reflective, working relationship” (p. 147) with their cooperating teachers. First, the participants, based on their individual needs, utilized the Trading Fours Online Project in different ways. Participants a) initiated discussion threads based on personal ideas, b) responded to inquiries from others, or c) simply read through discussion threads as time permitted in their schedules. Second, students posted reflections on dates and times that were convenient for them, suggesting the importance of an asynchronous online learning environment. Third, participant discussion posts focused primarily on giving and receiving advice. Finally, each participant had individual needs concerning their student teaching experience. The needs of the participants overshadowed the requirement to participate on the forum. Although participants met the posting requirements, Slotwinski stated their participation was dictated by individual time availability.

Stefanov’s (2011) dissertation examined the perceptions of online music learning by high school students and their teachers with an emphasis on convergence and divergence of student/teacher perceptions. This study is based on Learning Environment Research (LER) that examined student/teacher perceptions of “instructor support, technology, class structure, assessment, student interaction, relevance, student autonomy, opportunities for creativity, and course delivery mode” (p. 1). Data were collected through an online survey, and follow-up semi-structured interviews were conducted via email. Students ($n = 37$) and teachers ($n = 12$) completed the online survey, and of these, eight students and six teachers completed the emailed follow-up survey. Stefanov found that student perceptions were influenced by the role the teacher played in learning, how the course was structured in the online environment, and academic and technology support. Students stated they found online learning allowed them to work at their own pace while experiencing less peer pressure. However, students

also acknowledged that online coursework required extra independent work and greater self-discipline. Additionally, the lack of student–teacher communication resulted in divergent perceptions of online learning.

Slotwinski (2011) and Stefanov (2011) both explored perceptions of the online learning environment. Both studies found student perceptions of their respective online environments to be positive. Such findings illustrate the value of developing best practices in online learning that sustain positive student perceptions.

Summary

This chronological analysis of literature found the emergence of three primary areas from which to examine the suitability of courses for online delivery. First, online music practices in public and private K-12 schools illustrated the value of pre-service music educators gaining practical experience through online interaction with K-12 music programs (Reese & Hickey, 1999; Stefanov, 2011). Second, the availability of online graduate programs illustrated the value of graduate programs being available for working music educators (Groulx & Hearnly, 2010; Walls, 2008). Third, the availability of online music courses in post-secondary education shows that collaboration of faculty, course designers, and institutions can result in courses which students find valuable to their future in the field of music (Bauer, 1999; Greher, 2007, Groulx & Hearnly, 2010; Isaacson, 2001; Isaacson & Findlay, 2000; Reese, 2001; Walls, 2008).

Online music courses in the literature focused on secondary or post-secondary DL/online design and integration of technology (Reese & Hickey 1999; Isaacson & Findlay 2000; Isaacson 2001; Reese 2001), and in some instances included the design of wiki

discussion boards (Slotwinski, 2011) or an interactive web-based course (Isaacson, 2001; Isaacson & Findlay, 2000). The suitability of courses for delivery via DL models has been examined through perceptions of students who indicated a positive perception of online learning. (Slotwinski, 2011; Stefanov, 2011), while music educators expressed a positive attitude toward future online professional development courses (Bauer, 1999).

This review of literature has provided an image of the integration of developing technologies to DL and online music learning. While each study provides valuable findings in technology integration in music learning, no studies were found that surveyed music faculty to determine the current characteristics of online music courses.

CHAPTER 3: METHODOLOGY

The purpose of this study was to determine the perceptions of music faculty toward course suitability for online delivery, the pedagogical practices of online music faculty, and the current predominant characteristics of online music courses. A survey methodology was deemed the most effective means to answer this study's research questions. While previous studies had surveyed the perceptions of music department administrators (Taylor & Deal, 1997), this study surveyed music faculty at NASM accredited post-secondary music programs.

Participants

The National Association of Schools of Music (NASM) is the national accrediting agency for music programs offered at colleges, universities, and post-secondary non-degree granting institutions. NASM accreditation presumes institutional consistency whereby member schools have demonstrated minimum standards of competency through a peer-review process. Additionally, as this study relates to online learning, NASM maintains established guidelines for all institutions offering courses through distance learning or correspondence modes. According to the 2013-2014 NASM Handbook, "Distance or correspondence learning programs must meet all NASM operational and curricular standards for programs of their type and content" (p. 78).

NASM accredited, degree-granting institutions were selected for participation in this study to eliminate possible confounding variables. Possible confounding variables could arise from participants representing non-NASM accredited institutions or NASM accredited

institutions that do not grant degrees. For example, community music schools, which do not grant degrees, can be accredited by NASM. However, their student body is likely different than that of a NASM accredited, degree-granting institutions. Responses from such institutions could significantly differ, and consequently, alter the findings of this study in a manner that is not consistent with NASM accredited, degree-granting institutions. Therefore, community music schools and other non-degree granting programs were excluded from inclusion in this study.

A search of the National Association of Schools of Music (NASM) website found 653 accredited music schools, colleges, and universities with 632 (97%) classified as degree granting (<http://nasm.arts-accredit.org>). Using an online randomizer (Urbaniak & Plous, 2014), 160 colleges and universities (25%) were randomly selected from the NASM accredited, degree-granting institutions. All degree-granting NASM accredited institutions were eligible for participation in this study, even if a selected institution did not provide online music courses.

Each selected music schools' website was viewed, and an email database of music faculty of invited participants in this study was created. Of the 160 schools of music selected for inclusion, 26 schools did not post faculty email addresses on their websites, resulting in 134 school websites providing sufficient data to determine faculty eligibility for participant inclusion. Full-time music faculty members teaching academic courses at selected institutions were eligible for participation, even if a faculty member had not designed or taught online music courses. Within the present study, academic music courses are defined as courses taught in a classroom setting. For example, music history, music theory, and conducting classes were considered academic courses, whereas applied lessons and

ensembles were not. Academic faculty included those listed on music department web pages in music education, music theory, musicology, and music history. Additionally, the biographical information of other faculty, including conducting, voice, music therapy, and applied areas, were viewed to determine faculty who taught a limited number of academic classroom courses. All full-time faculty members, teaching a minimum of one academic music course, were invited to participate in this study. The potential participant pool included 1,530 faculty members.

Procedures

Taylor & Deal (1997) collected data from administrators completing surveys sent through the mail, while Bauer (1999) used a survey hosted online to collect data from music educators. The present study utilized a researcher-constructed survey (see Appendix A) that was hosted online and completed by college and university music faculty. The research questions of this study guided the creation of survey questions (see Table 1). Survey questions not found in Table 1 were asked for demographic purposes.

Table 1

Correlation of Research Questions and Researcher Constructed Survey Instrument

Research Question	Researcher-Constructed Survey Question Number
1) What undergraduate and graduate online music courses were offered at colleges and universities accredited by the National Association of Schools of Music (NASM)?	6, 7, 8, 9, 29
2) What factors or rationale did music faculty use to support the offering of music courses online?	26, 29
3) What music courses were considered to be suitable for distance learning by college and university music faculty?	22, 29
4) What were the assessment practices among current music faculty in online courses?	20, 21, 29
5) How do music faculty perceive the quality of online courses versus on-campus courses?	28, 29
6) What were the current online instructional delivery practices in use today?	11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 23, 29

The researcher-designed survey (see Appendix A) included both open and closed-ended questions to gather data that included demographic information, types of online music courses offered, characteristics of online course design, and ratings of course suitability for online delivery. The first section of the survey gathered demographic information about the participant and the institution they represented. The second section gathered information about participants' experience designing and teaching online courses. The third section gathered additional demographic data, sought to determine the suitability of music courses

for online delivery, and allowed participants an opportunity to add any additional information about online music courses through an open-ended question.

With the likelihood of some participants not having experience designing or teaching online courses, the survey utilized SurveyMonkey's skip logic to guide participants through the survey. For example, the final question of the first section asked the participants if they currently teach, or have previously taught music courses online. If participants answered yes, they were directed to section 2 of the survey, and if they answered no, they were automatically directed to section 3. Additionally, participants who indicated they had experience in online teaching were asked about their course design experience. If participants indicated they had taught online but did not have experience in designing courses, they were directed past questions pertaining to online course design using.

The survey instrument was examined for validity through a three-step process. First, students enrolled in a graduate research in music education course at large research university located in the southern United States examined the survey for clarity of language. Graduate students discussed the survey instrument as a part of their work in a music education research methods course. The classroom discussion was recorded, allowing the researcher to examine feedback and make necessary changes to the survey instrument. Second, following recommended changes, the researcher presented the survey in person to a second graduate research in music education class at large university in the midwestern United States. Following discussions, a few minor changes in the survey instrument were made. Third, the revised survey was then presented to two music faculty, who examined it for expert validity, a process consistent with DeVellis (1991). These faculty members had terminal degrees in music from different universities and experience in online/distance music

learning. They examined each item of the researcher-designed survey to a) determine the relevance of each item to the intended criteria measured, b) evaluate the clarity of language in each item, and c) provide direction on potential areas of addition and omission (DeVellis, 1991). Feedback from the expert evaluators was examined, and appropriate changes to the survey instrument were made.

Following approval from the University of Houston Committee for the Protection of Human Subjects, the survey was hosted on SurveyMonkey.com and opened for participants to complete. Participants were only required to visit SurveyMonkey.com one time for completion of the survey. The first page viewed by participants contained the Consent to Participate in Research statement (see Appendix B). If participants agreed to participate they were directed to complete the survey. However, if they declined to participate in the survey they were directed to the conclusion of the survey without an opportunity to participate. The anticipated maximum total time for completion of the survey was approximately 12 minutes, however shorter completion times may have been experienced as a result of the intelligent skip logic design. A review of SurveyMonkey data found that some participants completed the survey in less than 1 minute, while others approached 45 minutes.

All 1,530 potential participants received an initial email (see Appendix C), which provided a brief purpose statement for the study and a hyperlink directing them to the survey. The survey was open for participant completion in February 2014 and was available for 15 days. A follow-up reminder email was sent to participants seven days prior to the close of survey data collection (see Appendix D). The email also expressed appreciation to participants who had already completed the survey and requested they not select the hyperlink to participate in the survey again. Six participants replied to the initial email with

additional comments. Five of these participants were removed from the follow-up email list because they provided additional comments to the researcher and stated they had completed the survey ($n = 2$), or because they stated they were not interested in completing the survey ($n = 3$). Therefore, 1,525 participants received the follow-up email and 230 faculty members completed the survey, resulting in a 15% response rate.

Data Analysis

Data collected from the researcher-constructed survey instrument was exported from SurveyMonkey.com to IBM SPSS (ver. 18 for Mac) and frequency distributions, One-Way ANOVAs, and t -tests were conducted. Additionally, data were automatically imported from SurveyMonkey.com into Nvivo (ver. 10 for Microsoft Windows by QSR International) using the data import from SurveyMonkey function. Open-ended questions were coded and frequency of themes determined. Both open and closed ended responses were used to answer the research questions.

Analysis of open-ended questions was completed utilizing Nvivo software that allowed for researcher-identified themes to be placed in categories. For example, participant discussions of administrative viewpoints of online learning, such as administration deciding not to offer online music courses, were placed in a category identified as *Administrative Considerations*, while discussions of increasing student enrollment through online programs were placed into a category identified as *Enrollment*. Upon completion of coding, each category could be accessed to determine the frequency of theme responses.

Limitations

Participants only included full-time faculty teaching at least one classroom music course at NASM accredited degree-granting institutions; therefore, opinions of music faculty teaching at non-accredited institutions was not included. Participants were selected from music department websites that may or may not accurately reflect current teaching faculty or accurately reflect courses taught by the faculty. Also, the opinions of full-time performance faculty, who may not teach classroom courses, were not included. Therefore, the responses to questions specific to applied courses or applied faculty may not be fully represented.

The survey was posted with unrestricted access, therefore it was possible that the web-link to the survey was shared with individuals not selected to participate. Questions 23 and 24 of the researcher-designed survey limited the range of responses from 0-4 years. Such limitation did not allow for distinguishing the number of participating institutions that do not offer online undergraduate and graduate courses. Therefore, institutions not offering online undergraduate and graduate courses online were included in the number of institutions offering such courses for 4 or less years. Additionally, because this study had a low response rate, the results may not accurately reflect the views of a greater majority of music faculty.

CHAPTER 4: RESULTS

Results are categorized and presented in relation to the research questions guiding this study. Prior to presenting results specific to the research questions, a summary of participant demographics and their respective intuitions is presented. An understanding of participant demographics provided a basis from which to analyze participant responses and begin building a representation of the current status of online music courses.

Demographic Summary

The following demographic summary delineates participants ($N = 230$) by area of music specialization, previous online teaching experience, and institution size. Further, the presence of an institutional DL specialist and the years of undergraduate and graduate online course offerings by institutions are presented. The participants identified their primary area of music specialization, with the highest response rate from the fields of music education (34%), music theory (19%), and music history (16%) (Table 2).

Table 2

<i>Participant Area of Specialization</i>		
<i>Area of Specialization</i>	<i>n</i>	<i>%</i>
Music Education	75	33.63
Music Theory	43	19.28
Music History	35	15.70
Applied Instrumental/Choral	30	13.45
Composition	22	9.87
Instrumental/Choral Conducting	14	6.28
Ethnomusicology	4	1.79

Note: % = percentage of total respondents.

To determine the size of the institution the participants represented, the Carnegie Classification system was used: Large (10,000+ Students), Medium (3,000 – 9,999 students), Small (1,000 – 2,999 students), and Very Small (Less than 1,000 students). One Hundred Twenty-eight (57.40%) of the participants indicated they were from large colleges/universities, 45 (20.18%) from medium colleges/universities, 38 (17.04%) from small colleges/universities, and 12 (5.38%) from very small colleges/universities. While 49.53% of participants stated their institutions have offered undergraduate courses for 4 or fewer years, while 56.54% indicated their institutions have offered online graduate courses for 4 or fewer years (Table 3). Additionally, 176 (81.48%) participants stated that their music departments do not have a DL specialist on staff.

Table 3

Years Institutions Have Offered Undergraduate and Graduate Online Music Courses

Years	Undergraduate		Graduate	
	<i>n</i>	%	<i>n</i>	%
0 - 4	106	49.53	121	56.54
5 - 9	43	20.09	25	11.68
10 or more	13	6.07	10	4.67
Don't Know/Unsure	52	24.30	58	27.10

Approximately one-third of participants ($n = 81$; 36.32%) indicated that they had previous experience teaching music courses online, but most did not have any online teaching experience ($n = 142$; 63.38%). Of the 81 participants indicating they currently teach or had previously taught online music courses, 40.74% ($n = 33$) had taught

undergraduate courses online, 38.27% ($n = 31$) had taught graduate music courses online, 39.50% ($n = 32$) had taught hybrid/blended undergraduate courses, and 27.16% ($n = 22$) had taught blended/hybrid graduate courses.

These findings indicate the majority of participants represented the fields of music education, music theory, and music history. Most participants were from large universities and the participants did not have previous experience teaching music online. Additionally, universities offering undergraduate and graduate courses online have done so for 4 or less years.

Undergraduate and Graduate Online Music Courses

Due to the skip logic design within the survey, only the participants who stated they previously taught music courses online ($n = 81$; 36.32%) listed the courses they taught in each of the following categories: a) undergraduate online, b) graduate online, c) undergraduate blended/hybrid, and d) graduate blended/hybrid (see Appendix E). The total undergraduate online and blended/hybrid courses were 65, while the total graduate online and blended/hybrid were 91. Unique course titles for each category were compiled and showed 21 undergraduate online courses, 52 graduate online courses, 44 undergraduate blended/hybrid courses, and 39 graduate blended/hybrid courses.

The unique course titles for undergraduate and graduate online music courses ($n = 72$) were placed in 9 academic music areas (Table 4). Undergraduate online courses were primarily found in music history ($n = 5$), music appreciation ($n = 4$), and religious studies in music ($n = 4$), while graduate online courses were primarily found in music education ($n = 27$), music research ($n = 9$), and music technology ($n = 8$). The large number of graduate

music education courses found ($n = 27$) is possibly a result of these courses being offered for online degree programs or other professional development. The survey did not ask participants to describe the individual courses. Therefore, it is possible that course content is the same for some courses despite showing unique course titles.

Table 4

*Unique Undergraduate and Graduate Online Course Titles
by Academic Area*

Academic Area	Undergraduate Online	Graduate Online
Music Education	1	27
Music History	5	3
Music Theory	3	4
Music Research	0	9
Music Technology	1	8
Religious Studies in Music	4	1
Ethnomusicology	1	0
Commercial Music	2	0
Music Appreciation	4	0

Factors Influencing Online Music Course Offerings

The majority of participants ($n = 123$; 63.73%) indicated their affiliated institutions offered online music courses, while 79 (40.93%) participants indicated their affiliated institutions did not offer online music courses. Participants were asked to provide their perceptions of why their music departments did or did not offer online music courses. Participants from institutions offering online music courses briefly described their perceptions of why their institution elected to offer online music courses. The open-ended responses were coded using the Nvivo software program and 7 themes emerged (Table 5).

Table 5

<i>Institutional Justification for Offering Online Music Courses</i>	
Theme	References
Professional Development	24
Increased Enrollment	21
Financial Considerations	12
Student Interest	17
Specific Course Offerings	14
Student Location	11

Participants indicated that professional development, which included online graduate degree programs, influenced institutions to offer online music courses designed for working music educator who are unable to travel to a campus for graduate study. For example, one participant stated, “Although many teachers choose [to] pursue a graduate degree as a means of professional development, their time to do so is increasingly limited. An online degree program makes the path to professional development much easier.” Another commented, “We offer graduate degree programs online in order to reach students who might not be able to come to a university without leaving their jobs.” These statements indicated the perceived value of offering online graduate degrees because of student location, current employment obligations, and time commitment. Still other participants stated that increasing student enrollment was a factor for offering online courses because increased enrollment translates into increased revenue for the institution.

Some institutions began offering online music courses because of student interest. Such online courses were offered because students requested the course be offered online. While some universities offered courses to meet student requests, other universities offered

general education courses online (i.e. Music Appreciation) that are taken by large numbers of students who are not music majors.

Participants from institutions not offering online music courses ($n = 79$) also provided brief statements indicating their perception of why their institutions or music departments choose not to offer online music courses. Table 6 shows the most frequently appearing themes for not offering online music courses.

Table 6

Institutional Justification for Not Offering Online Music Courses

Theme	Frequency
Faculty Considerations	13
Administrative Considerations	10
Lack of Technology	8
Students attend on Campus	7
Lack of Interest	7
Institution Size	4
Prefer face-to-face interaction	4

Faculty and administration considerations were the most prominent reoccurring themes. If, according to the participants, the decision to not offer online courses was a result of faculty choice or a lack of faculty to teach online, then the statements were coded as a faculty considerations. For example, “[S]enior faculty believe that online courses are not as valuable as courses delivered in a ‘brick and mortar’ institution. They also believe that online courses in music education are a fad and will be proven ineffective over time.”

Another participant stated,

No fully online courses are offered because we are aware that this would require an overload for existing faculty and development over time. There are not funds

available to hire additional faculty to compensate for the overload or to pay for course development.

These statements illustrate that some institutions did not offer online courses because the faculty did not believe that quality music education could be offered online, while others believed that online music courses were a passing fad and would eventually cease to exist. Still others indicated their institutions did not offer online music courses because of a lack of faculty willing to teach online or faculty having time in their schedule for online teaching.

When participants stated that the choice to not offer online courses was based on a decision from university presidents or deans, it was coded as an administrative consideration. For example one participant stated, “The general philosophy of the President is that online courses are not effective.” This statement was coded as an administrative consideration for not offering online courses. Additional administrative considerations included statements such as, “Our institution has a policy against them.”

Other considerations the participants provided for not offering online music courses included the institution size being too small, an institutional lack of finances for faculty to develop or teach online music courses, a lack of technology infrastructure, and a lack of a specialist to organize online courses. These findings indicate that, in addition to administrative and faculty considerations for not offering online courses, there are numerous other factors that influence the decision as well.

This study did not ask participants to rate the individual influences for or against offering online music courses. Therefore it is unknown which influences described had the greatest impact on the decision, or if it was a combination of influences that led to the decision for or against offering online music courses.

Course Suitability for Online Delivery

Participants were asked to rate the suitability for online delivery of researcher-provided music course types on a 5-point Likert scale. Four primary statistical tests were conducted to determine the differences in suitability ratings of specific music course types. First, the mean suitability rating for all participants is presented to gain insight into the perceptions of the field of music as a whole toward course suitability for online delivery. Second, an analysis was conducted to determine the differences in mean suitability ratings between participants with previous online teaching experience and participants without. Third, an analysis of differences in mean suitability ratings between participants grouped by years of collegiate teaching experience was conducted. Fourth, an analysis of differences between mean suitability ratings and indicated primary areas of music specialization was conducted.

Participants rated the suitability for online delivery of specific course types using a 5-point Likert scale. Table 7 shows the mean (*M*) ratings of 96% of the participants ($n = 214$) regardless of whether or not they had previous experience in online design or teaching. Courses considered somewhat suitable for online delivery included Music Appreciation, Music Business, Music History, and Music Research. Music Theory, Introduction to Music Education, and Instrumental/Choral Literature also were indicated as somewhat suitable for online delivery, but these courses were also tending toward neutral with means close to 3.00. Instrumental/Choral Arranging, Composition, Music Education Methods, Music Education for the Non-Music Major, Sight Singing & Ear Training, Instrumental/Choral Pedagogy, Instrumental/Choral Methods, Instrumental/Choral Conducting, and Applied

Instrumental/Vocal lessons ranged from neutral, with means close to 3.00, to not suitable, with means close to 5.00, for online delivery.

Table 7

Suitability for Online Delivery Rating

Music Course Type	<i>M</i> (<i>n</i> = 214)	<i>SD</i>
Music Appreciation	2.08	1.26
Music Business	2.23	1.14
Music History	2.31	1.27
Music Research	2.33	1.20
Music Theory	2.88	1.23
Introduction to Music Education	2.92	1.34
Instrumental/Choral Literature	2.94	1.31
Instrumental/Choral Arranging	3.24	1.33
Composition	3.54	1.35
Music Education Methods	3.69	1.21
Music Education of Children for the Non-Music Major	3.72	1.23
Sight Singing & Ear Training	3.73	1.35
Instrumental/Choral Pedagogy	3.80	1.18
Instrumental/Choral Methods	3.92	1.20
Instrumental/Choral Conducting	4.22	1.08
Applied Instrumental/Vocal Lesson	4.37	1.08

Note. *n* = 214. 1 = Suitable, 2 = Somewhat Suitable, 3 = Neutral, 4 = Somewhat Not Suitable, 5 = Not Suitable

A *t*-Test for independent means was conducted between those with previous online teaching experience and those without previous online teaching experience (independent variables) and their perceptions of the courses as suitable for online delivery (dependent variable). The data showed those with previous online music teaching experience rated Music History, Music Research, Music Theory, Music Appreciation, Instrumental/Choral Literature, Instrumental/Choral Pedagogy, Sight Singing & Ear Training, Music Business,

and Instrumental/Choral Arranging significantly more suitable for online delivery than those without previous online teaching experience (Table 8).

Table 8

Course Suitability Based on Previous Online Teaching Experience

Course Type	Group #	<i>n</i>	Rating (<i>M</i>)	<i>SD</i>	<i>t</i>	<i>df</i>	<i>Sig</i> (2-tail)
Music History	1	74	1.92	1.17	-3.399	211	*0.001
	2	139	2.53	1.27			
Music Research	1	73	1.92	1.09	-3.722	208	*0.000
	2	137	2.55	1.21			
Music Theory	1	74	2.54	1.20	-3.024	209	*0.003
	2	137	3.07	1.21			
Music Appreciation	1	74	1.66	1.02	-3.596	210	*0.000
	2	138	2.30	1.32			
Instrumental/Choral Literature	1	74	2.57	1.26	-3.092	209	*0.002
	2	137	3.14	1.29			
Instrumental/Choral Pedagogy	1	74	3.43	1.17	-3.422	208	*0.001
	2	136	4.00	1.14			
Sight Singing & Ear Training	1	74	3.34	1.43	-3.162	209	*0.002
	2	137	3.94	1.27			
Music Business	1	72	2.00	1.01	-2.116	205	*0.036
	2	135	2.35	1.19			
Instrumental/Choral Arranging	1	73	2.93	1.42	-2.511	207	*0.013
	2	136	3.41	1.26			

Note: Group #1 = Faculty indicating they have had previous experience teaching music courses online. Group #2 = Faculty indicating they have not previously taught music courses online. Rating Scale: 1 = Suitable, 2 = Somewhat Suitable, 3 = Neutral, 4 = Somewhat Not Suitable, 5 = Not Suitable. * $p < .05$

The participants' years of college teaching experience ranged between 1 to 47 years ($M = 17.83$; $SD = 10.41$). The participants were divided into four groups based on the number of years teaching at the college or university level (Table 9).

Table 9

Participant Groups Based on Years of Collegiate Teaching Experience.

Group #	Years of Experience	<i>n</i>	(<i>M</i>)	<i>SD</i>
1	1 - 10	61	5.95	2.74
2	11 - 20	66	14.52	2.33
3	21 - 30	67	24.04	3.09
4	31 or more	28	36.68	4.85

A one-way ANOVA between the years of experience groups (Table 8) and the mean scores for course suitability found significant differences in mean ratings. A Bonferroni post hoc analysis showed significant differences in five course types. First, Group 3 rated Music History more suitable than Group 4 ($M = 2.00$; $SD = 1.08$) [$F(3, 208) = 2.98, p < .05$]. Second, Group 3 rated Introduction to Music Education more suitable than Group 1 ($M = 2.47$; $SD = 1.32$) [$F(3, 203) = 2.98, p < .05$]. Third, Group 3 rated Music Theory more suitable than Group 4 ($M = 2.47$; $SD = 1.14$) [$F(3, 206) = 3.89, p < .05$]. Fourth, Group 3 rated Instrumental/Choral Pedagogy significantly more suitable than either Group 2 or Group 4 ($M = 3.33$; $SD = 1.36$) [$F(3, 205) = 4.74, p < .05$]. Fifth, Group 3 rated Instrumental/Choral Arranging significantly higher than Group 4 ($M = 2.76$; $SD = 1.41$) [$F(3, 204) = 3.92, p < .05$].

Music Educators rated course suitability significantly higher for Music History than Music History faculty ($M = 1.92$; $SD = 1.27$) [$F(6, 206) = 2.81, p < .05$] and rated course suitability significantly higher for Instrumental/Choral Arranging than faculty from Music Theory, Music History, and Music Composition faculty ($M = 2.57$; $SD = 1.30$) [$F(6, 202) = 6.20, p < .05$].

These findings indicate that those with previous online teaching experience tended to rate courses more suitable for online delivery than those without previous experience. Additionally, those with 21 – 30 years teaching experience significantly rated courses more suitable for online delivery than colleagues with more and less experience, but differences between these groups are found based on course type. Music educators tended to rate specific course more suitable for online delivery than other music specializations. However, such generalizations surrounding music specializations and subsequent suitability ratings can not be inferred from this data because of the large differences between the number of participants from the field of music education and respondents from other fields of music.

Online Assessment Practices

NASM guidelines (National Association of Schools of Music, 2014) state the outcomes of distance learning courses should be equal to the outcomes in similar on-campus courses. Assessments are valuable in measuring outcomes. Participants indicating previous online teaching experience ($n = 76$) were asked to rate their use of specific assessment methodologies in their online courses (Table 10).

Table 10

Assessment Practices of Online Music Faculty

Assessment Type	<i>M</i>	<i>SD</i>
I require written papers submitted electronically.	1.64	1.18
I give online quizzes/tests.	2.30	1.52
I use written discussion posts.	2.50	1.55
I require online listening assignments.	2.71	1.66
I require collaborative student assignments.	3.54	1.45
I use video chat discussion posts.	4.29	1.33

Note: Likert Responses: 1=Always, 2=Most of the Time, 3=Half of the Time, 4=Less than Half of the Time, 5=Never.

The findings shown in Table 10 indicate the most frequently used assessment strategies for online courses were written assignments submitted electronically, online quizzes and tests, and written discussion posts. However, as indicated by the large *SD*, there is not a solid consensus on what assessments should be used. It is possible that selected assessments represent instructor preference amongst this sample. This study did not seek to find what the participants considered to be pedagogically appropriate or a best practice for assessment. These findings represent only what experienced online music faculty have used in their online courses.

Perceived Quality of Online vs. On-Campus Courses

Measurement of the perceived quality of online music courses required participants to rate their level of agreement with a statement about students' ability to meet the objectives for online courses as well as they meet objectives for the same course offered on-campus. Ninety-three percent of all participants responded: 40.58% ($n = 84$) disagreed, 25.12% ($n = 52$) agreed, while 13.04% ($n = 27$) remained neutral, 21.26 depends. A one-way ANOVA with Bonferroni post hoc analysis was conducted between levels of agreement (excluding those responding that it depended on the courses). Results of the ANOVA revealed that faculty members with 21-30 years of experience (Group 3) agreed significantly more with the statement than faculty members with 1-10 years experience ($M = 3.28$; $SD = 1.38$) [$F(3,159) = 4.70$, $p < .05$]. No significant difference was found between other groups.

The remaining 21.26% ($n = 44$) of participants responding to the statement indicated that it depended on the course whether or not objectives were met equally between online and on campus students. These participants were asked to further describe the ways in which

students were or were not able to meet course objectives in online and on-campus courses in an open-ended response. Due to a technical issue, the Nvivo software was not used to code these responses. Therefore, the researcher coded the emergent themes in the same manner as coding themes in Nvivo, but without using the software. Each open-ended response was analyzed, similar content assigned to themes, and the frequency of theme appearance was calculated.

Participant responses indicated that key themes generally support students in meeting objectives, generally do not support students in meeting objectives, or may either support or not support students in meeting objectives. Themes identified as either generally supporting students in meet course objectives or generally not supporting students in meeting course objectives included a) course design ($n = 10$), b) the student ($n = 3$), c) depends on the teacher ($n = 2$), d) university support ($n = 1$). For example, the course design impacts the students' ability to meet objectives based on how well the course is designed, as indicated by the following participant statement: "I do believe there are course that are developed so well online, with video lectures, that they are equal to or even better than classroom courses." Such a statement implies the possibility that if the course is designed poorly, the student is less likely to meet objectives. However, a properly designed online course may increase the likelihood of the student meeting objectives. Similarly, if the student is motivated to learn, then they are more likely to meet objectives than a student not motivated to learn.

Courses that are a) skill or performance-based ($n = 16$; ensembles and applied lessons) or require live interaction ($n = 9$; seminar courses) were thought to generally not support students in meeting objectives in the online environment at the same level as their on-campus counterpart. Conversely, participants believed that lecture or research-based

courses ($n = 11$) generally support students in meeting objectives in the online versions as well as their on-campus counterparts. It is possible that the faculty view of students meeting objectives influences their perception of courses suitable for online delivery. The remaining themes are dependent on variables within the themes themselves. For example, one participant stated, “I think it is dependent on the course and the instructor and the way in which the course is designed. I do believe there are courses that are developed so well online, with video lectures, that they are equal to or even better than classroom courses.” Conversely, another participant stated, “For higher-level courses, I am skeptical that it is currently possible to duplicate in an online format many invaluable aspects of traditional classrooms, such as real-time peer-to-peer interaction and faculty feedback, faculty comments on student work, etc.”

These findings show that participants believed that performance-based courses and courses requiring live interaction were considered unable to meet course objectives in the online environment as well as their on-campus counterparts. However, all other course types possessed the potential to meet objectives in the online environment but is conditioned on other factors, including instructor involvement, robust course design, and institution support.

Current Online Instructional Delivery Practices

Participants rated each of the provided statements of online instructional delivery practice (Table 11). The data showed that participants most frequently used the following in their online courses: responding to student emails, providing links to outside sources, discussion posts, online quizzes/tests, and submitting written papers electronically. Online listening assignments, and instructor response with follow-up questions were also used most

of the time, but tended toward being used half of the time in online courses, while the remaining characteristics tended to be used half of the time or less in online courses. However, other than “I respond to student email messages,” and “I provide links to outside sources,” consideration of the high *SD* is needed. The high *SD* could be indicative of lacking consensus among experienced online music faculty. Thus, additional research in best practices for online instructional delivery of music courses is needed to build a consensus within among online teaching faculty.

Table 11

Instructional Delivery Practices of Online Music Faculty

Statement of Online Instructional Delivery Practice	<i>M</i>	<i>SD</i>
I respond to student emails or messages.	1.11	0.42
I require written papers submitted electronically.	1.64	1.18
I provide links to outside sources.	1.75	0.99
I provide responses/feedback to student discussion posts.	2.28	1.47
I give online quizzes/tests.	2.30	1.52
I use written discussion posts.	2.50	1.55
I respond to student discussion posts with follow-up comments or questions.	2.65	1.52
I require online listening assignments.	2.71	1.66
I provide video lectures.	3.43	1.56
I require collaborative student assignments.	3.54	1.45
I use video chat discussion posts.	4.29	1.33

Note: Likert Responses: 1=Always, 2=Most of the Time, 3=Half of the Time, 4=Less than Half of the Time, 5=Never

In addition to the provided statements, participants provided additional online instructional strategies they use in their courses in an open-response question. Some participants chose to provide more detail on the statements found in Table 11, while others provided additional data from which themes found in Table 12 were derived.

Table 12

<i>Primary Online Characteristic Emergent Themes</i>	
Online Characteristic	Frequency
Discussions	7
Quizzes	7
Synchronous Elements	6
Video	6
Supplemental Materials	5
Lectures	4
Project-Based Assignments	4
Written Assignments	4

Although themes are listed independently in Table 12, participants frequently them discussed collectively. While some participants stated that neither they, nor their students, valued discussion boards, others stated their use of discussion boards was used to stimulate critical thinking and encourage student interaction by placing students in small groups for discussions. These findings seem to indicate a) a lack of agreement concerning the use of discussion boards, b) that faculty may not know how to use discussion boards effectively, or c) the use of discussion boards is a matter of faculty preference and teaching style.

Course lectures were provided in different formats that may or may not have audio or video. These formats include synchronous video lectures, asynchronous video lectures, or Power Point presentations with embedded audio. Lectures were also included as supplement materials. For example, the following statement indicated why this participant viewed the inclusion of supplemental online material as necessary:

I try to make a course where they [students] are supplemented with either a video of a professor lecturing or a supplemental documentary type video on the subject, for

example the Ken Burns' Jazz Series. I want the students to get the same things that they would get in class online and not to be lacking in things the instructor provides. Additionally, lectures were split into smaller units to allow students to complete small assignments between viewing the segments:

I introduce the students to new material, [and] then send them to read certain pages in the text. They return to the course web site and either do a forum or listening assignment, or continue with an introduction from me to the next new material, etc. Assessment strategies included quizzes, written assignments, and project-based assignments. The findings revealed differing perspectives on the use of a quiz. One participant indicated that quizzes were used for demonstrating "simple" knowledge, while a second participant described requesting students submit 2 or 3 questions from the reading for weekly tests, and a third participant stated that quizzes and all assignments should be closely linked to objectives. Writings were described as short "journal-like" assignments, and instructors should provide critical assessment of student writing to ensure quality feedback for the student. Project-based assignments were listed, but participants provided no clear definition or examples.

Online Course Design Experience and Training

While not addressed in questions related to online course delivery characteristics, other questions in the survey sought to find the characteristics of faculty training; compensation, collaboration, and the number of courses designed by participants. Seventy-seven participants indicated they had experience in online course design. The majority ($n = 44$; 59.46%) of course designers did not have special training in online course design, and 40

participants (54.04%) had not received special funding to design online music courses. Most courses designers ($n = 66$; 89.19%) had developed four or less online music courses, and 36 (49.32%) course designers stated that when designing an online course, they do not collaborate with other music faculty. Additionally, 21 participants indicated they consulted with a technology specialist during course development, “all of the time,” while 26 indicated they consulted “less than half of the time”, and 15 “never” consulted with a technology specialist (Table 13).

Table 13

Course Designers Frequency of Consultation with Technology Specialist

Frequency	<i>n</i>	%
Always	21	28.38
Most of the Time	8	10.81
Half of the Time	4	5.41
Less than Half of the Time	26	35.14
Never	15	20.27

When compared to designing on-campus courses, 58 participants (78.38%) stated it takes more time to design an online course. However, according to 36 participants (47.73%), once developed, the preparation time for delivery of online courses is the “same as on campus course.” The time to grade assignments for online courses was the “same as on-campus courses” for 49.53% ($n = 38$) and “more than on campus courses” for 36.36% ($n = 28$) of course instructors. The ideal number of students in online courses is “less than on-campus courses” for 43.42% ($n = 33$) and “the same as on-campus courses” for 42.11% ($n = 32$) of online course instructors.

Summary

The survey found that the majority of participants represented the fields of music education, music theory, and music history. Most participants were from large universities and did not have previous experience teaching music online. Additionally, most universities offering undergraduate and graduate courses online have done so for 4 or less years, while fewer universities have offered online courses for 7 or more years. Undergraduate online courses were primarily found in music history, music appreciation, and religious studies in music, while graduate online courses were primarily found in music education, music research, and music technology. Professional development, which included providing working music educators an opportunity to pursue graduate studies without relocation, was the theme most given as justification to offer online music courses. Some participants reported the decision to not offer online music courses was most frequently determined by administration or faculty considerations. Some participants indicated that administrators a) did not see online courses as a pedagogically effective means of education, and b) held a philosophy that online courses are ineffective. Faculty considerations for not offering online music courses included a) faculty choosing to not offer online courses, b) institutions not having sufficient faculty available to offer online music courses, c) faculty perceiving online courses less valuable than on-campus courses, and d) faculty not believing in the pedagogical effectiveness of online learning. Other lesser considerations included small institution size, an institutional lack of finances for faculty to develop or teach online music courses, a lack of technology infrastructure, and a lack of a specialist to organize online courses.

Participants with previous online teaching experience tended to rate courses as more suitable for online delivery than those without previous experience. Additionally,

participants with 21–30 years teaching experience tended to significantly rate courses as more suitable for online delivery than colleagues with more and less experience, but differences between these groups were found based on course type. Music educators tended to rate specific courses as more suitable for online delivery than other music specializations. However, such generalizations surrounding music specializations and subsequent suitability ratings can not be inferred from this data because of the large differences between the number of participants from the field of music education and respondents from other fields of music.

Students in performance-based courses and courses requiring live interaction were considered unable to meet course objectives in the online environment as well as their on-campus counterparts. However, students in all other course types possessed the potential to meet objectives in the online environment but is conditioned on other factors, including instructor involvement, robust course design, and institutional support.

Participants experienced in online instruction indicated their courses primarily used written assignments submitted electronically, discussion posts, quizzes, synchronous elements, supplemental materials, lectures, and project-based elements. Finally, the majority of course designers indicated they consulted with a technology specialist during course design less than half of the time or never ($n = 41$), while 29 participants consulted with a technology specialist most of the time or always.

CHAPTER 5: DISCUSSION AND CONCLUSIONS

The purpose of the present study was to determine the perceptions of music faculty toward course suitability for online delivery, the pedagogical practices of online music faculty, and the current predominate characteristics of online music courses. Full-time music faculty from 160 randomly selected NASM accredited degree-granting institutions who taught at least 1 classroom course were invited to complete a researcher-designed survey hosted on SurveyMonkey.com. The participants ($N = 230$) provided responses to open- and closed-response questions about online music courses. The data were analyzed using SPSS for closed-ended questions and Nvivo software for coded themes from open-ended questions.

This study attempted to find the current offerings and characteristics of online music courses. However, it is possible the presentation of collected survey data may be skewed toward a positive view of online music learning because the researcher believes that many music course types can be effectively delivered via online methods. Additionally, the study of any topic focused on technology use is limited to presently known technologies and findings cannot be generalizable to the future, because technology develops at an extremely rapid pace. The survey used in this study did not ask about the technology knowledge or technology experience of the participants. Therefore, the expressed perceptions of participants likely were based on their understanding of the effectiveness of known technology use in online music learning. This study does provide a snapshot of the current state of online music learning that involves the student, faculty, administration, and institution. Such a snapshot provides a basis from which to consider further study in numerous topics relevant to online music courses.

Research Questions

This study sought to answer the following research questions:

- 1) What undergraduate and graduate online music courses are offered at colleges and universities accredited by the National Association of Schools of Music (NASM)?
- 2) What factors or rationale do music faculty use to support the offering of music courses online?
- 3) What music courses are considered to be suitable for online delivery by college and university music faculty?
- 4) What are the assessment practices among current music faculty in online courses?
- 5) How do music faculty perceive the quality of online music courses versus on-campus music courses?
- 6) What are the current online instructional delivery practices in use today?

The following discussion is divided into 4 sections based on these research questions. First, the discussion of findings provide a broad overview description of the current state of online music courses and relate the findings to the research questions guiding this study, as well as relating the findings to previous literature. Second, a discussion of the different opinions within the field of music toward online music courses is presented. Third, based on findings from this study, a holistic approach to online music course development is presented. Fourth, the limitations of this study are addressed, and suggestions for further research are provided.

Discussion of the Findings

The majority of participants were from large universities, did not have previous experience teaching music online ($n = 142$; 63.38%), and represented the fields of music education ($n = 75$; 33.63%), music theory ($n = 43$; 19.28%), music history ($n = 35$; 15.70%), applied instrumental/choral ($n = 30$; 13.45%), composition ($n = 22$; 9.87%), instrumental/choral conducting ($n = 14$; 6.28%), and ethnomusicology ($n = 4$; 1.79%).

Factors Influencing Institutions to Offer Online Music Courses

The first research question sought to explore what rationale music faculty used to support the offering of online music courses. According to the participants ($N = 230$), 50% of their universities have offered online undergraduate music courses for 4 or fewer years, 26% have offered online courses for 5 or more years, and 24% were unsure of how long their institution has offered undergraduate online courses. Additionally, 60% of their universities have offered online graduate music courses for 4 or fewer years, 16% have offered graduate online music courses for 5 or more years, and 27% were unsure how long their institutions have offered online graduate music courses. As mentioned previously, due to a survey question's design, universities offering online undergraduate and graduate courses for less than 4 years included institutions that do not currently offer online music courses.

The limited number of years online music courses have been offered indicated that online music courses are still in their infancy. Therefore, music faculty perceptions toward offering music courses online should be approached with caution, because it is unknown how such perceptions have developed in this limited time period and the accuracy of these views. Institutional decisions to add online music courses during this period could be attributed to

the advancement of technology, the perception of economic benefit for the university, and competition among universities for increased student enrollment. If increased enrollment was a factor in adding online music courses, then allowing working music educators an opportunity to take courses online may have opened a large pool of potential students. Therefore, the finding that graduate music education courses were the most offered online courses type ($n = 27$) may not be surprising. The cost of course development was not a part of this study; therefore it is unknown whether or not enrollment increase created profits for the university following funding the development of online courses.

Music Course Suitability for Online Delivery

The second research question explored which music courses were considered to be suitable for online delivery by college and university music faculty. An examination of the current music courses offered online, or via blended/hybrid methodologies, showed the type of course(s) that music faculty deemed appropriate for online delivery (Appendix E). Music history (23.82%), music appreciation (19.05%), and religious studies in music (19.05%) were determined to be the most suitable undergraduate courses, while music education (51.93%), music research (17.31%), and music technology (15.38%) were found to be most suitable graduate courses. These findings are consistent with previous literature showing that courses that are considered lecture-based are more suited to be offered online than courses that are performance-based (Bauer, 1999; Rees, 1999; Taylor & Deal, 1997).

Participants rated the suitability of specific music course types for online delivery, and those with previous online teaching experience tended to rate courses more suitable for online delivery than those without previous experience. Therefore, it is possible that

experienced online music faculty may have had previous success with teaching online, resulting in a possible bias in favor of online courses. Such successes likely impacted their perception of suitable course types for online delivery, whereas participants without previous online teaching experience did not have similar experiences influencing their perceptions.

Surprisingly, faculty with 21–30 years experience tended to significantly rate courses more suitable for online delivery than colleagues with more and less experience, but differences between teaching experience groups were found based on course type. This finding contradicts the expectation that new faculty members, who were likely younger, would rate courses more suitable for online delivery because their generation likely a) pursued education during a time when educational technology use increased, or b) utilized technology in everyday life. The difference of course suitability ratings in the 21–30 years teaching experience group may be attributed to their teaching careers spanning the development and integration of computers for use in education. Such experience may have shaped their perceptions of technologies' potential for offering music courses online. However, this finding could be unique to the sampling in this study, and further inquiry is needed before generalizing to all faculty in this teaching group.

In comparing faculty specializations, music educators tended to rate specific courses more suitable for online delivery than other music areas. In particular, music educators rated Music History more suitable for online delivery than music history faculty and Instrumental/Choral Arranging more suitable than music theory, music history, and music composition faculty. However, this finding may be due to participant sampling in this study with a higher number of respondents from music education faculty.

Participants frequently identified professional development as a reason to offer online music courses in graduate music education ($n = 24$). This finding may also be a result of the previous finding indicating a larger number of participants who were music educators. The offering of graduate music education courses is consistent with previous literature that indicated a need for DL options for working music educators to obtain advanced training/degrees without leaving their present jobs (Groulx & Hearnley, 2010; Rees & Downs, 1995). Participants may have believed that graduate music education courses were more suitable for online delivery, in part, because a) these course types require less personal interaction, and b) fewer courses in music education require performance-based participation, especially at the graduate level.

One of the most frequently given reasons for not offering online music courses was faculty considerations. Such considerations included faculty choosing not to offer online courses, because of a lack of faith in the pedagogical effectiveness. Some faculty made statements like, “Senior faculty believe that online courses are not as valuable as courses delivered in a ‘brick and mortar’ institution. They also believe that online courses in music education are a fad and will be proven ineffective over time.” Additional faculty considerations included the lack of faculty available to teach online. Other reasons participants provided for their institutions not offering online courses included institution size, institutional lack of finances for faculty to develop and/or teach online music courses, lack of technology infrastructure, and a lack of a specialist to organize online courses.

The historical trajectory of technology integration in music shows that steps have been taken to integrate technology in music learning (He, 1995; Ho, 1990; Greher (2007); Walls, 1997; Young, 1990), distance learning (Deverich, 1998; Greher, 2007; Rees, 2002;

Rees & Downs, 1995; Walls, 2008; Wright, 1997), and online (Bauer, 2001; Isaacson, 2001; Reese & Hickey, 1999; Reese, 2001; Slotwinski, 2011; Stefanov, 2011; Waters, 1999).

Since it is likely that the majority of faculty were not familiar with this literature, it is likely that the faculty suitability for online delivery ratings were based upon personal opinions developed over time, and their perceptions of technological capabilities to deliver content in a manner similar to on-campus interaction.

Participants in this study believed that certain music course types were not suitable for online delivery. For example, participants rated applied instrumental/vocal lessons and instrumental/choral conducting as courses between *Somewhat Not Suitable* and *Not Suitable* for online delivery. This finding is contrary to Ho (1990) and He (1995) who considered the use of the Internet for applied lessons through computer based music instruction for adult piano students (He, 1995) and through the design of the Violin Monitor System (VMS) that allowed students to learn without a teacher present (He, 1995). However, other courses such as music appreciation, music history, and introduction to music education as courses that were rated between *Somewhat Suitable* and *Neutral*. While neither of the previous examples were rated explicitly *Suitable* or *Not Suitable*, they show the tendencies of participant faculty as a whole to lean both directions.

Online Course Development

Faculty designing online music courses encountered different content delivery scenarios than when developing on-campus courses, which may impact the course planning and design process. Dykman & Davis (2008) stated, “Teaching online is very different from conventional teaching and it is not easy. Planning online coursework is much more

demanding and student-teacher relationships, much more complex” (pg. 14). An analysis of the present data related to developing online music courses is consistent with Dykman & Davis (2008). Participants indicated the time required for course development is more than designing an on-campus course, but once an online course is developed, the preparation and grading time for future offerings is the same as on-campus courses. During the development of online courses, the majority of participants with design experience stated they never collaborate with other music faculty, and they may or may not consult with a technology specialist, both of which are likely consistent with participants designing their on-campus courses. Additionally, 54% of participants stated they had not received special funding, and 59% had not received specialized training to develop online music courses. It is unknown whether or not participants were aware of available funding or training at their institution. Therefore, the previous findings seem to indicate that if online music course offerings continue to expand, institutions may find it beneficial to secure funding for the development of courses and increased faculty training.

Online Instructional Delivery Practices

One of the research questions in the present study was to find the current online instructional delivery practices in use. Participants with previous online teaching experience ($n = 81$) were provided two methods of indicating their assessment practices. First, participants rated their frequency of using the given statements about online instructional delivery practice. A 5-point Likert Scale was used to gather data. The data showed that participants most frequently used the following non-assessment strategies in their online courses: responding to student emails ($M = 1.11$; $SD = 0.42$), providing links to outside

sources ($M = 1.75$; $SD = 0.99$), and video lectures ($M = 3.43$; $SD = 1.56$). The high SD of providing links to outside sources and the use of video lectures may be a) indicative of the variety of practices used by faculty, or b) the result of online music courses being in their infancy, and the pedagogical value of these practices have yet to be established. Responding to student emails, while used by both on- and off-campus faculty, may be the primary mode of communication between the instructor and the online student. Whereas on campus students have the opportunity to speak directly with faculty in class, the online student may use email to communicate with faculty on course related topics. Therefore, responding to student emails may represent a pedagogical strategy in the online course. The present study did not seek to compare faculty's use of these strategies between on campus and online courses. Therefore, it is unknown if the strategies were previously used by faculty and adapted to the online environment.

Second, participants were given the opportunity to express additional online instructional strategies through an open-response prompt. Using Nvivo software, themes were categorized and the frequencies of appearance were calculated. The following themes were found: synchronous elements ($n = 6$), video ($n = 6$), supplementary materials ($n = 5$), and lectures ($n = 4$). These findings indicate participants' use of a variety of technologies and methodologies for in online courses. However, as these represent the types of additional online strategies, they do not provide the frequency, context of use, or how the online student may benefit from such use.

Assessment Strategies

This section addresses the research question seeking to find what assessment strategies were used in online courses. Participants with previous online teaching experience ($n = 81$) were provided two methods indicating their assessment practices. First, the survey instrument provided a list of statements of online instructional delivery practices that participants rated on a 5-point Likert Scale. The data showed that electronically submitted papers ($M = 1.64$; $SD = 1.18$), online quizzes/tests ($M = 2.30$; $SD = 1.52$), and discussion posts ($M = 2.50$; $SD = 1.55$) were the most used forms of assessment. However, considering the large SD for each item, it is unknown if there is a consensus among the online faculty as whether these are assessment strategies represent best practices for online instruction, were used because they are the preference of the instructor, or represent variety amongst online faculty.

Second, participants were given the opportunity to express additional online instructional strategies through an open-response prompt. Here, the frequency of themes indicated that discussion posts ($n = 7$), quizzes ($n = 7$), project-based assignments ($n = 4$), and written assignments ($n = 4$) were frequently used assessment tools. Between the two questions, discussion posts, quizzes, and written assignments were the most frequently used assessment tools. The open-ended question was designed to discover other modes of assessment not included in the Likert-Scale question. Therefore, it is unknown if project-based assessments would score a similar rating if it were included in the Likert-Scale question. Additionally, the participants provided no detailed descriptions of project-based assignments.

Perception of Online Music Course Quality

An additional research question investigated how music faculty perceived the quality of online music courses versus on-campus courses. Regardless of prior online teaching experience, participants of this study believed that students in online performance-based courses and courses requiring live interaction would be less likely to meet course objectives as students in the same on-campus course. However, participants indicated that students in course types not requiring face-to-face or live interaction possessed the potential to meet objectives in the online environment, but may be affected by other factors, including instructor involvement, robust course design, and institutional support.

Differing Faculty Opinions of Online Music Courses

He (1995) predicted:

With the powerful features of the Internet, it is foreseeable that all instructional activities which used to occur in the classroom will be deliverable to every place in the world as long as that place is connected to the Internet. (p. 111)

However, seven years later, Rees (2002) postulated that the music education community had been slow to adapt technological advances “probably because of a combination of skepticism, lack of access to technology, and discomfort with learning how to use computer-based applications” (p. 257).

This study found a large difference between faculty opinions surrounding the existence of online music courses. For example, participants in favor of online courses said things like, “While I initially had concerns about the effectiveness of online instruction I found that the current technology allows for all music courses to be taught in an intellectually

honest and effective manner.” Another participant stated, “I think that online courses meet a need with people who have significant time commitments of work or families or who must take more time or spread their time out to complete the courses [*sic*].”

However, just as some participants expressed positive views of online music education, others had negative views. For example, one participant stated, “I believe that on-line courses are frauds. I will not vote to hire, tenure, or promote a person who has taught an on-line course.” This participant shows an extremely negative view of online learning that directly extends to other faculty who teach online. Still others expressed negative views of online music courses by stating, “I have no interest in ever participating in online teaching. I think it’s a terrible idea and there is no way students will ever get even close to as much out of the experience as they have the potential to get in the classroom.”

Such divergent statements between participants show the polarization within the field of music concerning the existence of online music courses. The present study did not poll participants to expressly quantify how the field of music as a whole views online music courses—we can only see that there are extreme differences in opinions amongst music faculty.

Toward a Holistic Approach to Online Music Course Development

An adaption of Bronfenbrenner’s ecological systems theory (1979) to online music courses would likely include the student, faculty, course design, academic institution, and society. Such an adaptation, with further research of each factor independently, as well as the interactions between factors, may help us better understand the complex issue of online

music courses. The following discussion seeks to briefly examine these factors based on the findings of the present study.

The design of the present study did not seek to examine the role of the student in an online music course. However, some participants held the student partially responsible for meeting course objectives. The design of online music courses and the level of faculty engagement may influence student engagement, and thus influence whether or not the student will meet course objectives. Future research should explore more about the role of the student in online music courses.

This study found that 59% ($n = 44$) of participants with experience in course design did not have special training in online course design, and only 21 (28%) of the experienced course designers indicated they consulted with a technology specialist during course development “all of the time.” Therefore the majority of experienced online music course designers did not having specialized training in online course design or consult with a technology specialist during course design. Such a finding presents the possibility that course designers a) may be unaware of available technologies that may increase the effectiveness of online course delivery, b) may be unaware of known practices for effective course design, c) may not see the value of training and collaboration with a technology specialist, or d) may not have access to training or collaboration with a technology specialist. Teaching music online may be considered a specialized type of instruction. Therefore, like other specialized types of instruction requiring training through professional development, online music faculty may benefit from professional development that enhances their use of technology and known practices for effective online course design.

The characteristics of online music courses examined in this study not only include course design elements, but the perceptions of faculty toward the role of the institution in offering such courses as well. The role of the institution is implemented by the administration, and as found in this study, participants believed that some online music courses were offered to increase student enrollment. Therefore, students and faculty may benefit from institutions providing support for the development of online courses, faculty training, and online student services.

Online education has increased in acceptance between 2011 and 2013 (Gallup, 2014). This finding represents online learning beyond just music courses and shows continued growth in acceptance over time. If sustained acceptance in our culture is expected, then continued inquiry in online practices is warranted. Therefore, relative to online music courses, consideration of a holistic approach to online music course development may be of value. The proposed holistic approach—including the student, faculty, course design, academic institution, and society—seeks to understand each factor and the interactions between each factor on the impact on final course development.

Limitations

The survey participants were affiliated with NASM accredited, degree-granting institutions only. These criteria excluded music faculty who teach at non-NASM accredited colleges and course designers developing commercially available pre-packaged online music courses, which are purchased by institutions and delivered to their students. Participants of this study were selected because they were full-time music faculty teaching at least one classroom course. The participant selection process required searching the selected music

department websites, which may or may not have accurately reflected the faculty teaching status or the classroom courses they taught. Therefore, it is possible that website data was incorrect and that participants were incorrectly invited to participate in this study.

The survey was hosted on SurveyMonkey.com, and the web link for accessing the survey was only provided in the emails sent to participants. The supplied web link was posted with unrestricted access and could have potentially been accessed multiple times by a participant or the link could have been provided to individuals who were not invited to participate, allowing them to provide responses to the survey. The method used to provide the survey web link to participants was the only solution meeting both the regulations of SurveyMonkey.com and the Committee for the Protection of Human Subjects at the University of Houston. As a survey conducted online, this study may have led to biases in the types of participants who chose to respond. Such biases may include presuppositions, both positive and negative, concerning online learning.

The findings of this study are directly related to the field of music. Therefore, the unique issues discussed in the delivery of music course content in an online or blended/hybrid format may not necessarily be generalizable to the delivery of academic content in other fields of study. Additionally, the larger percentage of responses from music education faculty indicates a sampling issue that may limit generalizability of these findings.

Further generalization of these findings is limited because it is unknown whether music faculty have an accurate understanding of the technology and pedagogical practices used in teaching online. This study did not seek to determine the full background of each participant.

Following analysis of the survey instrument responses, it was found that questions 23 and 24 of the researcher-designed survey limited the range of responses from 0-4 years. Such limitation does not allow for determining the number of participating institutions who do not offer online undergraduate and graduate courses.

Suggestions for Further Research

This study sought to create an image of the current state of online music courses through a survey of music faculty at NASM accredited, degree-granting institutions. The findings show that the field of music is still in the early stages of offering online music courses. For continued growth of online music courses/programs within the field of music, future research should a) strive to develop a theoretical framework for online music course delivery, b) examine the pedagogical appropriateness of new developing technologies, c) develop best practices for online delivery of music courses, and d) establish protocols for faculty training in online course design and facilitation.

First, to strengthen our understanding of the purpose for offering online music courses, a theoretical framework for online music courses delivery is needed. Such a framework should address the needs for online music courses at the graduate and undergraduate level. The development of dialogue within the field of music may help refine the view of online music courses within the field and demonstrate the need for such courses. A concerted holistic understanding of online music courses by all music faculty will assist in understanding the strengths and weaknesses of online music courses.

Second, future research should examine the pedagogical appropriateness of new developing technologies for use in online music courses. The increased used of

hybrid/blended courses may provide a platform for developing best practices in online learning. Implementation of developing technologies within this domain may allow faculty to closely monitor student understanding and progress because the instructor still has personal interaction with students in a classroom. Such interaction may allow the instructor to determine the effective use of new technologies.

Third, there is a need for qualitative and quantitative studies comparing on-campus and online versions of like courses. Such studies will allow clearer comparisons for developing best practices. Additionally, evolving technologies, including educational use of Facebook and Twitter are being integrated into on-campus and online courses, and these should be studied for their effective use in online and on-campus courses.

Fourth, in agreement with Rees (2002), future research should focus on effective teaching and student learning practices. The findings of the present study show the need for developing methods that ensure the quality of courses and guide students to meeting course objectives in the online environment. Both qualitative and quantitative research will assist in developing best practices for students and faculty.

Finally, further studies should seek ways to provide faculty with ongoing technology training concurrent with developing technology. Such studies may also assist administrative personnel in securing funding for faculty training.

Appendix A

Researcher-Designed Survey

Dan M. Littles: Researcher-Designed Survey Instrument

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY
<p>1. Which of the following most clearly represents your primary area of specialization?</p> <p><input type="radio"/> Music Education</p> <p><input type="radio"/> Applied Instrumental/Choral</p> <p><input type="radio"/> Instrumental/Choral Conducting</p> <p><input type="radio"/> Music Theory</p> <p><input type="radio"/> Music History</p> <p><input type="radio"/> Ethnomusicology</p> <p><input type="radio"/> Composition</p>
<p>2. How many years have you taught music in the college or university setting?</p> <div></div>
<p>3. Which of the following represents the total student population of the university or college you represent?</p> <p><input type="radio"/> Very Small < 1000 Students</p> <p><input type="radio"/> Small = 1000-2999 Students</p> <p><input type="radio"/> Medium = 3000-9999 Students</p> <p><input type="radio"/> Large = 10,000 + Students</p>
<p>4. Do you currently, or have you previously taught music courses online?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No (Skip Logic Added: Skip to #21)</p>

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY
<p>5. Please list the undergraduate courses you have taught in an online only format (not courses utilizing both on-campus and on-line components).</p> <div></div>
<p>6. Please list the graduate courses you have taught in an online only format (not courses utilizing both on-campus and on-line components).</p> <div></div>
<p>7. Please list the undergraduate blended courses (courses utilizing both on-campus and on-line components) you have taught.</p> <div></div>
<p>8. Please list the graduate courses (courses utilizing both on-campus and on-line components) you have taught .</p> <div></div>
<p>9. Have you designed any of the courses you teach online?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No (Skip Logic Added: Skip to # 16)</p>
<p>10. I received specialized training in online courses design.</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY

11. I received special funding to develop online music courses.

- ☐ Yes
☐ No

12. I have designed

- ☐ 0-2 online music courses.
☐ 3-4 online music courses.
☐ 5-6 online music courses.
☐ 7 or more online music courses.

13. I collaborate with other music faculty when designing online music courses.

- ☐ Always
☐ Most of the time
☐ Half-of-the-time
☐ Less than half-of-the-time
☐ Never

14. I consult with a technology specialist to assist in course development.

- ☐ Always
☐ Most of the time
☐ Half-of-the-time
☐ Less than half-of-the-time
☐ Never

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY

15. The time required for me to design an online course is

- ☐ less than designing on-campus courses.
☐ same as designing on-campus courses.
☐ more than designing on-campus courses.
☐ dependent on the course. Please describe:

16. The time required for me to prep for an online course that is already developed is

- ☐ less than on-campus courses.
☐ the same as on-campus courses.
☐ more than on-campus courses.
☐ dependent on the course. Please describe

17. The time required for me to grade assignments for online courses is

- ☐ less than on-campus courses.
☐ the same as on-campus courses.
☐ more than on-campus courses.
☐ dependent on the course. Please describe:

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY

18. My ideal number of students in an online course is

- ☐ less than on-campus courses.
☐ the same as on-campus courses.
☐ more than on-campus courses.
☐ dependent on the course. Please describe:

Please rate the following criteria based on your experience designing or teaching music courses online.

19. I use the following online teaching tools.

	Always	Most of the time	Half of the time	Less than half of the time	Never
I provide video lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I provide links to outside sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give online quizzes/tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I require written papers submitted electronically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I require online listening assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use written discussion posts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use video chat discussion posts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I require collaborative student assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respond to student discussion posts with follow-up comments or questions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respond to student emails or messages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I provide responses/feedback to student discussion posts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY

20. Please describe other characteristics of your pedagogical approach to teaching online music courses.

Please rate the suitability for online delivery of each of the following music courses even if it is not offered at your university.

21. Please rate the suitability for online delivery of each of the following music courses even if it is not offered at your university. (1= Suitable --- 5= Not Suitable)

	1	2	3	4	5
Composition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intro to Music Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Applied Instrument/Voice Lesson	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music Research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music Theory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music Appreciation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instrumental/Choral Literature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instrumental/Choral Pedagogy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instrumental/Choral Conducting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music Education Methods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sight Singing & Ear Training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music Education of children for non-music major	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instrumental/Choral Methods	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Music Business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instrumental/Choral Arranging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY

22. Does your school of music or music department have a Distance Learning Specialist within the music department?

- ☐ Yes
☐ No
☐ Don't Know/Unsure

23. How long has your school offered undergraduate music courses online?

- ☐ 0 – 4 years
☐ 5 – 9 years
☐ More than 10 years
☐ Don't know/Unsure

24. How long has your school offered graduate level music courses online?

- ☐ 0 – 4 years
☐ 5 – 9 years
☐ More than 10 years
☐ Don't know/Unsure

25. Does your college or university offer online music courses?

Yes: Please describe your music department's reasons for offering music courses online.

No: Please describe your music department's reasons for not offering music courses online.

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY

26. In which semester does your school offer the most online music courses?

- ☐ Fall
☐ Spring
☐ Summer
☐ Other Special Semester (Winter, Intensive, etc.)
☐ Don't know/Unsure

27. I believe that students enrolled in online music courses meet course objectives with the same results as students enrolled in the same course offered on campus.

- ☐ Strongly Disagree
☐ Moderately Disagree
☐ Neutral
☐ Moderately Agree
☐ Strongly Agree
☐ Depends on the course (Please describe below)

CHARACTERISTICS OF ONLINE MUSIC COURSES: A SURVEY OF MUSIC FACULTY

28. Please describe any additional information about teaching music courses online that you feel may be relevant to this study.

Appendix B

UNIVERSITY OF HOUSTON CONSENT TO PARTICIPATE IN RESEARCH

PROJECT TITLE: Characteristics of Online Music Courses: A Survey of Music Faculty

You are being invited to participate in a research project conducted by Dan M. Littles from the Moores School of Music at the University of Houston. This project is being conducted as part of a dissertation and is being supervised by Dr. Julie Kastner.

NON-PARTICIPATION STATEMENT

Your participation is voluntary and you may refuse to participate or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. You may also refuse to answer any question.

PURPOSE OF THE STUDY

The purpose of this study is to determine the perceptions of music faculty toward course suitability for online delivery, the pedagogical practices of online music faculty, and the current predominant characteristics of online music courses. The duration of data collection is 15 days.

PROCEDURES

You are one of approximately 2500 subjects being asked to participate in this project.

You are being asked to complete a 28-question researcher-constructed survey that will require approximately 12 minutes for completion. The survey is designed using intelligent skip logic. Therefore, based on answers provided, your participation time may be greatly reduced. The survey includes multiple-choice, Likert, dichotomous, and open-text questions. You will be provided a link to access the survey online at SurveyMonkey.com. Once you have completed the online survey your participation in this study is complete.

CONFIDENTIALITY

Your participation in this project is anonymous. Please do not write your name in any of the open response questions of the survey.

RISKS/DISCOMFORTS

There are no foreseeable risks.

BENEFITS

While you will not directly benefit from participation, your participation may help investigators better understand the current predominant characteristics of online music courses.

ALTERNATIVES

Participation in this project is voluntary and the only alternative to this project is non-participation.

PUBLICATION STATEMENT

The results of this study may be published in professional and/or scientific journals. It may also be used for educational purposes or for professional presentations. However, no individual subject will be identified.

If you have any questions, you may contact Dan M. Littles at (314) 560-5997. You may also contact Dr. Julie Kastner, faculty sponsor, at (713) 743-4547.

ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UNIVERSITY OF HOUSTON COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (713-743-9204).

Principal Investigator's Name: Dan M. Littles

Appendix C

Email 1 Script

Professor,

You are invited to participate in a research project conducted by Dan M. Littles from the Moores School of Music at the University of Houston. This project is being conducted as part of a dissertation and is being supervised by Dr. Julie Kastner.

Dissertation Title: *Characteristics of Online Music Courses: A Survey of Music Faculty*

This study seeks to determine the perceptions of music faculty toward course suitability for online delivery, the pedagogical practices of online music faculty, and the current predominate characteristics of online music courses.

Your participation in completing the 28-question survey is greatly appreciated, even if you have no previous experience in online learning. The survey should take less than 12 minutes to complete.

Link to the survey: <https://www.surveymonkey.com/s/DS28FVX>

Thank You,

Dan M. Littles
University of Houston

Appendix D

Email 2 Script

Professor,

You previously received an email inviting you to participate in a research project conducted by Dan M. Littles from the Moores School of Music at the University of Houston. This project is being conducted as part of a dissertation and is being supervised by Dr. Julie Kastner.

Dissertation Title: *Characteristics of Online Music Courses: A Survey of Music Faculty*

This study seeks to determine the perceptions of music faculty toward course suitability for online delivery, the pedagogical practices of online music faculty, and the current predominant characteristics of online music courses.

I would like to extend my gratitude if you have already participated in completing the survey. If you have not had the opportunity to complete the survey, I would greatly appreciate your participation, as it is a valued component, not only to this project, but to the field of music as well.

Link to the survey: <https://www.surveymonkey.com/s/DS28FVX>

Thank you for your participation.

Dan M. Littles
University of Houston

Appendix E
List of Undergraduate/Graduate Online and Blended/Hybrid Courses

Course Title	UG* Online Only	UG* Blended/ Hybrid	Graduate Online Only	Graduate Blended/ Hybrid
21st Century Music Teacher			X	
Administration and Curriculum of Music Programs			X	
Advanced Theory			X	
Analysis of Masterworks				X
Analytical Techniques				X
Applications of Technology			X	X
Arts Administration Specialty: Music Management/Artist Management	X			
Aural Skills I-IV		X		
Church Music Administration		X		
Choral Arranging		X		
Choral Methods		X		
Classical Music Appreciations		X		
Concepts in Music Education (Foundations)			X	
Conducting		X		
Contemporary Issues and Trends in Music Education			X	
Contemporary Issues in Music Education			X	X
Counterpoint		X		
Critique in Music Education			X	
Critique of Music Education Research			X	
Curriculum and Assessment				X
Curriculum in Music Education				X
Curriculum Project			X	
Curriculum Seminar			X	X
Digital Media			X	X
Doctoral Seminar in Digital Media				X

Course Title	UG* Online Only	UG* Blended/ Hybrid	Graduate Online Only	Graduate Blended/ Hybrid
21st Century Music Teacher			X	
Administration and Curriculum of Music Programs			X	
Advanced Theory			X	
Analysis of Masterworks				X
Doctoral Seminar in Music Technology			X	
Educational Principles of Church Music Ministry				X
Elementary Methods (non-major)		X		
Elementary Music Methods		X		
Evaluation in Music Education				X
Evaluation of Program (Assessment)			X	X
Form and Analysis		X		
Foundations and Current Issues in Music Education			X	
Foundations of Music Education			X	X
Graduate Choral Methods				X
Graduate Music Theory Review			X	
Graduate Research				X
Guitar Methods				X
History and Philosophy of Music Education			X	X
History of Commercial Music	X			
History of Rock	X	X		
History Seminar				X
Hymnology			X	X
Internship-Student Teaching		X		
Instrumental Development and Materials				X
Instrumental Methods		X		
Instrumental Music Methods		X		
Instrumental Problems and techniques			X	

Course Title	UG* Online Only	UG* Blended/ Hybrid	Graduate Online Only	Graduate Blended/ Hybrid
21st Century Music Teacher			X	
Administration and Curriculum of Music Programs			X	
Advanced Theory			X	
Analysis of Masterworks				X
Introduction to Music		X		
Introduction to Music Education Research			X	
Introduction to Music Technology			X	
Introduction to Music Technology		X		
Introduction to Research			X	
Introduction to the Arts	X			
Jazz Appreciation	X			
Jazz in American Society		X		
Jazz/Rock History		X		
MA Field Project				X
Masters Inclusive Music Education			X	
Methods of Teaching Woodwinds			X	
Methods, Materials, and Pedagogy in Music Education			X	
Multicultural Music Education			X	
Multimedia Research and Design			X	X
Music Analysis			X	
Music Appreciation	X	X		
Music Bibliography and Research				X
Music Capstone - Music and Christian Faith	X			
Music Creativity with Music Technology			X	
Music Education for the Classroom Teacher	X			
Music Education Materials and Methods				X

Course Title	UG* Online Only	UG* Blended/ Hybrid	Graduate Online Only	Graduate Blended/ Hybrid
21st Century Music Teacher			X	
Administration and Curriculum of Music Programs			X	
Advanced Theory			X	
Analysis of Masterworks				X
Music Education Research			X	X
Music Educations Foundations			X	
Music for Living	X			
Music Fundamentals	X	X		
Music History	X	X	X	X
Music History & Literature		X		
Music in the Elementary School		X		
Music in World Cultures		X		
Music Technology		X		
Music Technology Pedagogy			X	
Music Theory	X	X		
Music Theory for Worship	X	X		
Music Theory I-IV		X		
Music Theory, Analysis, and Technology			X	
Orchestration		X		
Organization of Program (Philosophy and History)			X	X
Pedagogy of Music Theory				X
Pedagogy, Methods, and Materials			X	
Philosophy/History			X	X
Popular Music: Jazz & Rock		X		
Practicum				X
Prelude to Music Education		X		
Principles of Child Development and Early Childhood Education			X	
Psalms, Hymns, and Spiritual Songs	X	X		
Psychology and Sociology of Music Education			X	X
Psychology of Music			X	X

Course Title	UG* Online Only	UG* Blended/ Hybrid	Graduate Online Only	Graduate Blended/ Hybrid
21st Century Music Teacher			X	
Administration and Curriculum of Music Programs			X	
Advanced Theory			X	
Analysis of Masterworks				X
Psychology of Teaching Music		X		
Psychology/Sociology			X	
Qualitative Research			X	
Quantitative Research on Music Education			X	
Research			X	
Research Design			X	
Research for Practitioners in Music Education			X	
Research in Music Education				X
Research Techniques				
Rock and Roll in American Society		X		
Secondary Methods		X		
Sight Singing/Ear Training		X		
Student Teacher Seminar		X		
Supervision & Administration of the School Music Program			X	
Survey of Church Song		X		
Survey of Jazz History	X	X		
Survey of Music in America	X			
Survey of Music Literature I-II	X			
Survey of Music Technology	X			
Survey of World Music		X		
Teaching Music in the Elementary Grades		X		
Teaching Music with Technology			X	
Teaching World Music			X	
Techniques in Church Music Ministries				X

Course Title	UG* Online Only	UG* Blended/ Hybrid	Graduate Online Only	Graduate Blended/ Hybrid
21st Century Music Teacher			X	
Administration and Curriculum of Music Programs			X	
Advanced Theory			X	
Analysis of Masterworks				X
Technology in Music Education				X
The School Music Program: The Adolescent Learner			X	
Theory Pedagogy				X
World Music	X	X		
Worship and Church Music Administration				X
Worship Leadership	X	X		X
Worship Perspectives	X	X		
Total Unique Course Titles	21	44	52	39

*UG = Undergraduate

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