MALLEABLE MINDSETS: RETHINKING INSTRUCTIONAL DESIGN IN UNDERGRADUATE MUSIC THEORY

by

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DISSERTATION ABSTRACT

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This dissertation explores why undergraduate music theory students may not be motivated in their classes and how we can begin to improve music theory pedagogy by addressing the negative preconceptions surrounding the subject and changing student motivation. I will investigate student motivation in the core curriculum of music theory by studying students' *self-theories* (that is, the mindsets that they bring to the study of the subject, which dictate whether they view a construct like intelligence or ability as being either malleable or fixed) and detailing how an instructional design specific to music theory may influence that self-theory. By drawing upon research in fields outside of music theory, such as psychology, mathematics, and video game design, I will show how our classrooms can be more motivating and engaging through the adoption of an instructional design that ultimately helps our students develop a stronger ability in music theory.

I theorize that a model for improving student motivation begins with the Instructional Design for Incremental Self-Theory Adoption (IDISTA). This model introduces a new way of designing a course through different levels of focus based on a student-centered approach to teaching. By using IDISTA, teachers can design their

courses in a way that encourages students to adopt a more malleable mindset as they pursue their studies in music theory. Based on my theoretical model of motivation, I propose that students will adopt a more malleable mindset that will lead to a change in motivation, and also to an increase in their music theory ability.

These robust models provide an important and significant contribution to the field of music theory pedagogy by transforming the way instructors design and conceptualize their curricula. Most importantly, these models and their application in music theory pedagogy will improve the learning environment for our students and help them gain a new fluency in understanding music.

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CHAPTER I

INTRODUCTION

Music theory is a field for asking questions. While many music theorists ask questions about music, some ask questions about how to teach music and musical theories. M. Rogers (2004) even states that "one of the most important goals of any [music] theory class ought to be discovering which questions about music are most worth asking in the first place" (p. 5). In this dissertation, I will be asking questions about how we teach music theory. Are current students in music theory motivated in their classes? How does an instructional design—the combination of course materials, assessment, syllabi, and our teaching philosophies—influence a student's motivation in music theory?

This dissertation aims to address student motivation in the core curriculum by investigating a student's *self-theory* (a type of mindset in which a person views a construct like intelligence or ability as being either malleable or fixed) and how an instructional design specific to music theory may influence that self-theory. Many factors influence the amount and type of motivation, and his dissertation only aims to address a subset of possible issues and theories. While little research directly addresses student motivation in music theory, a large body of work in the fields of education, psychology, mathematics, and video game design addresses questions about student motivation and mindsets. By drawing upon some of this outside research, I hope to discover how motivated music theory students are and how we as teachers can create a more motivating and engaging environment through an instructional design that ultimately helps our students develop a stronger ability in music theory. In this chapter, I will briefly outline

the history of music theory pedagogy as a subfield of music theory, as well as my interdisciplinary approach to addressing student motivation in music theory.

History of Music Theory Pedagogy

In 1982, B. B. Campbell observed that research in music theory pedagogy within the larger field of music theory was lacking: "only five of the nearly two hundred articles that have appeared in [the *Journal of Music Theory* since 1957] have dealt with pedagogy" (p. 356). In the years immediately following, there was a surge of interest in music theory pedagogy. M. Rogers (2004) notes that "the mid-1980s marked a turning point toward heightened interest and momentum for the evolution of theory pedagogy" (p. vii). This time period saw the publication of two important books about teaching music theory, by White in 1981 and M. Rogers in 1984, as well as the formation of the *Journal of Music Theory Pedagogy* in 1987.

Despite the increase of interest in music theory pedagogy during the 1980s, however, pedagogical practices have not significantly changed in the intervening 20–30 years. White (2002) states that "in spite of all the noise about transcending the canon and reaching beyond the so-called common practice period, four-part writing in eighteenth-century style persists … in present-day freshman and sophomore theory courses" (p. 6), and that "the primary objectives of skills in sight-singing, part-writing, analysis, and keyboard remain substantially unchanged" (p. 6). In the preface to the 2004 second edition of his book, M. Rogers adds that "the core of the subject [as we teach it] has not changed much over recent years in my opinion" (p. viii). More generally, Conway and Hodgman (2009) observe that "music curricula in many colleges and universities have changed little in the past 50 years" (p. 19).

A New Approach to Music Curricula

Since 2009, many new approaches to teaching music theory have been proposed and discussed, especially student-centered approaches. In the inaugural issue of *Engaging Students: Essays in Music Pedagogy*, Burstein (2013) pledged that "for the field of music theory pedagogy to continue to thrive within an increasingly pluralistic university setting, surely it must adopt new avenues for encouraging a student-centered, holistic approach to the subject" (para. 6). While the content of the *Engaging Students* journal encourages the development of more student-centered, more meaningful, and engaging classrooms, issues of low student engagement and motivation are often not addressed.

While engagement and motivation have not been directly addressed in the scholarly literature on music theory pedagogy, there seems to be an unwritten, anecdotal understanding that music theory students are not motivated. Jones and Bergee (2008) even suggested in their study that "the onset of the digital music age should make it extremely easy for the instructor to incorporate a variety of performance media into her/his musical examples in order to generate a greater intrinsic motivation among the student group" (p. 103). The inclusion of this suggestion implies that motivation, specifically intrinsic motivation, is currently lacking in music theory students.

Malleable Mindsets

In this dissertation, I will directly address issues of motivation using psychological theories developed by Dweck et al. (1995) and Deci and Ryan (2000) to develop my own theoretical model of motivation. This model will feature a new approach to instructional design that creates an environment more conducive to the development of a malleable music-theory mindset. I theorize that adoption of this malleable mindset (or

self-theory, or implicit theory, as referred to by Dweck et al. (1995)) will change students' motivation, particularly their intrinsic motivation, and lead to higher overall ability in music theory.

Chapter II of this dissertation will review literature from music theory, education, psychology, mathematics, and video game design research in order to investigate current music theory pedagogies, define engagement and motivation in education, and understand how mathematics and video games provide relevant models for the application of the research done by Dweck et al. (1995) and Deci and Ryan (2000). Chapter III will introduce my own theoretical model of motivation and the Instructional Design for Incremental Self-Theory Adoption (IDISTA), followed by applications of IDISTA in music theory in Chapter IV. Finally, Chapter V will offer current conclusions and future plans for empirical research of these models in music theory.

The development of my theoretical model of motivation and IDISTA builds on research from psychology in an interdisciplinary approach to address motivation. These robust models provide an important and significant contribution to the field of music theory pedagogy by transforming the way instructors design and conceptualize their curriculums and by providing new avenues for researchers to incorporate empirical studies into their work. Further, the use and future potential of these models will help music theorists connect to a larger body of research and ideas in psychology and education.

CHAPTER II

LITERATURE REVIEW

> While many students flourish in the music-academic environment, a disproportionate number seem to struggle with the material and are at risk of abandoning their music studies, in part because of the challenges presented by their introductory experience with music theory. (Jones & Bergee, 2008, p. 94)

Jones and Bergee's (2008) comment represents one among many anecdotal observations made by music theory instructors who remark that for many of their students, music theory is difficult. Many incoming undergraduate music students are unprepared for the core curriculum in music theory, as noted by West Marvin (2012): "respondents commented on the increased need for remediation in their incoming freshman theory classes" (p. 261). Additionally, students who successfully complete an undergraduate degree in music "cannot confidently spell scales, intervals, or chords, or perform other seemingly basic tasks" (Hoag, 2013b, p. 2). While the subfield of music theory pedagogy continues to grow, little attention has been given to the problem of low ability in music theory undergraduates in relation to music theory ability and motivation. In this chapter, I will first define some important constructs: the core curricula in music theory, engagement, and motivation. Because of the lack of direct research on motivation in music theory, I will the introduce work in other fields, such as psychology, mathematics pedagogy, and video game design, that has investigated motivation more directly. Then I will explore why students in music theory may be unmotivated, what kinds of improvements might be made, and how specific theories of motivation may be applied to music theory pedagogy.

Core Curricula in Undergraduate Music Programs

The National Association of Schools of Music (NASM) (2015) defines undergraduate musicianship studies as including:

> the body of knowledge, skills, practices, and insights that enables music-making at any level. … Completion of an undergraduate program in music indicates acquisition of sufficient musicianship to perform these functions [performing, listening, composing, theorizing, teaching, etc.] appropriate to the areas of concentration and to communicate effectively across the specializations of musical practice. (p. 84)

NASM (2015) elaborates further that all professional baccalaureate degrees in music require the following musicianship and analysis skills:

> [1.] An understanding of the common elements and organizational patterns of music and their interaction, the ability to employ this understanding in aural, verbal, and visual analyses, and the ability to take aural dictation. [2.] Sufficient understanding of and capability with musical forms, processes, and structures to use this knowledge and skill in compositional, performance, analytical, scholarly, and pedagogical applications according to the requisites of their specializations. [3.] The ability to place music in historical, cultural, and stylistic contexts. (p. 99)

Shaffer (2014b) provides context for the role of musicianship studies, commonly referred to as a core curriculum in music theory, as being "usually 3–5 semesters of music theory, aural skills, and keyboard skills" (para. 8). For the purposes of this dissertation, I will only be focusing on the music theory portion of this core curricular outline.

Engagement and Motivation

With the influx of new pedagogical approaches and teaching styles in recent scholarship, more focus is beginning to be directed toward student-centered learning. This shift in focus may be an indication that some teachers and researchers in music theory are beginning to take note of the importance of student engagement and motivation.

What, then, is engagement? Newman, Wehlage, and Lamborn (1992) define engagement as "active involvement, commitment, and concentrated attention, in contrast to superficial participation, apathy, or lack of interest" (p. 11). Newman et al. (1992) write that "student engagement in academic work as the student's psychological investment in and effort directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote" (p. 12). This psychological investment goes beyond simply completing assignments and acquiring desired grades, tasks that may be completed without engaging in the mastery of a topic or skill. Shernoff (2013) further defines engagement "as an interactive, ecological process that exists in the interaction or fit between an individual and an ecological system, with activities and relationships with others" (p. 53). In summary, engagement is active involvement and investment in a particular task that occurs in an interactive environment.

Sharan, Shachar, and Levine (1999) further clarify that "student engagement in learning [is] a concept that overlaps with, but is not reducible to, motivation to learn" (p. 85). Ryan and Deci (2000) define motivation as being "*moved* to do something. A person who feels no impetus or inspiration to act is thus characterized as unmotivated, whereas someone who is energized or activated toward an end is considered motivated" (p. 54). Within the general description of motivation are two important distinctions: "intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a separable outcome" (Ryan & Deci, 2000, 55). Thus, motivation can be understood in terms of a person's amount of motivation and their orientation of motivation. Schunk, Pintrich, and Meece (2008) build on this definition by specifying that motivation is "the

process whereby goal-directed activity is instigated and sustained" (p. 4). Unlike engagement, which is often something external to one's sense of self that happens in an environment, motivation is internal and specific to an individual. In summary, engagement and motivation are related concepts; being engaged in an activity or task holds a person's interest and attention, and motivation is the driving force behind the desire to take part in said activity or task.

Motivation in Mathematics and Video Games

In the first chapter of this dissertation I quoted B. B. Campbell (1982), who observed that actual pedagogical practices may not have evolved much, despite the continued wealth of music theory pedagogy research. Current research in music theory pedagogy falls into three broad categories: content (of both specific classes and curricula as a whole), philosophy and practice, and assessment. Many articles have been written about the content that we include in teaching music theory, the order and pacing of that content, and the philosophies and histories that inform how we might approach teaching that content (Callahan, 2012; Rogers, M., 2004; Schubert, 2014). These discussions may even include anecdotal evidence on how a certain teacher goes about teaching a specific topic, as Schubert (2014) describes: "Lately I have experimented with using improvisation as a step towards analysis in an upper-level undergraduate class" (para. 2). Philosophical articles often deal with course design (West Marvin, 2012) and teaching philosophies (Stamatis, 2014), with many recent publications discussing different teaching styles, like flipped classes (Shaffer & Hughes, 2013), inquiry-driven classes (Shaffer, 2013), and problem-based learning (Duker, Shaffer, & Stevens 2014), which may help increase student engagement. Specifically, flipped classes attempt to flip the

traditional roles of in-class work and out-of-class work, with students watching lecture videos, reading materials, and learning basic information outside of class and working through problems, experimenting with tools, and applying the information they learned in class; inquiry-driven classes and problem-based learning may be used separately or in conjunction with flipped classes by giving students questions and problems to solve that leads to the discovery of information by the student instead of introducing the student to the same material through a teacher-led lecture. Additionally, assessment in music theory courses continues to be a popular topic of discussion (Alegant & Sawhill, 2013; Gawboy, 2013; Moseley 2014; Smith, 1999).

Issues of engagement and motivation have been discussed to some extent in the music theory pedagogy research cited above. However, the field is currently lacking a more direct and robust discussion of motivation. Therefore, it is necessary to look to other disciplines that have more thoroughly explored problems and solutions of motivation in their pedagogical approaches and research. Music theorists can address the problem more effectively if we take advantage of the research in psychology and education, as well as overlapping applications in other fields with similarities to music theory, including mathematics and video games.

Mathematics. Music theory classes are often described as the math classes of music. VanHandel (2012) explores many of the similarities: "a form of representation—a system of notation" (p. 194) is necessary for both that is abstract and grows in complexity, basic fundamental functions in mathematics and music theory are "organized systematically, and if students understand the system it can help them understand each

piece of the system and to grasp the whole" (p. 194), the use of algorithms, and the "development of expert understanding" (p. 195).

Like music theory,

> math is an intrinsically engaging subject, or should be. … Because solving problems is an inherent goal of mathematics, a discovery approach that is at the foundation of 'constructivist' activities is built in to it. … Unfortunately, math is not at all motivating for a large number of students. (Shernoff, 2013, p. 200)

Shernoff's (2013) findings suggest that math is often perceived as having a high intellectual intensity, challenge, and importance that could be highly engaging if it were also enjoyable. VanHandel (2012) recognizes that "the pedagogy of mathematics education is an immense field that has enjoyed much more research attention and funding than the pedagogy of music theory" (p. 191), and for this reason, I will be investigating some of the recent advancements in mathematics pedagogy. Because of these similarities, direct research on motivation in mathematics classrooms may provide some helpful clues for addressing motivation in music theory classrooms.

Video games. Boettcher, Hahn, and Shaw (1994) note that "there are many correlational, historical and anecdotal accounts of relationships and similarities between mathematics, music and chess" (p. 53). However, these similarities may not be exclusive to chess, but to games of all types, including video games. Gee (2007) adds that "if the principles of learning in good video games *are* good, then better theories of learning are embedded in the video games many children in elementary and high school play than in the schools they attend" (p. 5). He defines video games as a semiotic domain, or "a set of practices that recruits one or more modalities (e.g., oral or written language, images, equations, symbols, sounds, gestures, graphs, artifacts, etc.) to communicate distinctive types of meanings" (p. 19), going so far as to list "rap music" (p. 19) as one example in

"a nearly endless, motley, and every-changing list" (p. 19). Gee's (2007) definition of video games as a semiotic domain could even be applied to the list of similarities VanHandel (2012) found in mathematics and music theory, constituting both as semiotic domains.

For example, the puzzle video game Portal (2007) establishes an environment of a dystopian human test facility where the player is a test subject. This identity immediately gives the player a reason for participating in the first several levels of the game, which are the first tests for your character. The player enters a room, and in order to exit, must complete an objective, which is abstractly illustrated at the entrance of the room. Through free exploration and manipulation of the area, the player interacts with objects, including a stationary portal that connects two areas. As the game progresses, the player receives a gun that creates a portal that connects to an existing stationary portal in the level, and eventually gains access to creating both the portal entrance and exit. The player learns how to understand and operate within the internal grammar of this semiotic domain by learning how to navigate in a first-person perspective and manipulate various environmental objects, while also understanding the external grammar of the semiotic domain by recognizing various levels of a video game, and possibly communicating with others about the game in the real world. For Gee (2007), critical learning takes place in video games because

> the learner must see and appreciate the semiotic domain as a *design space*, internally as a system of interrelated elements making up the possible content of the domain and externally as ways of thinking, acting, interacting, and valuing that constitute the identities of those people who are members of the affinity group associated with the domain. (p. 32)

Boettcher et al. (1994) summarize that "the underlying basis of the higher brain functions that apply to mathematics, music or chess is abstract, spatio-temporal firing-pattern development by groups of neurons over large regions of cortex for some tens of seconds" (p. 53). What this suggests is that games, mathematics, and music have much in common cognitively. Video games and learning have become the focus of research in education and psychology, as they "can be highly engaging, and educators have suggested taking advantage of the motivational properties of video games to promote learning" (Shernoff, 2013, p. 323). Applications of research on motivation in mathematics and video games may prove to be very informative for the ways music theory pedagogy can adapt and change to directly address issues of motivation in music theory. In the discussion that follows, I will outline some of the current motivation problems in music theory, solutions that have been explored, and the new approaches we can take to solving this problem based on psychological and educational research.

Why are Undergraduate Music Theory Students Unmotivated?

While much of the research on motivation has taken place in K–12 mathematics classrooms or with younger students, most undergraduate music students do not encounter formal music theory coursework until they begin their undergraduate programs. There are some exceptions, of course, including Advanced Placement music theory courses becoming more popular in recent years, with participation reaching "some 18,000 high school students in 2011" (West Marvin, 2012, p. 261). However, certain negative preconceptions about studying music theory persist through the musical landscape that students encounter before ever entering a music theory classroom.

Jones and Bergee (2008) comment on this phenomenon:

> The current reader may find that she/he has formulated *a priori* judgments about a number of the topics addressed in our study. One hears statements such as "of course I'm terrible at theory. I'm a singer…" from students on a regular basis, and they become the sources for popular misconceptions. (p. 94)

They continue by elaborating that these misconceptions are not only held by students, but also by music theory professors: "A surprising number of colleagues have expressed personal biases over the years, with the primary assumption seeming to be that vocalists are weaker at theory than instrumentalists" (p. 103).

Additionally, students may hear about the experienced difficulties and biases described above from a variety of sources, including other students, older peers in music theory coursework, siblings, private instructors, and social media. One example is Hein's (2014) article published on Slate, where he states that "the conventional teaching of music theory serves practicing musicians very poorly" (para. 1). Shaffer (2014b) replies that the article "contains straw-man arguments, misinformation, and generalizations" (para. 1) and Hughes (2014) reflects that

> I seem to frequently respond to people who suggest that what we learn in music theory class is "irrelevant and useless, since we're not eighteenth-century court musicians." … Many students over the years have asked me to explain to them how music theory is "relevant to their musical lives." (para. 2)

However, as both noted by Shaffer and Hughes, Hein's article was "'published' (curated?) by Slate, a seemingly reputable journalistic website" (Hughes, 2014, para. 2), and "received wide publicity" (Shaffer, 2014b, para. 1).

Another common idea students may encounter before studying music theory is that it will be similar to a mathematics course, or even that they will need to have prior aptitude in mathematics in order to perform well in a music theory course. There is some empirical evidence from Jones and Bergee (2008) that shows a correlation between

success in first-year music theory with both high school class rank and ACT math scores. However, Gee (2007) emphasizes the importance of student identities in education, stating that

> if a child brings to science learning a real-world identity as a learner, a school learner, or a school science learner who is already damaged—and a good many children do—then this identity needs to be repaired before any active, critical learning can occur. (p. 57)

If a soon-to-be music theory student is told that they will do well in music theory if they were good at math, and they are bringing a damaged "real-world identity" of a math student to the music theory classroom, they may already be adopting a damaged identity in music theory, or developing reasons to be fearful of the subject.

Reforms in Music Theory Core Curricula

Approaches to reforms in the music theory core curricula fall along a spectrum of two extremes: greatly reducing or removing music theory from undergraduate core curricula, and ignoring the problem to maintain the current climate and approach for teaching music theory, most often manifested in published textbooks. I will begin by discussing examples of these two extremes and then offer some examples of "in-between" cases in current scholarship.

Textbooks and maintaining the status quo. Cathey (2015) identified "commercially-available textbooks (92.31%) and companion workbooks (80.77%) [as] the most common pedagogical tools" (p. 11) for Oklahoma Music Theory Roundtable instructors. The most commonly used music theory books include Kostka and Payne's 2009 *Tonal Harmony*, Clendinning and Marvin's 2004 *Musician's Guide to Theory and Analysis*, and instructor-designed materials (Cathey, 2015, pp. 11–12). (Both of these textbooks have since published newer editions.)

As observed in Graybill's (1993) review of several of these textbooks, "harmony and voice leading figure prominently in each of the six textbooks" (p. 257). Within the subjects of harmony and voice leading, four-voice part writing in particular takes a center stage and is often the focus of the content in modern textbooks. As defined by Kulma and Naxer (2014), "part writing in its current pedagogical form [is] the specific combination of voice leading and harmonic syntax in the eighteenth- and nineteenth-century styles that has appeared in textbooks since Walter Piston's *Harmony* [first published in 1941]" (para. 2). However, the pervasiveness of part writing in modern textbooks means these pedagogical tools maintain the current climate leading to negative conceptions of incoming music theory students, contributing to low motivation.

To further investigate some of the problems exhibited by current music theory textbooks, I have selected five representative examples, all in current distribution, based on availability and perceived use in current music theory curricula in the United States: Aldwell, Schachter, and Cadwallader (2011), Burstein and Straus (2016), Clendinning and Marvin (2011), Kostka, Payne, and Almén (2013), and Laitz (2016). An informal look at these textbooks show that on average, approximately 69% of the tonal music chapters include part writing in the form of examples, explanations, and exercises. Since part writing is often taught following fundamental music skills like scales and intervals, excluding chapters on these topics raises the average to approximately 82% of the textbook's chapters on tonal harmony and voice-leading topics.

Currently, a great deal of curriculum, content, and classroom time is devoted to part-writing techniques, due to the emphasis in textbooks discussed above. However, Kulma and Naxer (2014) point out that there are many shortcomings of part writing,

including "students hav[ing] difficulty sifting important ideas from stylistic idiosyncrasies" (para. 4), limiting student engagement and agency because of rigid, memorized sets of part-writing rules, focusing on stylistic idiosyncrasies that are not always relevant to the music students interact with or are familiar with, and the outcome that students "often come away with the feeling that part writing is equivalent to music theory, and then assume it is always applicable or wholly irrelevant" (para. 4), as demonstrated by Hein (2014). In mathematics, similar criticisms of similar tasks in geometry were observed in Schoenfield's 1988 case study: classes were well-taught and students performed well on standardized exams, but they learned inappropriate and counterproductive concepts of math. Because topics were "presented … in bite-sized pieces so that it would be easy for them to master" (p. 161), especially in their books, students finished the class believing that mathematics is about "error-free and mechanical performance" (p. 161), since that is what they experienced in their classrooms. Schoenfield (1988) further criticized textbooks for "present[ing] 'problems' that can be solved without thinking about the underlying mathematics, but by blindly applying the procedures that have just been studied" (p. 163).

Schoenfield's (1988) observations can be seen in one example in music theory textbook instruction on the topic of "root position part writing with roots a 4th (5th) apart" (p. 83) found in Kostka, Payne, and Almén (2013). In four-part textures, part-writing procedures have three options:

> [1.] Keep in the same voice the tone that is common to both chords, while the remaining two upper parts move by step in the same direction. The stepwise motion will be ascending for root movement of a P5 down and descending for root movement of a P5 up; [2.] Move all three upper parts in the same direction, with no leap larger than a 3rd. The motion will be descending for a root movement of a P5 down (or a P4 up) and

> ascending for a root movement of a P5 up (or P4 down); [3.] As in the first method, we keep in the same voice the tone that is common to both chords, but the voice that has the 3rd in the first chord leaps to provide the 3rd in the second chord. The remaining voice moves by step. (Kostka et al., 2013, pp. 83–84)

Following the explanation are short "problems" that can be solved as Schoenfield (1988) describes above. It is important to note that part writing itself is not the inherent problem exhibited by textbooks—the problem, as exhibited above by Kostka et al. (2013), is the way part writing is often taught as a prescribed set of rules and the overemphasis on this approach in many two-year music theory core curricula.

The pervasiveness of part writing creates three other large problems for core curriculum pedagogies. First, this approach favors short, abstract examples (in four-voice style, four-voice reductions, or short, out-of-context repertoire excerpts) over larger music examples and whole pieces or movements of repertoire. Second, the heavy amount of prose and set of rules for part writing contribute to adoption of a lecture-style format of teaching instead of favoring newer pedagogies like flipped classes or inquiry-based learning. A common lesson plan may include students reading their book, which outlines part-writing rules for a given topic, attending class where a teacher further explains those rules in a lecture, and finally completing homework by following these rules. Third, the emphasis on part writing is not exclusive to textbooks, as each of the five textbooks highlighted above also offer companion workbooks of exercises and activities with part-writing assignments occurring as much or more frequently than the textbooks. The amount of part-writing exercises and activities in workbooks has an even larger cascading effect, as the types of activities and assignments experienced during a class often influence the types of activities and competencies assessed on exams that contribute to a student's final course grade.

While a large number of commercially available textbooks overemphasize four-voice part writing throughout the majority of tonal harmony topics, music theorists are beginning to discuss solutions to this problem, both in terms of curriculum (Kulma & Naxer, 2014) and in offering alternate textbook options like *Open Music Theory* (Shaffer, Hughes, & Moseley, 2014). This online, open-source textbook begins to solve multiple problems manifested in the commercial textbooks described above: the "textbook is meant to support *active student engagement with music* in the theory classroom" (Shaffer et al., 2014, About Open Music Theory, para. 1), making it flexible for multiple teaching and learning styles, including flipped classrooms and inquiry-based models specifically. Additionally, the open-source nature of the textbook allows others to "use, modify, distribute, even sell its contents provided that you 1) attribute the original to us, and 2) pass on the same rights to others … by licensing your derivative work the same way we license this one" (Shaffer et al., 2014, About Open Music Theory, para. 6), which is encouraged by the textbook's authors. As far as a direct comparison of the content, *Open Music Theory* is difficult to compare due to the different chapter structure adopted by the authors, a product of the flexible nature of online publishing. However, close examination shows that only sections on "Strict four-voice composition" and "Harmony" include any amount of part writing examples, explanations, or exercises, out of the fourteen tonal-music sections (approximately 14%). Other topics that do not include part writing consist of form, phrase rhythm, post-tonal music, popular music, and text and music.

While *Open Music Theory* breaks away from the traditional textbook model of teaching music theory, there are many reasons why an educator may be reluctant to use

the new resource as primary course materials. Some music theory instructors may not be music theorists; many higher education music theory departments are also home to composers, musicologists, and other music faculty. Instructors teaching a course outside of their own area of interest or expertise may find the wealth of information and prose in a traditional textbook easier to teach from than a barebones internet resource that requires additional knowledge in the field to draft lesson plans, activities, and select additional repertoire. Some instructors may favor a lecture-based teaching style, which is more suited to traditional textbooks. Many instructors may wish to use a companion workbook for regular assignments instead of creating custom assignments, and the companion workbook requires the use of its companion textbook.

However, even with the above issues, Shaffer (2014a) argues that textbooks are

> one perspective on an issue, written often by a non-specialist in that issue, is presented without nuance, but with authority, and in a fixed expression that is both physically and legally prevented from being altered. … Further, the material, like the discussion points in our classes, should be open to contradiction and revision, meaning it must be a (physically and legally) malleable, even hackable expression" (para. 12–14).

Open Music Theory is just one example of music theorists and educators working to break the status quo of music theory textbooks and their impact on music theory pedagogy. Schoenfield (1988) calls for "a reexamination of curricular goals, materials, and measurement tools" (p. 164), stating that "mathematical thinking is not the rote memorization of facts and procedures as often practiced in our classrooms, and as reified by current texts and examinations" (p. 164). A close collaboration with psychology and cognitive science is recommended by Schoenfield (1988), as well as becoming "deeply involved in the development and testing of instructional materials" (p. 165).

Reducing music theory in musicianship. As discussed, textbooks uphold a traditional approach to music theory pedagogy, focusing on four-voice part writing and eighteenth-century repertoire. One extreme response to change this pedagogical approach was the College Music Society's 2013 task force for reevaluating higher education in music, culminating in P. S. Campbell, Myers, and Sarath's (2014) manifesto document that outlines progressive changes in undergraduate music curricula. Within it are many criticisms of the current state of musical higher education as a whole: "the academy has remained isolated, resistant to change, and too frequently regressive rather than progressive in its approach to undergraduate education" (p. 2), and of the current state of music theory pedagogy: "improvisation and composition provide a stronger basis for educating musicians today than the prevailing model of training performers in the interpretation of older works" (p. 2). However, musicians unfamiliar with jazz and popular music studies may find composition a difficult and vague exercise without careful guidance. While P. S. Campbell et al. (2014) claim that the report's suggestions are not "an attack on the way music theory is currently taught" (p. 5), they advocate "reducing the number of core requirements and allowing students greater latitude in the space that is thereby opened up" (p. 31), integrating music theory into other areas of a suggested curriculum focused on composition and improvisation (pp. 37, 40), and expanding the current "Eurocentric aesthetic-pedagogical model" (p. 39) to include Afrocentric music (particularly jazz repertoire).

Much of the report by P. S. Campbell et al. (2014) aims to improve engagement and motivation for students, who they envision as "aspiring contemporary improvisers-composers-performers" (p. 45). One option for implementing a more motivating

curriculum would be to offer students "option-rich curricular strategies" (p. 30), concluding that "when students are provided options, they immediately engage in heightened critical thinking about who they are as individuals, as aspiring artists, and as learners" (p. 30). However, no further motivational research or observations are provided to support their claims.

While P. S. Campbell et al. (2014) highlight some of the current limitations of the traditional music theory pedagogy evidenced in the above discussion of textbooks, "streamlining" (p. 31) music theory to the extent described is an opposite extreme. Many other authors have discussed approaches to incorporate improvisation and composition into the core music theory curricula without reducing the number of course requirements or replacing the courses (Callahan, 2012; Hoag, 2013a; Johnson, 2014; Michaelsen, 2014; Rifkin, 2014; Rogers, N., 2013; Schubert, 2014).

As outlined above, a textbook-model approach to teaching music theory and greatly reducing music theory in larger music curricula are two extreme examples of recent reforms in music theory pedagogy. As noted in both examples, music theorists are beginning to indirectly address issues of motivation from a variety of platforms, including authoring new, collaborative, and open-source textbooks, integrating improvisation and composition into aural skills and music theory classrooms, adopting new teaching styles like flipped classes and inquiry-driven learning, and challenging students with projects that simulate real-world problems, issues, and professional scenarios. These additional teaching techniques and resources serve as a middle ground between the two extreme examples above and offer educators a wealth of new knowledge and information to begin making their own reforms in music theory pedagogy. However,

neither of these solutions proposed by music scholars directly addresses motivation. In the following sections, I will introduce several theories of motivation and outline the possible impact of incorporating them into current music theory pedagogy, drawing examples from mathematics and video games.

Theories of Motivation

Self-Theories. One way to investigate a student's motivation, both before entering the classroom and within the classroom, is by examining a student's self-theory (also, implicit theory, mindset). Dweck and Molden (2005) explain that "achievement motivation is powered by a valuing of both competence acquisition (learning goals) and competence validation (performance goals). Self-theories help us understand which of these two faces of competence … becomes most valued" (Dweck & Molden, 2005, p. 122). Dweck, Chiu, and Hong (1995) further define the construct:

> These implicit theories refer to the two different assumptions people may make about the malleability of personal attributes; they may believe that a highly valued personal attribute, such as intelligence or morality, is a fixed, nonmalleable trait-like entity (entity theory), or they may believe that the attribute is a malleable quality that can be changed and developed (incremental theory). (p. 267)

An investigation into the self-theories of seventh-grade math students by Blackwell, Trzesniewski, and Dweck (2007) found that "the belief that intelligence is malleable (incremental theory) predicted an upward trajectory in grades … while a belief that intelligence is fixed (entity theory) predicted a flat trajectory" (p. 246). Dweck and Molden (2005) further reflect that "holding an incremental theory of intelligence … was associated with holding strong learning goals" (p. 124), as well as being associated with student beliefs about effort, reactions to difficulties, strategies to overcoming setbacks, and overall competence in the form of final grades (pp. 124–125).

Can self-theories change? Studies by Aronson, Fried, and Good (2002) and Blackwell et al. (2007) show that short self-theory interventions "yield encouraging changes" (Dweck & Molden, 2005, p. 136). Blackwell et al. (2007) found that "teaching a malleable theory of intelligence was successful in enhancing students' motivation in their mathematics class, according to teacher reports" (p. 258), while Dweck and Molden (2005) summarize that changes in self-theories, specifically entity theories becoming incremental theories, "came about by boosting students valuing of learning and improvement, and their belief in the efficacy of their efforts" (p. 136). In other words, self-theories can change through a variety of means as simple as teaching students about self-theories and encouraging students to value their own learning and improvement.

For beliefs about effort, Dweck and Molden (2005) describe those with incremental theories as viewing applying effort as as positive endeavor towards learning, while those with entity theories view applying effort as a negative reflection of deficient ability (p. 125). Viewing expenditure of effort as a positive is a requirement in Gee's (2007) description of good teaching and learning as three basic things: trying, putting in lots of effort, and achieving some meaningful success (p. 58). However, he recognizes that these hallmarks

> are left out of most of the current debates about education, which tend not to engage with issues about the identities learners bring to school and how these identities relate to motivation and effort (or their lack) in relation to specific sorts of pedagogies. (p. 58)

Instead, he suggests studying video games, which "are particularly good at these three things" (p. 58). He notes that video games create a "learning space in which the learner can take risks where real-world consequences are lowered" (p. 59), which helps entice players to try a game. Once enticed to try a game, players are encouraged to put in

effort through a variety of means, including creating compelling virtual worlds, virtual identities, and scaling the difficulty of various tasks to the player's ability (pp. 59–60). Finally, games provide players with a sense of achievement through amplification of input and helping the player adopt a new valued identity based on their achievements and learned abilities (pp. 59–64). Some of the observations about video games have been suggested by mathematics pedagogues, including Hand, Kirtley, and Matassa (2015) stating that "opportunities to participate in activities that involve mathematical reasoning and argumentation in a safe and supportive manner are central to the development of mathematical competence and identity" (p. 262).

Additionally, the behavior of an authority figure, like a teacher, may have an impact on a student's self theory. Teachers holding entity-like beliefs did not impact students with low achievement, but teachers holding incremental-like beliefs "promoted growth in achievement among those who were initially behind, to the point that many of them caught up to the higher achievers" (Dweck & Molden, 2005, p. 127). Another look at the impacts of an authority figure found that mothers using controlling behaviors (e.g., telling a child to do a task without asking, telling a child the answer to a current problem, etc.) with their children led to those children adopting entity theories, while mothers using autonomy supportive behaviors (e.g., providing feedback or hints) with their children led to those children adopting incremental theories (Dweck & Molden, 2005, p. 135).

The kinds of autonomy-supportive behaviors described above can be observed in most video games, which rarely explicitly give players answers or solutions upon receiving negative feedback. Hand et al. (2015) suggest using autonomy-supportive

behaviors in mathematics classrooms, stating that "looking only for 'responses' and 'answers' in classroom mathematics activity inclines teachers toward judging and evaluating what students are saying and doing instead of noticing what or how students are attempting to contribute to the class's learning" (p. 263).

Self-Determination Theory. Autonomy plays an important role in understanding motivation, specifically intrinsic motivation. Deci and Ryan's Self-Determination Theory (SDT) "bring[s] together innate human tendencies, social contexts, and the motivators for human action to illustrate how congruence between one's basic needs and core values spur individual agency that, ultimately, results in overall well-being" (Wehmeyer, Little, & Sergeant, 2009, p. 359). Three basic psychological needs form the core of SDT: competence, autonomy, and relatedness. The need for competence is linked to motivation through feedback:

> events such as positive feedback that signify effectance provide satisfaction of the need for competence, thus enhancing intrinsic motivation, whereas events such as negative feedback that convey ineffectance tend to thwart the need for competence and thus undermine intrinsic motivation. (Deci & Ryan, 2000, p. 234)

Autonomy promotes intrinsic motivation by "providing choice and acknowledging feelings [that] can enhance the sense of self-initiation … providing satisfaction of the need for autonomy and resulting in more positive outcomes" (Deci & Ryan, 2000, p. 234), whereas "motivational strategies such as rewards and threats undermine autonomy and thus lead to nonoptimal outcomes such as decreased intrinsic motivation, less creativity, and poorer problem solving" (Deci & Ryan, 2000, p. 234). Relatedness, or meaningful connections with others, provides "a needed backdrop—a distal support—for intrinsic motivation, a sense of security that makes the expression of this innate growth tendency more likely and more robust" (Deci & Ryan, 2000, p. 235). Shernoff (2013)

adds that "an important insight of self-determination theory is that there are intermediate positions on the continuum between extrinsic motivation, or feeling controlled, and intrinsic motivation, or feeling fully autonomous" (p. 56).

Player Experience of Need Satisfaction. SDT has been applied in many fields, including an investigation into why video games are motivational. Rigby & Ryan (2011) directly applied SDT to video games, creating the Player Experience of Need Satisfaction (PENS). This application shows "that video games are most successful, engaging, and fun when they are satisfying specific intrinsic needs: those of competence, autonomy, and relatedness" (p. 29). Because of the earlier comparison of music theory, mathematics, and video games, an understanding of PENS in the context of video games may provide a helpful basis for applying SDT to the field of music theory pedagogy.

The need for competence is fulfilled in video games by a variety of means. First, video games provide players with an invitation to "stretch ourselves to new levels of mastery, which, once achieved, satisfy our intrinsic need for competence" (Rigby & Ryan, 2011, p. 40). Goals in video games are often very clear (e.g., block the dot in Pong (1972), defend the house by planting plants in Plants vs. Zombies (2009), complete a given list of quests in role-playing games like The Elder Scrolls V: Skyrim (2011)). The difficulty of these goals is carefully balanced so players do not feel underwhelmed or overwhelmed. When we have a clear goal at the proper difficulty, there also needs to be clear feedback about our progress so that we can learn and continue pursuing mastery.

The above description overlaps with another important psychological theory related to intrinsic motivation: Csikszentmihalyi's (1988) Flow Theory, or optimal experience. When a person experiences flow, they often experience a sense of control,

distorted sense of time, heightened concentration, and temporarily lose awareness of one's self. The conditions necessary for flow requires a given activity to "have relatively clear goals and provide rather quick and unambiguous feedback" (Csikszentmihalyi, 1988, p. 32), and "an equilibrium of challenges and skills" (Csikszentmihalyi, 1988, p. 32). A result of experiencing flow is a desire to repeat the activity, thus creating intrinsic motivation. Chen (2007) recognizes that Flow Theory has been utilized by video game designers, and even used the theory himself to create a video game based on the theory (Flow, 2006). Additionally, dynamic difficulty settings and artificial intelligence in games continue to be developed to keep players in flow states for longer periods of time (Hunicke & Chapman, 2004).

Rigby and Ryan (2011) point out that the conditions for flow and competence needs satisfaction describe "what we'd wish not just from a game, but from our jobs and most activities in life. … This demonstrates the fundamental nature of our need for growth through experiences of competence" (p. 45). They also point out that certain games focus more on fulfilling competence needs than the other two needs categories, highlighting band games like Guitar Hero (2005), first-person shooter games like Half-Life (1998), sports games like Need for Speed (2015), and platforming games like Super Mario Bros. (1985) as prime examples.

The need for autonomy is fulfilled in games by providing meaningful choices and the opportunity to act volitionally. Autonomy is not simply a feeling of freedom, but the "sense of choice when we perceive the situation as providing intriguing or valued alternatives or options, ones that we can actually explore and realize rather than just imagine" (Rigby & Ryan, 2011, pp. 76–77). Rigby and Ryan continue by clarifying that

fundamentally, autonomy "means that one's actions are aligned with one's inner self and values; that you feel you are making the decisions and are able to stand behind what you do" (p. 77). Video games fulfill this need by giving players opportunities to form a virtual identity, options and choices of activities to pursue, choices over strategies and tactics, and sometimes providing open-world "sandboxes" for players to freely explore. Even when there are limited choices available to a player, video games may allow players to act volitionally by using "well-crafted stories and compelling rationales to awaken in the player an internal desire to walk the path ahead" (Rigby & Ryan, 2011, p. 88). Like games based on competence, examples of game genres focused on fulfilling autonomy needs include role-playing games like The Elder Scrolls V: Skyrim (2011), simulation games like SimCity (2013), and turn-based strategy games like Sid Meier's Civilization V (2010).

The need for relatedness is fulfilled by allowing players to "connect with others and feel that they are interacting in meaningful ways" (Rigby & Ryan, 2011, p. 118). Games provide a sense of relatedness through companionship in multiplayer games, where it is easy to instantly meet, connect, and start interacting with others, and through appreciation and recognition from others, either from real players or from non-player characters. One primary genre example of games that focus on relatedness are massively multiplayer online (MMO) games like World of Warcraft (2004).

In summary, SDT and PENS complement Dweck's self-theories by outlining competence, autonomy, and relatedness as specific needs that, once fulfilled, promote intrinsic motivation. Autonomy in particular also has a strong link in promoting incremental self-theories in individuals. Video games provide an excellent example of

how PENS is utilized by game designers and can serve as a framework for applying SDT to music theory classrooms.

Conclusion

Students in music theory may be observed to have low ability in musicianship skills during the core curriculum due to a problem of low motivation. This lack of motivation may be caused by several factors, including experiences and accounts of music theory before they begin formal study and experiencing pedagogy based on current commercial textbooks. While music theory pedagogy research has begun to investigate various types of student-centered learning and pedagogical techniques, current research has not addressed the issue of motivation as directly as other fields, primarily mathematics and video game design. By observing how psychological theories of motivation impact other related disciplines, we can begin to create direct solutions to the problem of motivation in music theory classrooms.

A variety of interventions may be applied to help individuals develop more intrinsic motivation and develop more positive student identities. Interventions that lead an individual to adopt an incremental theory of their intelligence includes teaching about incremental self-theories at the beginning of a class, instilling a value of learning in the learning environment, valuing improvement over time, instilling a strong belief in the value of applying effort, and providing students with autonomy. Autonomy, and other psychological needs of competence and relatedness, may be applied in a similar way as video games, by allowing students to act volitionally, creating environments conducive to creating flow states, and providing opportunities to share their learning with their peers and be recognized and appreciated for their learning and contributions.

In the following chapter, I will introduce a theoretical model of motivation that may be applied to music theory pedagogy in order to apply these interventions in an instructional design. This will in turn bring about a change in student motivation, ultimately resulting in an increase in student ability in music theory.

CHAPTER III

A THEORETICAL MODEL OF MOTIVATION FOR MUSIC THEORY

In order to better understand the possible connections between instructional design, motivation, and student ability in music theory, I have developed a theoretical model of motivation. In my model, as seen in Figure 1 below, each boxed construct represents one variable in the process. The horizontal arrows (e.g., connecting incremental self-theory to a change in motivation) show the indirect relationships between each construct, mediators that "other variables '*work through*' [emphasis added] to influence the outcome" (Jaccard & Jacoby, 2010, p. 142). The vertical arrows (e.g., prior self-theory connecting to the mediating arrow between instructional design and incremental self-theory) represent moderated causal relationships; Jaccard and Jacoby (2010) explain that "the causal relationship between two variables, X and Y, differs depending on the value of a third variable, Z" (p. 143). In other words, an instructional design in music theory impacts a student's ability in music theory by *working through* incremental self-theories and changes in motivation as a process, while the degree of change between an instructional design in music theory and incremental self-theories depends on the social concept of musical talent (itself moderated by the student's personal concept of musical talent) and his or her prior self-theory. In what follows, I investigate each construct individually—reading from left to right: instructional design, incremental self-theory, change in motivation, and increase in music theory ability—and discuss the causal relationship each construct has as the model's process unfolds.

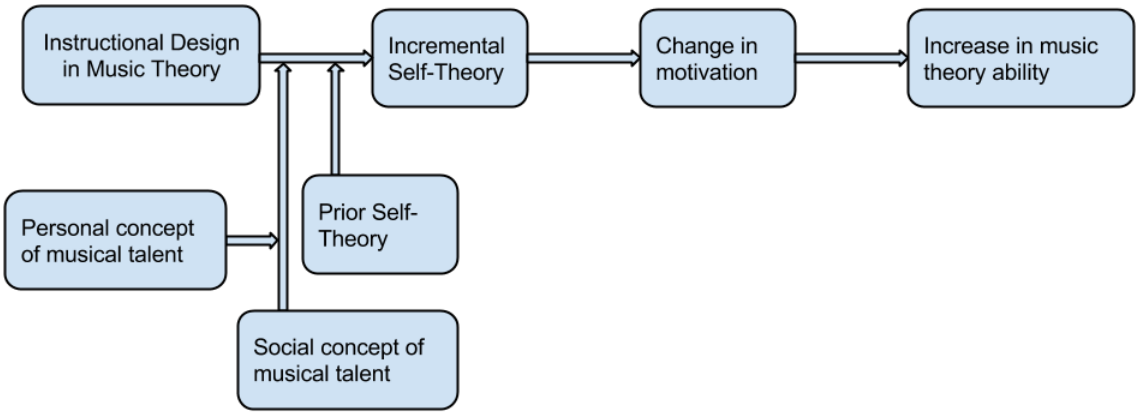

Figure 1. Theoretical Model of Motivation

Instructional Design

Instructional design, the first construct presented in the theoretical model of motivation, is primarily comprised of four components: a teaching philosophy, syllabus, course materials, and assessment. A teaching philosophy impacts all aspects of a course and is unique to each individual teacher. Critical pedagogy and student-centered learning are two examples of philosophies that may influence the approach to teaching and learning for a teacher, and subsequently, a course. Teaching philosophies can also be specific to a given field: M. Rogers (2004), for example, notes that a teaching philosophy in music theory will impact the balance between concepts and skills. A syllabus outlines important information about a course and helps provide a structure for the learning environment. Course materials, which are often textbook and workbook bundles in music theory, have an entwined relationship with the syllabus. A textbook's accompanying workbook and in-text exercises may also influence the types of materials that appear on an assessment. Finally, M. Rogers (2004) defines the purpose of assessment in music theory as "measuring, learning, and motivating," though others (Kohn, 1999) argue that

grades are not motivating. In higher education, music theory is often a pre-requisite course for upper-level music coursework, and with the use of the letter-grade system, assessments determine continuation in a set of core curricula, as well as providing the foundation for upper-level collegiate courses in analysis and musical understanding. These four components form an interconnected foundation of the beginning of instructional design, which is visualized as a nested model in the Instructional Design for Incremental Self-Theory Adoption (IDISTA). (This model will be discussed later in the chapter.)

The first two years in music theory are often referred to as the core curriculum for students majoring in music. While many students enter higher education with many years of experience on their chosen instrument(s), they possess a wide range of prior experiences in music theory. Some students enter college with no prior experience, even to the point of not being able to read written music notation, while others have completed Advanced Placement music theory courses and received a college-level introduction to the topic. However, the majority of students have little experience in the subject beyond a basic understanding of some fundamental topics (like scales, key signatures, etc.). This lack of experience makes the instructional design of music theory courses crucial, since for many students this will be their first exposure to the field.

Incremental Self-Theories

As examined in Chapter II, self-theories refer to how people view their various abilities and intelligences, with the two ends of this spectrum being an *entity* self-theory (a belief that an ability is fixed, or "you are good at something or you are not") and an *incremental* self-theory (a belief that an ability is malleable, or "your ability can change

over time based on effort"). Many scholars have suggested that adopting an incremental self-theory can have a large impact on a student's motivation, value of learning, and overall proficiency, as discussed in Chapter II.

While there has been no direct research on self-theories in the field of music theory, the fact that music theory is often compared with math may be a starting point for understanding students' self-theories entering music theory classrooms. However, unlike in mathematics, students often do not study music theory until higher education, which may change the way self-theories for music theory are formed, especially prior to entering a college classroom.

Additionally, as previously discussed, many students come into college with negative preconceptions of music theory. While many students may not have studied music theory before entering higher education, they may have developed a negative bias toward the subject from a teacher or colleague, or from social media. This negative view toward the subject matter often correlates with a negative view of their own ability to learn the subject matter. Anecdotally, I have had numerous students in music theory classes from different universities explain to me that they do not believe they are good at music theory, while other students are. This experience is similar to the observations made by Jones and Bergee (2008) in Chapter II.

What do instructional designs have to do with self-theories? Many of the interventions found in self-theory studies that direct students to adopt a more incremental self-theory of a specific ability or intelligence can be implemented in an instructional design. By taking the various interventions into consideration during the design process,

an instructional design can lead to a student adopting a more incremental self-theory: the first connection on the theoretical model of motivation.

The amount of influence an instructional design has on a student's adopting an incremental self-theory is moderated by several factors, the first being society's concept of musical talent. Western society places influential musicians from history and current popular culture on high pedestals as being talented musicians. As a result, many people hold a fixed view of musical talent, believing that one is either born with musical talent, or not. Based on how students have been influenced by this societal view, they will adopt their own concept of musical talent that will affect how influential this societal concept is on their own beliefs. This combination of beliefs about talent will impact how much a student might change along the spectrum of self-theories based on an instructional design. In other words, if a student believes that musical talent is a fixed trait, they may be more likely to believe that their ability in music theory, prior to entering a classroom, is also a fixed trait, resulting in an entity theory for that student. In this case, the degree of change in the student's self-theory from fixed to incremental due to an instructional design may be smaller than for a student who does not view their musical talent as a fixed trait.

An additional moderating factor affecting the influence of instructional designs on the adoption of incremental self-theories is a student's prior self-theory in music theory. Students with prior experience in a music theory class or with influence from an outside mentor or source may already have adopted a self-theory of their music theory ability. Depending on the belief adopted, this could also have an impact on how influential an instructional design is toward the adoption of an incremental self-theory.

Change in Motivation

As stated in Chapters I and II, teachers have casually observed that students in music theory courses often lack motivation, due to numerous factors. However, increasing motivation, and especially intrinsic motivation, can have a massive benefit for students in improving their abilities, mastering skills, and transferring those skills outside the music theory classroom. When an instructional design can lead a student to adopt a more incremental self-theory, the result is a change in their motivation. This change may be an increase in overall motivation, or an increase in intrinsic motivation, and/or a decrease in extrinsic motivation. Changing the motivation of a student also impacts the way they might engage with the material and increase the quality of their overall learning experience.

Increase in Music Theory Ability

Finally, the outcome of the previous constructs is to increase a student's ability in music theory. What is having ability in music theory and how might that ability be observed? My hope is that students will have a higher proficiency in music theory skills as a result of the Instructional Design for Incremental Self-Theory Adoption (IDISTA). This increase in ability may appear as an increase in assessment performance (for instance, as a final letter grade for a class), an increase in overall retention rates in core music theory courses, an increase in enrollment in upper-level music theory courses due to curiosity, the application of theoretical concepts outside music theory, and the fostering of independent learning in music theory.

In sum, by following IDISTA, students will adopt a more incremental self-theory. The degree of change along the spectrum of self-theories from an entity theory to an

incremental theory will be modified by a social concept of musical talent, their own personal concept of musical talent, and their prior self-theory in music theory. Adopting a more incremental self-theory will change a student's motivation in the course, which will finally lead to an overall increase in music theory ability.

The Instructional Design for Incremental Self-Theory Adoption Model

While the larger theoretical model of motivation outlines a causal, linear process, the Instructional Design for Incremental Self-Theory Adoption (IDISTA) model that is its first construct is another model itself. IDISTA is best visualized as a nested model, as seen in Figure 2 below. The nested model shows the interconnected relationship of each component of instructional design, with the foundation including a teaching philosophy, syllabus, assessment, and course materials, and the center being our students. Teachers of music theory face a number of challenges when creating courses, including designing their courses and organizing a syllabus based on that design, choosing textbooks (or writing their own materials), making decisions on assessments and grading, balancing skills and concepts, and upholding their own teaching philosophies. This model of instructional design shows both a process of course *creation*, starting from the foundation (the largest oval in the nested model) and drafting through the other levels (the smaller ovals), and course *revision*, as the draft is refined by moving back out from the innermost levels. The process of creating an instructional design can thus be conceptualized as movement from the right side of the model to the left, and back again, as the arrows above and below the model indicate. Because all of the elements of instructional design are intricately connected, the different levels of constructs can be imagined as different "levels of focus."

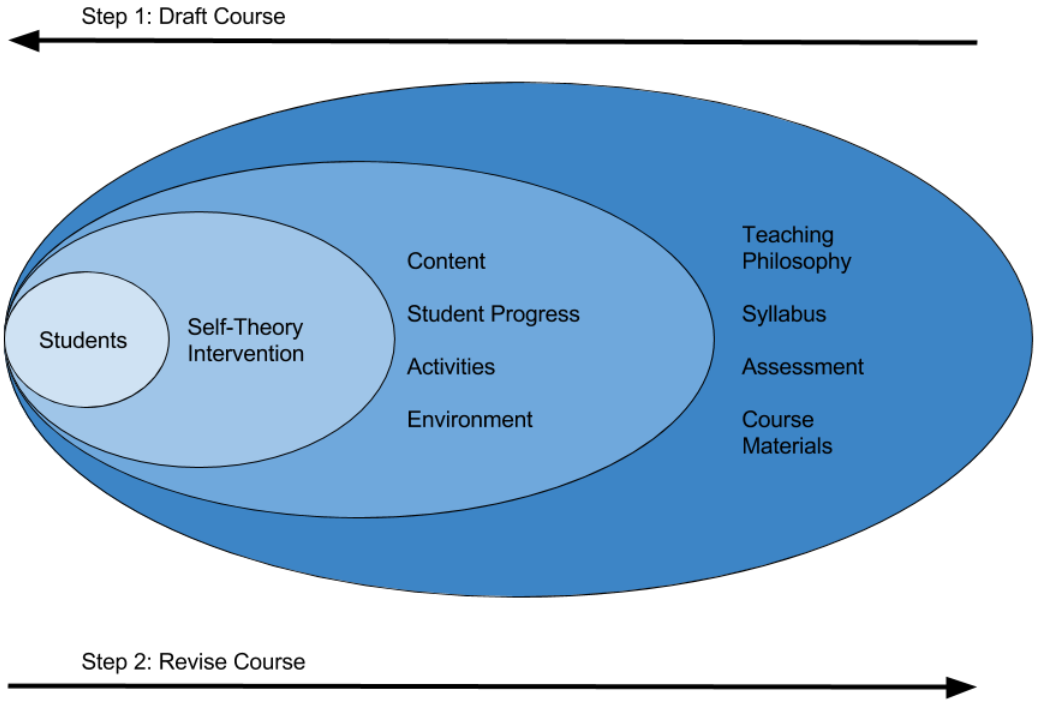

Figure 2. The Instructional Design for Incremental Self-Theory Adoption (IDISTA) Model

First level of focus. The first level of focus (the largest oval in the model) includes the foundational elements of an instructional design, and the first step in course creation. How often will your class meet? Where? What is your teaching philosophy? What kinds of assessments will be part of the course? Is there a textbook that would be appropriate to use? Answering these questions and others will form an outline for the instructional design to come and impact the rest of the elements of the model. I will first elaborate on each of these foundational elements individually, discuss their interrelated nature, and then continue with the next levels of focus (the smaller ovals in the model).

Teaching philosophy. A teaching philosophy impacts all aspects of a course and is unique to each individual teacher. It may influence the philosophical approach to teaching and learning for the teacher, as critical pedagogy and student-centered learning can, or it can also be specific to a given field, with M. Rogers (2004) citing that a teaching philosophy in music theory will impact the balance between concepts and skills.

In the last ten years, two new philosophies have taken center-stage in research: student-centered learning and critical pedagogy. Conway and Hodgman (2009) describe the learner-centered classroom as a place where "students will need to 'learn how to learn'" (p. 85) in an environment that promotes "student interaction, dialogue, and contribution" (p. 85). Music theory teachers are experimenting with different classroom practices that encourage student-centered learning, like flipped classes that "put the student, rather than the instructor or the progression of content, at the center of the class, and to use in-class and out-of-class time as effectively as possible to help students meet the course goals" (Shaffer & Hughes, 2013, para. 2). An additional student-centered practice is problem-based learning, "an inquiry-driven pedagogical practice in which students learn course content by thinking through real-world problems" (Duker, Shaffer, & Stevens, 2014, para. 1). Critical pedagogy is an approach to teaching that "insists on the classroom as a site of moral agency" (Rorabaugh, 2012, para. 1) and "is an approach to teaching and learning predicated on fostering agency and empowering learners (implicitly and explicitly critiquing oppressive power structures)" (Stommel, 2014, para. 4).

M. Rogers (2004) defines a concepts approach as featuring "reading, discussing, analyzing, and thinking about music" (p. 27), while a skills approach

> views the learning of music theory as "doing" things such as singing intervals, aurally recognizing a chord, transposing a scale, harmonizing a melody, performing a keyboard progression, composing a fugue, conducting an ensemble, arranging an exercise for string quartet, etc. (p. 28)

M. Rogers (2004) notes that the link between concepts and skills is a "shared dependence" (p. 28) that uses both approaches to strengthen the learning and understanding of music theory for a student. Graybill (2014) suggests an alternative "Unitary" model that combines thinking about music (concepts) and thinking in music (skills), which "assigns all the subdisciplines [sight singing, counterpoint, etc.] to a single realm, rather than to opposite sides of an epistemological divide" (para. 9).

Syllabus. A course syllabus can set the mood for an entire term of a course. In addition to providing important information about course content, learning objectives, materials, evaluation, and a calendar, the syllabus serves as an introduction to the course in tone and philosophy:

> Syllabi that reflect the mundane, bureaucratic requirements of the University are at risk of setting an equally banal classroom atmosphere. … The syllabus is not simply a contract between teacher and student…[it] should be a manifesto that serves as a founding document detailing the rights of the students and the pedagogy of the classroom. (Heidebrink-Bruno, 2014, para. 1)

While designing a music theory course, White (2002) advocates both "self-interrogation and intradepartmental communication" (p. 16) when determining theory course objectives, which include theoretical and musical skills to be dealt with, the relationship of the course to the total school or departmental curriculum, and values like fostering independence of thought, musical values, encouraging and rewarding creativity, imparting respect for scholarship, and developing humanistic or humane values (p. 17).

Additionally, M. Rogers (2004) highlights three crucial factors: "order, pacing, and emphasis" (p. 170).

Conway and Hodgman (2009) offer sample syllabi of many standard music curricula courses as a template, stating that "while the content varies greatly from course to course, the structure of the syllabi remains fairly consistent" (p. 57). The sample music theory syllabus (Conway & Hodgman, 2009, pp. 59–63) offers a course description with emphasis on the common practice period, course objectives, a required textbook (Benward & Saker, 2008), attendance and class participation policies, assignment details, academic honesty policy, examination, quiz, and final project details, grade calculations, and a course schedule. However, there is an additional note that only appears in the sample music theory syllabus:

> As you know from previous Music Theory work, this is not an "easy" class; it will require persistence and tenacity on your part. Expect to spend a couple of hours on each homework assignment, and the grade you receive is the grade you EARN. All aspects of the course (and your musical future) build upon the foundation of knowledge and skill sets acquired with each assignment (Conway & Hodgman, 2009, p. 61).

The inclusion of such a statement in a sample syllabus is one piece of evidence that points towards possible negative preconceptions of students when beginning a music theory class that may lead them to be apprehensive toward the subject. Additionally, statements such as these on syllabi may not be conducive to creating a motivating class.

Course materials. Course materials directly impact a course and its syllabus, "often dictating the structure of a course, particularly academic courses like theory and history" (Conway & Hodgman, 2009, p. 53). M. Rogers (2004) warns that

> order and pacing are likely to be determined, at least partially, by choice of textbooks. … The choice of textbook should be an outcome of the teaching philosophy of an individual or consensus of a group. Too often,

> though, the teaching style itself evolves from the book as an afterthought. (p. 171)

He notes some of the negative aspects of music theory textbooks as including an overwhelming amount of material, being unsatisfying to learn from, having poor organization, poor physical layout, a clogged writing style, a lack of distinction between key concepts and supporting issues, being too wordy, and cryptic (pp. 171–172). In addition to these challenges in textbook consideration, a textbook's accompanying workbook(s) may also influence the types of activities performed by the student both inside and outside of class and the types of materials that appear on an assessment.

Assessment. There are many purposes of evaluation and assessment in a music theory curriculum, including "measuring, learning, and motivating" (M. Rogers, 2004, p. 166); however, Kohn (1999) argues that "grades cannot be justified on the ground that they motivate students, because they actually undermine the sort of motivation that leads to excellence" (p. 203). White (2002) discusses the current issue of grade inflation stemming from student-teacher evaluations and a desire to "impart false feelings of 'self-esteem'" (p. 166) that also results in "low learning levels and academic achievement that appears to be much higher than it really is" (p. 166). Many new approaches to assessment in music theory have surfaced, including self-assessment (Alegant & Sawhill, 2013) and criterion-referenced assessment (Moseley, 2014) in individual classrooms and departments, and "a modification of the no-grades system of the seventies used at some private colleges" (White, 2002, pp. 165–166) in larger, institutional applications. With copious amounts of research in assessment, music theory teachers must both determine the purpose and intent of individual tests and the overall philosophy of a course's assessment policies. However, even with this vast amount of research, there is still a

"problem of validity in testing and test design" (White, 2002, p. 173) and a lack of research in valid and reliable assessment measurements in the field of music theory.

In higher education, music theory is often a pre-requisite course and with the use of the letter-grade system, assessments determine continuation in a set of core curricula, contributing to grades being a high-stakes assessment.

Second level of focus. The first level of focus forms the foundation for a course. However, decisions made in this outer layer will influence the next four elements, which are more closely linked to what the class meetings will be like to experience. What will students do during class? What will the classroom look like? How will students communicate? What will happen outside of class? What content will the course cover? The four elements of this second level of focus include the course content, student progress, activities, and environment. Like the first level of focus, the four elements present in the second level are interconnected and decisions made in one element may inform or change decisions made in another.

Content. Course content includes the subject material of the course, order, pacing, structure, and the balance of concepts and skills, as mentioned by M. Rogers (2004). After working through the first level of focus, the course should already have a broad topic and will be further refined in this second level. In addition to topics, units, and themes for the course, other content considerations can take place at this point of IDISTA: who will choose the content? How will it be chosen? How much emphasis will the content have on the other elements of this level of focus? Some of these answers may be informed by course materials decisions made in the first level of focus, but as M.

Rogers (2004) cautioned above, we must be sure that course material selection is in tandem with our teaching philosophy or the consensus of a group of instructors (p. 171).

In core music theory classes, the content typically seen follows the following sequence over a two-year curriculum: fundamentals including scales, key signatures, intervals, time signatures and meter, notation, triads, and seventh chords, roman numerals and scale-degree function, figured bass, voice leading and part writing, harmonic progression, phrase structure, small forms like binary and ternary, chromaticism including secondary function, modulation, mode mixture, altered predominants, altered dominants, and finally large forms like sonatas and rondos. Other topics that may be included are counterpoint and post-tonal theory. The amount of material listed above is daunting to pack into a two-year sequence.

While content often seems like the most important part of a class, it is important to remember that it is only one element, of one level of focus, of the larger instructional design. It does not need to dictate the outcomes of the rest of the instructional design, nor is there a set quota of material to "get through" by the time a course ends. However, Schoenfield (1988) commented on a similar issue he observed in mathematics curricula that was focused on skill acquisition as having

> an agreed-upon body of knowledge, consisting of facts and procedures, that comprised the curriculum. That meant that subject matter was presented, explained, and rehearsed; students practiced it until they got it (if they were lucky). There was little sense of exploration, or of the possibility that the students could make sense of the mathematics for themselves. (pp. 160–161)

Instead of putting content at the forefront of a design, it must be stressed that content is secondary to the four foundational elements of the first level of focus. Making content secondary greatly changes the tone and framing of a course. For example, a

course designed with a content-focus of sonata form might include learning objectives like formal analysis techniques, thematic module identification, and a final analysis paper, while a course designed with learning objectives like effectively communicating analytical ideas and critical thinking about analytical techniques might use sonata form for its content. While these two classes may seem very similar, the tone and framing are very different, which may impact decisions in other elements and levels of focus in IDISTA.

Activities. Student activities are the types of things students will do inside and outside class, like workbook exercises, problem-solving, small group work, individual presentations, etc. While it is not necessary to design and plan every class activity during the instructional design process, it is important to have an idea of the types of activities appropriate for your class. How will class time be spent? What will students be doing during class? How much time will the desired activities take? The structure and pacing of the content and classroom environment will also have a large impact on what activities are best suited for the class.

However, the second level of focus during the design-drafting stage is not the time to begin drafting individual activities. There are a multitude of outside factors that may change during a given course, like snow days, ensemble trips, conventions, etc., that require an amount of flexibility. While making decisions about the types of activities to include, the flexibility offered by each should also be a deciding factor. Carefully considering what a class will be doing, in a general sense, for each meeting, will give the instructor much-needed information about the learning environment and possible interactions between students and the teacher at this level of IDISTA.

Student progress. Student progress is the way students will receive feedback from various assessments and track their learning progress. Like content, it is closely tied to the previous level of focus, specifically assessment. However, while assessment focuses on the methods and instruments used to assess student work, this construct focuses more on the type of feedback a student will receive. This feedback also applies outside of assessment, as students may receive feedback during class activities that help them perceive their learning progress. For example, if a particular in-class activity is used on a regular basis, would a student be able to perceive their ability improving (or not) from activity to activity? What kind of feedback would the instructor give them to help, and would that feedback change over time?

Not only is the type of feedback itself important, the timing of the feedback is also critical. Will students be able to see feedback and develop ways to improve on their own in between activities or assignments? Will feedback be a one-way communication from teacher to student, or a dialogue between the two? Will students be able to reflect on their own learning during a course?

One example of incorporating student reflection is through writing assignments, something not typically seen in the music theory core curriculum. The 1980s saw the rise of the Writing Across the Curriculum (WAC) movement, which promotes two philosophies on writing: writing-to-learn and writing in the discipline. Haefeli (2013) suggests incorporating student blogging in music history pedagogy, stating that "blogging also provides a medium for a valuable reflective practice, although this reflection was never prescribed in any assignment" (p. 43). Additionally, Haefeli (2013) noted that using blogging for student writing allowed for faster feedback: "we enjoyed an

accelerated environment because of the immediacy of the medium. Students did not have to wait for the instructor to grade and return papers. Blogging eliminated the time-intensive assignment/grade/return paper cycle" (p. 53). By incorporating writing into music theory curriculum, students could write-to-learn, enjoy a timelier feedback loop, and reflect on their own learning and understanding of theoretical concepts.

Environment. Finally, the environment is both physical and psychological. The physical setup of the classroom may help determine the best in-class activities, as well as the general ability to communicate, interact, and collaborate between student peers and the instructor. The physical environment in a class may also contribute to the ability to foster relatedness aspects of SDT and PENS, as defined in Chapter II. Additionally, a learning environment can also be interpreted as the type of psychological space in the classroom. Will the space be hostile or encouraging to creativity? Will group work be valued? What kind of learning "climate" will be created? Shernoff (2013) defines optimal learning environments as having both environmental challenge, including incorporation of motivational theories (especially Flow Theory, see Chapter II), and environmental support, which may come from an instructor, include aspects of agency from SDT, and form a learning community. In summary, "students were not only actively working with materials to solve problems…but were also *interactive*, participating in a community of learners and teachers. Generally speaking, students were challenged but also given the social supports to meet the challenge" (Shernoff, 2013, p. 138).

Third and fourth levels of focus. After conceptualizing the first two levels and drafting what the course will be like, two final levels must be considered. The third level, self-theory interventions, ties back to the overarching theoretical model of motivation and

the connection of this instructional design to the outcome of students adopting a more incremental self-theory. The final level is considering the students in the course and their agency as both a starting point and a result of the self-theory interventions.

Self-theory interventions. Self-theories research shows in multiple cases that a small intervention can lead to a large outcome in students adopting more malleable views of their intelligence and abilities (Aronson et al., 2002; Blackwell et al., 2007; Dweck et al., 1995; Dweck & Molden, 2005). Some of these methods include transparently teaching students about incremental self-theories, giving students agency in the class, instilling a positive value of learning, highlighting student improvement over time, and believing that effort leads to an increase in ability (Dweck & Molden, 2005, p. 136). Additionally, self-theories may also combat the various stereotypes and preconceptions mentioned above, which may have originally influenced a student to adopt a fixed self-theory in music theory due to various negative preconceptions about the field. In order to apply these interventions in the larger model of instructional design, we must consider the students of our course (the center of the instructional design model) and use these intervention techniques to inform the outer layers of instructional design during the revision process. Some of the interventions can be directly implemented—for instance, including self-theories in the content of a course—while other interventions will have a larger impact on the instructional design, as demonstrated in Chapter IV.

Students. By placing students at the center of the instructional design model, I am advocating for a student-centered teaching philosophy and environment. Music theory teachers are experimenting with different classroom practices that encourage student-

centered learning, like flipped classes (Shaffer & Hughes, 2013) and problem-based learning (Duker, Shaffer, & Stevens, 2014).

Student agency, as discussed in Chapter II, helps change student motivation when students feel a sense of autonomy. Autonomy is not achieved by simply allowing students to have freedom or options in elements of an instructional design—in order to instill a sense of autonomy, a student must be able to act volitionally. Therefore, autonomy is achieved when a student has a mission or purpose and may make choices that make sense to them. When considering this level of IDISTA, instructors should ask themselves how we can give students a sense of agency while infusing an instructional design with self-theory interventions. Answers to this question and applications of student agency will be explored more fully in Chapter IV.

Revising the instructional design. After considering a course from the first level of focus through the other nested levels, it is time to apply student agency and self-theory interventions to the design by working back out through the nested levels. As evidenced by the self-theory research above, there are numerous ways to apply self-theory interventions, which will be explored in Chapter IV. However, each intervention technique will have a ripple effect as it is applied back out to the foundation of IDISTA.

In the second level of focus, each intervention is closely aligned with at least one construct. Teaching an incremental self-theory would be included in the content of a course. As the rest of the course is revised back out to the foundations, the application of the self-theories content could manifest in a number of different ways, including as a statement in a syllabus, reading material in the course materials, or a statement during a class as a reflection of a teaching philosophy. Viewing improvement over time would be

included in the student progress construct and primarily influence assessment choices. Instilling a value of learning would impact the activities and environment of a course, further altering the syllabus, assessment, and teaching philosophy behind a given course.

As seen in Chapter II, small interventions in self-theory research can lead to large changes for students. As the first connection in my theoretical model of motivation, it is imperative that this connection is effective in the adoption of a more incremental self-theory for students, as these small changes will begin the cascading process toward increasing student ability in music theory. In the following chapter, IDISTA and my theoretical model of motivation will be applied to sample course creation in music theory.

CHAPTER IV

IDISTA MODEL APPLICATIONS

As outlined in the previous chapter, there are many avenues for applications of IDISTA and my theoretical model of motivation. Most interventions will be applied during the instructional design process, while the theoretical model of motivation will be the result of those applications. In this chapter, I will discuss an assortment of intervention options that may promote music theory students to adopt an incremental self-theory, and suggest how those options may affect the first and second levels of focus as an instructional design is conceived and revised.

Scientific Interventions

Aronson, Fried, and Good (2002) designed a study to investigate the effects of stereotypes on African American college students by changing their self-theories about intelligence. Participants were invited to participate in a "Scholastic Pen Pal" program, where these college students would be mentors to middle-school students. Participants in the "malleable" group were asked to respond to their letters "stressing what research was revealing about the nature of human intelligence…[and] that intelligence is not a finite endowment, but rather an expandable capacity that grows with mental work" (Aronson et al., 2002, p. 117). The control group was asked to respond to letters with the belief that "intelligence [is] not a single unit but…composed of many different abilities" (Aronson et al., 2002, p. 118). Students in the malleable group, through this intervention study, developed their own incremental self-theories about intelligence, leading to the students "enjoying and valuing academics more…and they received higher grades" (Aronson et al., 2002, p. 123). Aronson et al. (2002) comment that "this relatively simple intervention

of changing students' views of the expandability of intelligence had about as much positive influence on grades as some larger scale, multifaceted interventions" (p. 123).

In Blackwell, Trzesniewski, and Dweck's (2007) study investigating self-theories during adolescent transitions, middle-school participants were invited to attend advisory groups to learn about the brain in a way that would help them with their study skills. The experimental group received additional content "that intelligence is malleable and can be developed" (Blackwell et al., 2007, p. 254), while the control group "had a lesson on memory and engaged in discussions of academic issues of personal interest" (Blackwell et al., 2007, p. 254). Like the previous study, students in the experimental group who learned about incremental self-theories "endorsed an incremental theory more strongly after participating in the intervention" (Blackwell et al., 2007, p. 256), while the control group did not change after the advisory group meetings.

Teaching incremental self-theories. Based on the research above, teaching music theory students about incremental self-theories, especially at the beginning of their first year in the core curriculum, may help them adopt the belief that their ability in music theory is malleable and can change over time through an application of effort. The original text from Aronson et al.'s (2002) intervention included the following statement:

> Because intelligence is malleable, humans are capable of learning and mastering new things at any time in their lives. This message is especially important to get across to young, struggling students. If these students view intelligence as a fixed quantity, they may feel that they are incapable of learning if they encounter difficulty with their school work. If, however, students can be convinced that intelligence expands with hard work, they may be more likely to remain in school and put effort into learning. (pp. 117–118)

The above statement may be reworded as a statement to appear in a syllabus (changes appear in italics): "Because intelligence is malleable, humans are capable of

learning and mastering new things at any time in their lives. This message is especially important *as you begin/continue studying music theory*. If *you* view *your ability in music theory* as a fixed quantity, *you* may feel that *you* are incapable of learning if *you* encounter difficulty with *the work in this class*. If, however, *you* can be convinced that intelligence *and your ability in music theory* expands with hard work, *you* may be more likely to *continue pursuing a music degree* and put effort into learning."

A simple statement like the one above and a brief mention of it in class may be all that is needed to help students adopt an incremental self-theory, and is one option for intervention, especially at the beginning of a course. The statement above is in stark contrast to the type of additional statement added to Conway and Hodgman's (2009) sample music theory syllabus, as discussed in Chapter III. A similar intervention approach may be to mimic Blackwell et al. (2007) and teach core curriculum music theory students about incremental self-theories through a workshop, in-class activity, or discussion. An additional option would be to incorporate short-term activities and long-term projects that would demonstrate this improvement over time directly to students. While working through IDISTA, both of these intervention options would be applied through the second level of focus (content and activities), and possibly manifest in the first level of focus as a statement in a syllabus.

Instilling a Value of Learning

As suggested by Dweck and Molden (2005), instilling a value of learning is another intervention option that may help students adopt a more incremental self-theory. While working through IDISTA, music theory teachers need to carefully consider the type of learning environment during the instructional design process.

Shernoff (2013) discusses a connection of perceived learning and perceived investment of effort as a mediating factor in optimal learning environments:

> Taken together, these factors [perceived learning and the perception of investing effort] speak volumes as to the importance of *valuing* in the learning process. In other words, to feel fully engaged and invested in learning, students needed to value the activity as important both to themselves and the process of learning, and they also needed to feel like a valued, active, and contributing members of a learning community. (pp. 140–141.)

Shernoff's (2013) characteristics of optimal learning environments includes environmental complexity (a combination of challenging tasks and supportiveness similar to SDT), clear importance of goals, problem solving, positive rapport between the instructor and student peers, clear goals, interactivity, feedback, and a balance between the challenge and student skills (p. 139). We have already seen the connection between many of these characteristics and positive psychological theories of motivation in Chapter II. How can an optimal learning environment be developed in a music theory classroom?

For teachers trying new instructional designs and learning environments for the first time, applying these pedagogical techniques on a small, one-class or one-activity basis would be ideal; this scope will be the approach shown in the hypothetical example below. After becoming familiar and comfortable with various application techniques, a teacher may want to invest time during the instructional design process to create optimal learning environments for larger units of a class or the entire class as a whole. For examples of instructional designs for an entire class, see the Appendix.

For the purposes of the following example, having a positive rapport and balancing the challenge of the task to the skills of the students will be omitted, as these factors will be specific to each individual classroom. For designing a hypothetical, one-

time activity, I will walk through the design of a class meeting on the second-inversion triad. Using repertoire to establish a musical "problem," in this case, what are the characteristics of second-inversion triads, is one starting point and a way to incorporate problem solving into the learning environment. Real-world repertoire, especially if it is taken from repertoire students already know or are currently studying in other classes or ensembles, is one way to help establish the importance of the goals of the current class. ("Understanding second-inversion triads will help us understand how this piece of music works.") In order to discuss second-inversion triads, the first step is being able to identify them. Asking students to find these triads in repertoire is a challenging task, and can be adjusted in difficulty based on the number of examples, the complexity of the examples, and the texture of the examples. Figure 3 below shows an example of an easier texture for identifying a second-inversion triad (located in m. 4, beat 4). Figure 4 below shows a more difficult piano texture, where the absence of blocked harmonies adds to the challenge of locating a second-inversion triad (located in m. 25, beat 4). In order to balance the challenge and provide support, students working in small groups may be more supportive than working individually. Working in groups for this activity also introduces a level of interactivity between the students.

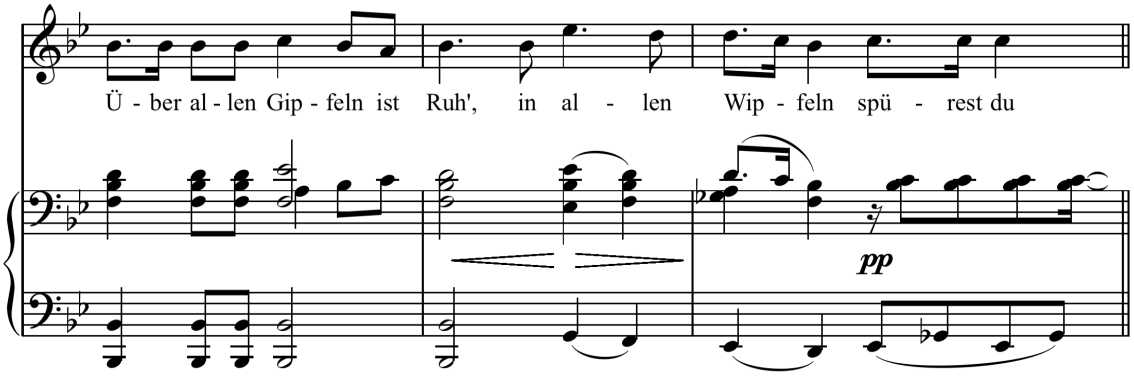

Figure 3. Franz Schubert, "Wandrers Nachtlied," D. 768, mm. 3–5.

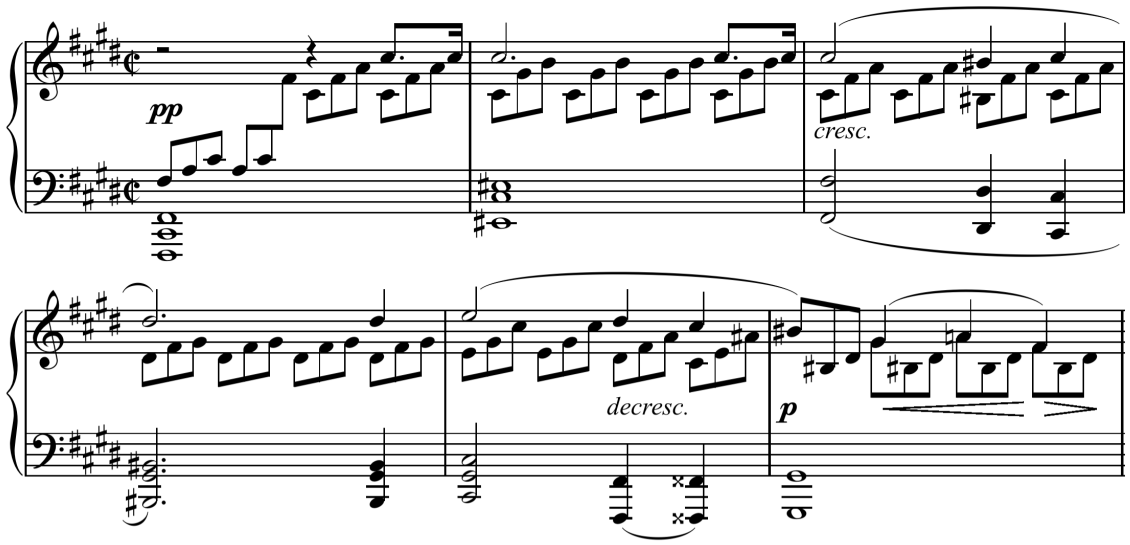

Figure 4. Ludwig van Beethoven, Piano Sonata in C sharp minor, op. 27 no. 2, mm. 23–28

So far, we have a small group activity where students are asked to find second-inversion triads in a variety of repertoire excerpts tailored to a specific class's skill level. However, one of the important goals of the activity is understanding second-inversion triads in context, so the students need to go beyond simply identifying the triads. An additional instruction after identification would be to find patterns. Each group could be given a different type of second-inversion triad (e.g., cadential, passing, etc.) and would be responsible for both locating and identifying the triads as well as finding a commonality between them. For example, in Figures 3 and 4 above, both of the second-inversion triads involve stepwise bass motion, specifically descending motion. Students asked to find a commonality between the second-inversion chords may discover this pattern and use it to form the basis of their own definition of what a passing six-four chord is. An additional example, shown in Figure 5 below, could be an extra challenge, as this example features an ascending bass motion, compelling students to revise their definition of passing six-four chords. In the context of the IDISTA, this example has

worked through considerations of content, activities, and environment in the second level of focus.

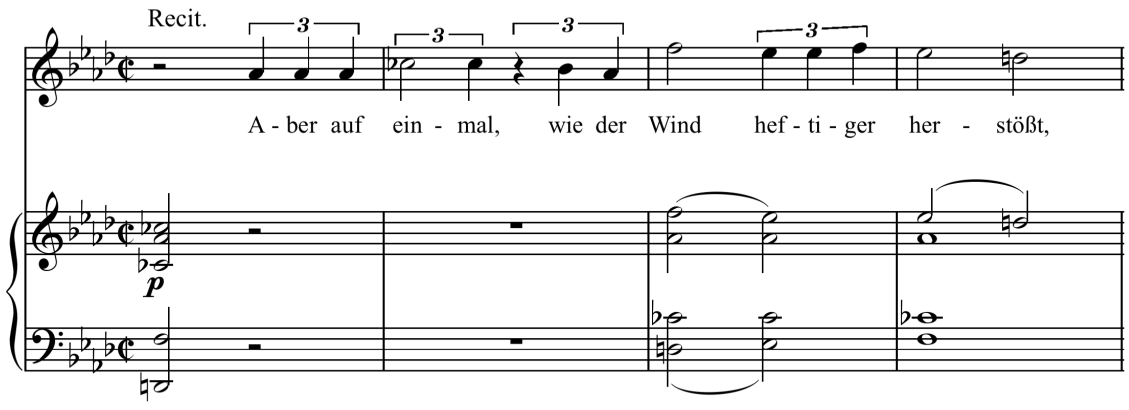

Figure 5. Johannes Brahms, "Five Poems," op. 19 no. 5, "An eine Äolsharfe," mm. 74–77

However, an additional consideration for instilling a value of learning in a classroom is the self-theory of the instructor, which is another way a student's self-theory could be impacted. Ultimately, an instructor's own beliefs and values as manifested and expressed in the classroom will have an impact on the learning environment, which is closely tied to the teaching philosophy construct in the first level of focus. Over time through the process of applying self-theory interventions and revising a course design, a teaching philosophy may change or expand.

Instilling a Value of Improvement

One of the most important aspects of incremental self-theories is developing a positive value of work and effort, which leads to improvement over time. Therefore, it is important that students value their own improvement, which requires them to be able to see and evaluate their own improvement. In IDISTA, applying this type of intervention will be focused on the student-progress construct in the second level of focus and the assessment construct in the first level of focus.

While playing video games, players often fail (inability to complete a level, character death, etc.). However, for many players this feeling of failure affects their motivation differently than a perceived failure in a classroom setting. Juul (2013) speaks to the different kinds of failure in games, concluding that "players should be told that they can improve (*unstable* cause) and that their poor performance in no way reflects on their general intelligence (*specific* cause)" (p. 53). Encouraging practice and effort can help a player believe that their failure is an unstable cause, or one that can improve, whereas a stable failure would be consistent with no opportunity for improvement. By pinpointing a specific cause of a failure in a given task, the player recognizes the specific cause, whereas a global cause of failure indicates that the failure is due to a general inability.

Games achieve this type of feedback in a variety of ways, but there are many commonalities between games of all types. The stakes for failing during a game are usually low: games give players multiple opportunities to try again with failure being a minor setback with very little real-world consequence. In contrast, assignments in classes often come with real-world consequences, often based on assessments and grading, including affecting grade averages, final grades, continuation in a sequence of courses or degree program, or scholarships. Allowing students to "fail safely" and lower the stakes in a class setting may include fewer graded assignments, a flipped class environment where students work on application of knowledge on their own or in groups and receive in-person feedback before a more formal assessment, or allowing students to revise and resubmit previous attempts at assignments.

Upon failure, players in video games are seldom given correct answers, but instead are provided with hints, reminders, and encouragement to try again. For example, in the action game Bastion (2011), when a character's health falls below a certain threshold, the game reminds you that pressing "F" will heal your character during combat, as seen in Figure 6 below. If you fail completely, resulting in character death, the game prompts you to press the "ESC" key in order to "carry on" (Figure 7); in this case, there is no "game over" dialogue, and the game resets to give you another opportunity to succeed. This feedback signals to the player that there is an opportunity to improve and provides additional information the player may need to turn the failure into a success.

Figure 6. Bastion (2011), reminding a player to press "F" to heal due to low health, seen in the upper left corner.

Figure 7. Bastion (2011), game prompt upon character death.

Because goals are clearly outlined, especially during tutorials or learning levels, it is often clear what the specific cause of the failure was, and feedback is often binary: you succeed and continue or you failed a specific task and need to try again. In the Bastion (2011) example above, the player died during combat after receiving a shield and after ignoring the recommendation to use a healing potion. This information enables the player to try the combat again using the shield and health potions to improve the outcome. The game will not continue before positive feedback for the specific task is achieved. In these ways, video games often instill a value of improvement.

How can this type of feedback be incorporated into an educational, classroom setting? Like the example above, games often have clear goals, something of importance in SDT, PENS, and Flow discussed in Chapter II; establishing clear goals for an activity or assignment is necessary and may help a student better interpret a specific cause of a

potential failure, instead of interpreting a general inability after a setback. Hand et al. (2015) advocates "posing questions instead of providing answers…temporarily putting aside pacing guides to help students learn to communicate their ideas in concise, comprehensible, and compelling ways" (p. 265), while also stressing the "importance of providing multiple avenues for students to be competent" (p. 265). While meaningful feedback is important, it may be undercut by the use of grades, which may lead to diminished interest, create a preference for only pursuing the easiest possible task, and reduce the quality of student thinking (Kohn, 2011, pp. 29–30).

Nilson (2015) criticizes not only grades, but also the common partial-credit point system:

> Though they may not know it yet, students pay the steep costs with their mental health, learning, enjoyment of the college experience, cognitive development, and lifelong learning skills. The partial-credit point system turns grades—and really all college course work—into a game, the object of which is to maximize the number of points toward one's grade with the lowest possible investment of time and effort. … If the current grading system turns college into a somewhat mean-spirited game, it obviously does not inspire students' motivation to learn. (pp. 7–8).

There are many options within and outside of a points-based or partial-credit grading system that may be more effective in music theory classrooms for helping students develop a sense and value of improvement.

Nilson (2015) advocates specifications grading, which relies on matching learning outcomes, often outlined on a syllabus, directly to the way students are assessed. Instead of assessing specific types of assignments and activities (e.g., midterm exam, final exam, homework assignments, reading responses, etc.), learning objectives and outcomes would be assessed individually, which means that one homework assignment may receive multiple grades based on the different learning objectives covered by it. For example, if a

course description lists that students will be able to analyze sonata form as an outcome of a class, that will also be one of the grading categories. The grading categories in specifications grading are then graded on a pass/fail basis: "with respect to rigor and motivation, student learning seems to thrive in a pass/fail environment when it is the only environment" (Nilson, 2015, p. 50).

Specifications grading shares much in common with the type of feedback received in video games described above: it is binary, tied to clear goals so failure is specific instead of generalized, and encourages improvement by allowing students to retry categories multiple times. By using a pass/fail grading system, students would have a clearer idea which course objectives they have passed and which still need to be mastered. Additionally, criteria for each objective would have a clear outline or rubric for pass requirements, as these rubrics would only require one level of explanation. Allowing students the freedom to pursue objectives at their own pace and encouraging students to continue putting in effort on incomplete objectives supports incremental self-theories and the needs of competence and autonomy in SDT. Using specifications grading for music fundamentals during the core curriculum may be even more fruitful due to the focus on fundamental skills and the varying level of incoming students. An example of specifications grading outlined in a first-year music theory course syllabus is included in the Appendix.

However, many universities and colleges will likely require a letter grade for required coursework, which will require a conversion from the pass/fail system. For this conversion, Nilson (2015) recommends a points-system, which may be most familiar for students, or bundling objectives into larger categories or modules that contribute toward a

final letter grade (pp. 201–228). For example, a first-year music theory course may bundle fundamentals learning outcomes into one module and other analysis topics like counterpoint or form into other, separate modules. In the example in the Appendix, fundamentals are not only grouped into their own module, but that module is given more value by requiring a full pass for the entire set of objectives, while other modules are converted to a letter grade based on the number of passed objectives. Specifications grading is related to several other types of assessment methods, including standards-based grading or criterion-referenced grading, which have successfully been implemented in music theory classrooms (Moseley, 2014; Duker, Shaffer, & Stevens, 2014).

Another grading method that strongly promotes student agency is self-assessment, implemented in music theory and Hispanic studies by Alegant and Sawhill (2013). Creating a dialogue about assessment between the instructor and student allows students to reflect on their own learning, which they are ultimately responsible for self-assessing. "Through practice and modeling, students learn to write persuasive and realistic self-assessments, as they must account for their successes and failures in their learning process; this is an important life-long skill" (Alegant & Sawhill, 2013). In this way, self-assessments go a step further than specifications grading by removing some of the scaffolding and structure around grading. While specifications grading and self-assessments are only two examples of applications of new assessment techniques that instill a value of learning, both are valuable and easily applicable in the music theory classroom.

Using IDISTA in Music Theory Course Design

Based on the interventions and examples above, the following pages will provide a walkthrough of the IDISTA model in a hypothetical course design for a first-term, first-year music theory course. The product of this course will be reflected as the first syllabus in the Appendix. However, the following course design process is only one example of the ways a teacher could use IDISTA to design a course, and the resulting course is not meant to be a single curricular recommendation. Additionally, the links from IDISTA to an increase in music theory ability as outlined in my theoretical model of motivation have not yet been empirically evaluated, though plans for future research are discussed in Chapter V.

For the purposes of this hypothetical course design, some assumptions have been made about the larger core curriculum. I have assumed that this course is the first in a two-year sequence of tonal music at a state university on a fifteen-week semester calendar. Some curricula incorporate post-tonal music in these two years, while others prefer dedicated post-tonal courses for music majors, which is the case for this scenario. Within the music theory core curriculum, aural skills and keyboard skills are separate, but coordinated, courses. The student body consists of musicians from a variety of backgrounds and experience levels, with minimum entrance abilities including the ability to read notated music on at least one clef and experience creating music on at least one instrument (including voice). While these assumptions may seem generic, they can have rippling effects throughout IDISTA and the larger curriculum must be taken into consideration as the framework for a course is established during the first level of focus.

Drafting the first level of focus. My first step in designing a hypothetical first-term music theory course would be to draft a framework of the course using IDISTA's first level of focus. Based on my current teaching philosophy, I would like to pursue a student-centered approach to the course in some capacity. To begin drafting a syllabus, I would begin with some basic considerations, like the number and frequency of class meetings, departmental and university requirements for the syllabus, and learning objectives. Because this course is the first in a sequence for students of varying ability levels, I would like to include learning objectives for fundamental music skills. However, I would also like students to be able to create something musical. My next step will involve exploring both of these very broad learning goals to begin narrowing them down to more specific objectives.

When students finish this class, what fundamental skills and abilities do I want them to have? I want them to understand basic concepts of rhythm and meter. I want them to be able to fluently read pitched music on a variety of common clefs. I want them to be able to use musical notation to write down musical ideas and communicate effectively to other musicians. I want them to understand how pitches can be organized into groups of two, three, and four. I want them to understand the relationship between keys and harmonies in diatonic music. Above all, I would like students to begin recognizing patterns in tonal music. Note that most of these skills require understanding and communication at their core.

In addition to helping students to master fundamental skills, I would also like students to create something musical as part of the course. What could they create that would exhibit their abilities with fundamentals? A composition project could be a good

option, but I might need to add some more objectives besides the basic fundamental skills listed above. Do I want the course to only focus on fundamentals? I would like my students working with repertoire as soon as possible, so dividing the course into two halves, one for basic skills and one for an introduction to Baroque counterpoint, would be one way to introduce more repertoire and variety to the course, as well as creating an opportunity for students to creatively use their skills in composition.

Next, are there materials and resources that will provide students with support and helpful reference outside of class? *Open Music Theory* seems to align with my learning objectives and offers referential material on both fundamental skills and on Baroque-style species counterpoint and four-voice composition.

The final consideration during the first level of focus is to begin considering assessment options. I would like to adopt some of Nilson's (2015) specifications grading ideas. With one unit focused on fundamental skills, a pass/no-pass (P/NP) option would work well, with each skill requiring a pass. This grading scheme may be more difficult to implement with Baroque counterpoint, but with a species approach, a similar P/NP grading scheme could be used for each species. Based on the two-unit setup of the course, it would make sense to have large assessments at midterm and finals week.

Students will need to demonstrate their fluency in fundamentals at the conclusion of that unit, mostly likely with a written exam. But if students have already passed fundamental skills on in-class assignments or homework, will those passes count toward a large midterm exam? During the draft stages these decisions do not necessarily need concrete answers, as we will be revisiting this first level of focus at the conclusion of the revision process in IDISTA.

In summary, the draft of the first level of focus includes a student-centered course covering two units of objectives: fundamental skills, with an emphasis on understanding and communication, and Baroque counterpoint skills, including species counterpoint and four-voice composition, with an emphasis on creating music. Students will use *Open Music Theory* as reference material. Skills will be assessed on a P/NP grading scheme, with skills being bundled into two units based on the objectives above.

Drafting the second level of focus. Now that we have a basic idea of what the course will look like, we can begin to dive deeper into IDISTA with the second level of focus. While the learning objectives established in the previous level focus on communication, understanding, and creating music, some of the content choices have already been considered. Fundamentals skills will include content areas of notation, rhythm, meter, pitch identification, clef reading, scales and scale degrees, key signatures, intervals, triads, and seventh chords. These content choices and order are also informed by the *Open Music Theory* course material. For a unit on Baroque counterpoint, content will include species counterpoint and four-voice composition, including introductions to voice leading, embellishing tones, and figured bass realizations. While my earlier discussion of part writing in Chapter II emphasizes the negative aspects of part writing as it appears in current textbooks, understanding voice leading and harmonic syntax, especially as it pertains to a historical approach to music from the Baroque period, is an important skill and included here in one small unit of a larger curriculum.

Now that there is a clearer idea of specific content areas, what will class meetings look like? What will students be doing during class and outside of class? If a flipped class format is adopted, students could read *Open Music Theory* chapters outside of class and

do individual and group activities to practice various skills during class. If an inquiry-driven model is adopted, students could examine and experience repertoire in class to discover various elements and applications of the content described above, like the second-inversion example described earlier in this chapter, and review reference materials outside of class. A combination of these types of activities could also be beneficial, with using inquiry-driven activities when introducing new topics and a flipped format for practicing and demonstrating skills during class.

If the latter is chosen as the basis for course activities, how will students be able to view their progress? Will they receive feedback during class? Will feedback during class contribute toward the P/NP grading scheme? Answers to these questions may depend on class size and duration. Will classes be small enough to give students meaningful feedback on an individual basis during class meetings? If not, will there be opportunities for students to understand and reflect on their progress, like written assignments inspired by WAC discussed in Chapter III, and will there be opportunities for students to receive feedback on assignments completed outside of class?

For the sake of this hypothetical situation, the class size will be around twenty students, with class meetings lasting fifty minutes each. It may not be possible to give students individual comments during activities in class at a sufficient rate for them to have a sense of progression. Therefore, students will complete assignments outside of class that receive formal P/NP feedback with comments and will receive informal feedback as often as possible during activities in class. Due to a simplified grading rubric because of the adoption of specifications grading, there should be minimal time between receiving assignments, grading them, and returning them to students. Additionally, if

students have the opportunity to revise and correct assignments, this process can help them have a sense of progression and improvement.

Finally, what kind of environment, both physical and intellectual, will be created for the class? During this step, I can confirm if the classroom will have sufficient space and materials for the types of activities outlined so far, like group work and in-class practice opportunities that may require tables and board space. Intellectually, I want to create an environment where students can freely make mistakes and learn from them, so I need to foster a low-stakes setting. Much of this may be portrayed through a teacher's own personality and rapport with a class, which is difficult to outline in this type of hypothetical demonstration. Still, there are some things a teacher can do when designing a course to ensure that the environment is safe, such as setting the physical arrangement of the room to match the type of activity so all students can equally participate, adjust the amount of P/NP assignments offered to students, occasionally ensure that all students get individual attention during class meetings, and strive to meet student setbacks and mistakes with positive enthusiasm instead of punishment or ridicule.

After exploring the second level of focus, we have a clear idea of the content that will be covered during the course, a mixture of inquiry-driven introductory in-class activities paired with regular skills practice during class, with students receiving informal feedback on progress, and out-of-class assignments that will receive more formal P/NP feedback and offer students an opportunity to revise and resubmit NP attempts. The classroom will be a low-stakes environment open for experimentation and exploration, with plenty of physical space and accommodations for these activities.

Drafting and revising the third and fourth levels of focus. Before continuing to revise the first and second levels of focus, it is time to consider self-theory interventions that are appropriate for the course, the students taking the course, and how to revise the current design to be motivating for them. For the purposes of demonstrating interventions beyond a content-oriented statement in the syllabus, of which there is already a sample statement earlier in this chapter, I will explore other interventions in this hypothetical scenario. Some interventions, like instilling a value of learning and a value of improvement, have already been applied to the course design through the adoption of specifications grading and a mixture of inquiry-driven and flipped classes. At this time, we can focus on student agency.

Like many first-year, first-term classes, the student body will be an unknown group of students. After teaching at the same university for many years, a teacher may come to anticipate the types of students to expect and may even meet some of these students during campus visits and entrance or placement exams. So what do we know about our students? They will be beginning a music major degree, have some experience on their instrument, and have likely experienced a variety of types of music, including classical repertoire and popular music. Getting to know the students, including their ambitions, goals (both for their degree and for this class), and interests during the first few days of a class can help influence the types of examples used for assignments and activities. Inviting students to bring music they are familiar with into the class and incorporating music they are working on is one way to allow for some student agency.

How can we make opportunities for these students to have agency in a class, especially one with a large emphasis on basic fundamental music skills? Because we are

already using specifications grading, students can make decisions about which assignments, or portions of assignments, to complete based on already passed course objectives. Once a student passes an objective, there is no need for them to continue working on that objective, which frees up their time to focus on skills that still need improvement. However, a student may still choose to complete assignments for passed objectives for extra practice.

One significant way to offer students meaningful choices in the class is to have multiple options for the final composition project at the end of the Baroque counterpoint unit. As seen in the syllabus in the Appendix, there are four options for students to choose from for the final project, each tailored to possible long-term goals of the students based on available degree options: a figured bass realization for students interested in pursuing performance, a four-part chorale style warm-up composition for students interested in music education, and a fifth-species counterpoint composition for students interested in composition. The fourth option is a "build your own" project for students interested in a more creative outlet or for students in other degree programs looking to apply these skills in other ways. These project descriptions in the sample syllabus are clear in their intentions by outlining the ways these specific skills might be useful in real-world professional scenarios.

Revising the first and second levels of focus. The revision process begins with the third and fourth levels of focus and works back through the drafted elements to complete the instructional design based on the students, their agency options, and the self-theory interventions chosen. One of the elements of student agency previously discussed was incorporating a variety of music into the course based on student interest

and experience. This inclusion may be easier during the fundamentals unit than the Baroque unit, which is rooted in a specific style. However, we may be able to use music of other styles as examples of voice leading (separate from the expected harmonic syntax of the Baroque period) or embellishing tones. While there are no significant changes to the content of the course, these considerations may be useful when preparing for class meetings.

We previously established that students will have a sense of progress through informal feedback in class and more formal feedback accompanying P/NP out-of-class assignments. It is important to be clear about grading practices, so the syllabus in the Appendix outlines the cumulative nature of the P/NP grading and the opportunity for students to focus on skills they have not passed by no longer requiring work on passed skills. However, in the first level of focus, we had also drafted a midterm skills demonstration for fundamentals. How do we reconcile the low-stakes assignments with a midterm exam?

Fundamental music skills are essential for all musicians, no matter the specific field or specialization. While a student may no longer need to work on first-species assignments after passing and moving on to second species, extra reinforcement of fundamental skills may be very important throughout the term. A midterm skills demonstration on fundamentals could serve as a required reassessment of skills. Because these skills are so important, a reassessment emphasizes that fact, while also giving students an additional opportunity to demonstrate their improvement in the first half of the course.

However, a midterm exam that requires a pass on all fundamental skills would be an extremely high-stakes assessment. Is there a way to lower the stakes so students can continue to improve their skills if necessary? The exam could also be offered at the end of the term after another seven weeks have passed, to give struggling students an additional opportunity to pass their fundamental objectives. The flow of assessments for fundamentals would progress as follows: assignments in the first half of the term will help students identify skills that need improvement, introduce them to specifications grading, and be low-stakes, as passes at this point are only a confirmation to a student of their abilities. The midterm exam would provide students with an incentive for continuing to practice and hone their skills throughout the first half of the term and allow them to learn how to prepare for the exam. If a student is not successful after the first attempt at the exam, they have another seven weeks to continue practicing and achieve a pass by the end of the term.

Sometimes it is helpful to imagine the process from a student's point of view. Let us imagine an incoming student who is comfortable on their instrument, fluent at reading treble clef music, but uncomfortable with music in minor keys and any key outside of having four flats or sharps in the key signature. They begin the course and easily pass the first few objectives of notation, rhythm, and meter. However, as soon as they are asked to read and write on clefs besides treble, they struggle. Would they have enough incentive to focus their efforts on clef reading? Would they have enough feedback to know if they are making progress on improving? If so, would a setback on the midterm exam due to not passing the clef reading category be insurmountable? Or would the student feel motivated

to continue working toward the objective in order to achieve mastery by the end of the term? As a teacher, would you be able to offer that student the support they need?

With fundamental skills, there are numerous websites ("Musictheory.net," 2016; Alvira, 2014), mobile apps (SpartanApps, 2013), and simple exercises for students to practice and experience these skills in different ways. Therefore, even with a higher-stakes assessment like this midterm exam, there is enough variety and quantity of support for teachers and students to realistically access and use. This type of detailed consideration during the revision process might also bring light to other issues in the first level of focus: is *Open Music Theory* a suitable resource for my students? Would it be an acceptable resource in this type of situation?

Continuing with the revision, there is one more aspect of the grading policy that has not been addressed: how will specifications grading be converted to a typical letter grade for final grade assignments. So far I have followed Nilson's (2015) process of bundling objectives into units. However, because of the requirement to pass all objectives in the fundamentals unit, the Baroque unit will be the determining factor for a final letter grade. If the music department requires a C or better to meet the pre-requisite requirements for a course, what is the minimum level of competency in the Baroque unit for continuation in the sequence? Of course, designing one course in a sequence is often not the best way to approach course design due to the long-term goals of connected classes; however, in this somewhat abstract scenario, I have decided that passing two of the seven Baroque objectives would be sufficient for proceeding. The Appendix includes the full range of this particular two-year sequence for reference and comparison. The rest

of the letter grade conversions are then distributed based on the number of passed objectives from the Baroque unit.

Finally, does the course introduction and description in the syllabus communicate the type of environment and philosophy held by the instructor? The referenced syllabus in the Appendix has been written in a way to clearly communicate what the learning objectives of the course are while also speaking directly to the students in a way that is welcoming and inviting, something I would also hope to communicate in person.

By working through the IDISTA process, I have shown how a class can be designed by the instructor to be more motivating for students by incorporating student agency and self-theory interventions. As previously stated, the syllabi in the Appendix are not intended as a single solution for instructional design, but instead are one example of syllabi for a two-year core curriculum in music theory designed with IDISTA and the research presented in this dissertation in mind. Every instructional design will differ based on the teacher and the students in the class.

Learning Objectives

While the learning objectives in the large scenario above were specified to reflect the content of the course, this specification does not always need to be the case. The next set of small scenarios will demonstrate how determining learning objectives, based on the syllabus and assessment elements of the first level of focus in IDISTA, can be applied to a variety of content areas during the second level of focus.

Creating broad learning objectives. Many of the undergraduate courses experienced by students, both in the core curriculum and in upper-level coursework, could have broad learning objectives. This wide scope of objectives may be especially

important for departments and teachers in smaller, liberal arts colleges in order to prepare students for a large variety of opportunities outside of higher education and to help them have a better understanding of the larger world outside of music studies.

Some of the broad learning objectives that may be important for many music courses revolve around creating artifacts of learning. These artifacts may be manifested in three broad objectives: composition, performance, and writing. These three categories would represent musical understanding through model composition, the ability to understand issues of performance and the ability to make music at sight, and having sufficient skills to communicate through writing about music. If these were the main objectives for a course or unit of a larger course, what would each course look like after considering the content aspect of the second level of focus in IDISTA?

Part Writing. While an entire course may not be devoted to common-practice part writing, a unit may be dedicated to the four-voice compositional practice. For this particular content area, displaying a competency in composition in a four-voice, common-practice style could apply to various short- and long-form compositions depending on the experience level of the students in the class, and may include a variety of musical styles. For example, by discussing elements of voice leading and harmonic syntax separately, music outside of the common-practice era may be included. Even arranging projects meant to simulate real-world scenarios, like arranging a song from popular music into a four-part string quartet, could be included to illustrate musical understanding of a variety of issues like spacing, doubling, and orchestration.

Performance objectives could be emphasized through sight-reading the model compositions of students in the class, as well as more formal performance opportunities

like students preparing to sing a final composition, performing four-voice compositions on their primary instruments, and considering issues of orchestration outside of the vocal domain. Finally, the course could also take inspiration from WAC, discussed in chapter III, by implementing a number of written assignments, both reflective about the compositional process, and informative about the history of part writing by engaging with primary music theory source materials during the common-practice period as it pertains to what we refer to today as part writing.

Formal Analysis. With the same three broad learning objectives, a unit or course on formal analysis would look very different. Composition objectives could be met through a variety of model composition projects in various forms and styles. Students could even be asked to show musical understanding of form through transforming familiar existing music into a variety of short, specific forms. For example, what would "Happy Birthday" sound like if it was rewritten to be the second theme of a sonata form? What would the rest of that sonata form sound like? These types of compositions could allow students to explore musical forms with their creativity while also demonstrating their understanding of those forms through recomposition.

Fulfilling performance-based objectives in formal analysis may include finding a way to communicate form in real-time alongside a performance, like a "play-by-play" video that outlines the form, or writing performance guides for musicians to help teach the forms studied in a way that is instructional for a performer. For students wishing to explore form on their own instruments, they could experiment with different interpretations based on their understanding of the form. Finally, writing objectives could be completed by demonstrating an ability to analyze forms and discuss them thoroughly

by engaging with current research in music theory. Students may even solidify their own understanding of musical forms by writing a script for a pre-concert lecture for a layman audience that teaches form based on a specific concert program.

Key Signatures. While the first two topics in the hypothetical situations above were more advanced topics, the following scenario will present the three broad learning objectives interpreted through a topic from music fundamentals. How can understanding music through composition, performance, and writing apply to key signatures? Students could write their own short melodies using only accidentals, and then apply a key signature based on the accidentals used. For example, a short melody in G minor would likely have accidentals of B flat, E flat, and F sharp. However, a student may discover that there is no key signature that includes all three accidentals. So which accidentals are covered in the key signature? Why are certain accidentals left out of the key signature? These are questions that would directly pertain to the music they had created.

Students can also become familiar with key signatures by performing music on their instruments. A student may begin making connections between sight-reading skills and other aural skills if they are asked to perform a familiar melody written in an unfamiliar key signature. This type of exercise could also help students solidify what it means to play music in a key by recognizing the similarities of the same melody written and performed in different keys. Finally, students could explore their understanding of key signatures by writing their own thoughts and discoveries about key signatures as their own musical theory. What patterns emerge as you study key signatures? Students may discover the pattern of sharps and flats and the connection to the circle of fifths. Why are certain key signatures more common than others? Students may theorize why certain

instruments favor certain keys based on a transposition or the open pitches of string instruments. Student findings could even be compiled into a collaborative wiki for future reference by the students in that class and future classes.

The three short examples above all illustrate that choosing relevant learning objectives, even if those objectives are broad in scope, can be applied to numerous content areas. These objectives may be refined and specified during the IDISTA process after applying content, as seen in the larger course design walkthrough above, but the creation of encompassing goals for a course during the first level of focus is an important step. As previously stated, content should be secondary to the elements in the first level of focus in IDISTA, and creating strong learning objectives based on a teaching philosophy, syllabus considerations, assessment ideas, and possible course materials can have a very positive impact on a course design, no matter what content is chosen for the course.

In summary, incorporating my larger theoretical model of motivation in a music theory curriculum begins by understanding incremental self-theories and working through IDISTA while designing a course. By applying self-theory interventions in the design of a course, we can begin to help students change their motivation in music theory and increase their abilities in music theory skills. While all the applications of IDISTA in this dissertation are in the context of undergraduate music theory curricula, it is also important to note that because of the interdisciplinary nature of this research, my theoretical model of motivation and IDISTA are not confined to only music theory. In fact, both models could be applied to numerous fields and disciplines; however, this type of theoretical work has not yet been the focus of music theory pedagogy research. By

incorporating these models into music theory pedagogy and undergraduate core curricula, approaches to teaching may be changed and improved moving forward.

CHAPTER V

CONCLUSION AND FUTURE RESEARCH

Conclusion

The field of music theory pedagogy is still a young subfield of the larger music theory discipline, gaining steam in the 1980s. While much attention has been given to the content we include in our classrooms, the techniques we use in our classrooms, and the types of assessments used, little direct attention has been given to issues of motivation, particularly for students in the core curricula. It is generally accepted that students have low motivation in music theory coursework, and various teaching techniques and philosophies have attempted to address the problem, but only indirectly. This dissertation, as well as the theoretical model of motivation and IDISTA model, are the first steps toward acknowledging and solving this issue of student motivation in music theory.

Because of the lack of research on motivation in the field of music theory pedagogy, an interdisciplinary approach must be taken to find applicable and relevant research. I have chosen to focus on two theories of motivation from the field of psychology and education: Dweck, et al.'s (1995) Self-Theories and Deci and Ryan's (2000) Self Determination Theory. Based on research and applications in mathematics pedagogy and video game design, two fields with significant cognitive similarities to music theory, we are able to understand how these theories may play a role in changing our students' beliefs about their ability in music theory and the type of motivation they have during the core curricula. However, these two theories only address a small subset of theories in the large and varied fields of psychology and education.

In order to implement changes in music theory pedagogy that take direct consideration of student motivation, I have developed my theoretical model of motivation and IDISTA. The theoretical model of motivation shows a linear process that begins with an instructional design that encourages students to adopt an incremental self-theory. Once students adopt a more incremental self-theory, their motivation will change, likely to a more intrinsic motivation to learn and explore music theory. Finally, this change in motivation will help students increase their ability in music theory.

The initial key for students adopting a more incremental self-theory lies in the instructional design process, represented by the nested IDISTA model. This model outlines the design process on different levels of focus, progressing from the first level (teaching philosophy, syllabus, assessment, and course materials) to the inner fourth level (students), and then revised from the inner levels through self-theory intervention application, back out to the finished design.

As seen in Chapter IV, self-theory interventions are often small and easy to incorporate during the instructional design process. There are a variety of types of interventions with applications in each of the elements of the first level of focus in IDISTA. These interventions range from teaching students about self-theories and the positive benefits of adopting an incremental self-theory, instilling a value of learning in a class, and instilling a value of improvement in a class. Because of the models and examples of these interventions in various studies, mathematics pedagogy, and video game design, we have working examples of how these interventions may impact music theory students.

As Dweck and Molden (2005) emphasized, small interventions can lead to large changes in student self-theories, resulting in improved ability, grades, self-esteem, and changes in motivation. If these small changes lead to the types of improvement evidenced in other disciplines and shown in my theoretical model of motivation, their implementation in the field of music theory pedagogy would be a much-needed improvement for our students. However, future research is still necessary to know the full effectiveness of both IDISTA and the theoretical model of motivation.

Future Research

The variables presented in my theoretical model of motivation and the assessment of ability in music theory still need to be tested before this model can come to fruition inside the music theory classroom. However, this model only represents the first step in providing our students with a more rewarding education in music theory. In order to begin making a link between instructional design in music theory, self-theories, motivation, and overall music theory ability in core curriculum students, I am planning on conducting numerous empirical studies. By investigating self-theories and motivation in music theory empirically, we can move beyond casual observations and anecdotal evidence in order to give us a firmer foundation for our pedagogical decisions in the future. Because of the lack of current empirical studies on motivation in music theory, numerous studies will be needed to assess the various causes of low motivation, which may extend beyond the scope of this dissertation, and the possible impact of student self-theories. The studies outlined below are a preliminary plan, which will require patience and revision due to the complexity of studying motivation.

Study 1. The pilot study will test measurement instruments for future use and assess current first-year music theory students' self-theories.

Participants. The participants in this study will be approximately 20 first-year students in late-fall or early-spring term at a state university and approximately 20 first-year students at another university with a contrasting instructional design or pedagogical approach.

Instrumentation. The survey will be based on the measurement developed by Dweck, et al. (1995) for measuring implicit theories with additional questions about any previous experiences in music theory and demographics. The survey by Dweck et al. (1995) includes three statements measured on a six-point Likert scale:

> (a) "You have a certain amount of intelligence and you really can't do much to change it"; (b) "Your intelligence is something about you that you can't change very much"; (c) "You can learn new things, but you can't really change your basic intelligence." (p. 269)

The result of these three items are averaged to create an "Overall Implicit Theory Score," which identifies the subject as an entity theorist (scores < 3.0) or an incremental theorist (scores > 4.0). This original study had a test-retest reliability of 0.80. Thorndike and Thorndike-Christ (2010) describe reliability correlations of 0.70 or higher as "permitting us to make useful studies of and draw dependable conclusions about groups, especially groups of substantial size" (p. 140) and reliability correlations of 0.80 as the "minimum level of reliability for making decisions about individuals" (p. 140). Additionally, the use of this instrument will allow a direct comparison with the results of other studies that have used this instrument.

Procedures. The survey will be administered during the fall or spring term at a state university to current first-year music theory students. The survey will be given twice

(pre-test and post-test) so student self-theories can be compared. The results of both tests will provide a baseline and will test the instruments for further research.

Study 2. The second study, taking place during the 2015 fall term, will use the same instruments as the pilot study to assess whether first-year music theory students change their self-theories after beginning their first year of music theory study.

Participants. This study will be larger in scope by including all first-year music theory students at a state university and several other universities with both similar and dissimilar pedagogic approaches, with an estimated population over 100.

Instrumentation. The instrumentation will be the same as Study 1.

Procedures. The survey will be administered at the beginning of a school's fall term prior to any exposure to the music theory course (including meeting the professor, viewing the syllabus, course website, or other materials). After a key event in the term (for example, a first exam, a midterm exam, etc.), students will retake the survey. The results from both administrations will then be compared to assess what self-theories students had prior to beginning music theory and whether their self-theory changed over time in the course. It is also possible to correlate students' course grades with their self-theories, as other implicit theory studies have done (Blackwell et al., 2007).

Study 3. I anticipate the combined data from the first two studies to provide sufficient evidence about current student self-theories and how the instructional design in music theory may be altering student self-theories. After this data is calculated, a third intervention study will be performed with a small group of students at a state university.

Future studies. Following the first three exploratory studies investigating music theory students' self-theories and gathering preliminary data on the application of self-

theory interventions, additional variables in my theoretical model of motivation will need to be examined. There is already ample evidence that students adopting incremental self-theories experience a change in their motivation (Aronson et al., 2002; Blackwell et al, 2007; Dweck & Molden, 2005), but it is currently unknown how much these variables impact a student's overall ability in music theory. Appropriate measurements for music theory ability will need to be developed, in addition to assessing the impact of instructional designs, self-theories, and motivation on music theory ability.

I hope that these empirical studies will not only provide valuable insight for the field of music theory pedagogy, but also introduce empirical research as a worthwhile and valuable method of research in the field.

These future research goals aim to bring critical, new research in student motivation to the field of music theory pedagogy. This research will open new avenues in continuing investigations in engagement and motivation, as well as helping current teachers of music theory understand the role of instructional design in their classrooms. By using an empirical approach, I hope to begin answering some of the questions educators may have about how motivated our students are in the core curriculum of music theory and how we can continue improving our students' experiences and abilities.

APPENDIX

SAMPLE CORE CURRICULUM SYLLABI

Music Theory I

Course Introduction. Welcome! What is music theory? (Shaffer, 2014b) During the next fifteen weeks you will begin to experience the discipline that examines multiples theories about multiple musics in a variety of different styles. I hope that during this course and the larger two-year sequence of coursework in music theory that we will accomplish a good deal more than simply acquiring necessary credits and degree requirements. We will be embarking on a journey together to experience, gain an understanding of, and appreciate music fundamentals and music in the Baroque time period. While music analysis may not be a career path for many of you, I hope the musical skills and tools we practice in this class will enrich your experience as a musician, whether you are pursuing performance, education, composition, or any other specialty in music.

Course Description and Objectives. Each course in the two-year sequence of music theory will be divided into seven-week units covering a variety of topics and stylistic periods. This course will include two units: Fundamentals I and Baroque I. Fundamentals I will introduce and review basic skills in music, including notation, rhythm and meter, scales, key signatures, intervals, and chords, culminating in a written skills demonstration. Baroque I will be an introduction to two-voice species counterpoint and four-voice chorale style, culminating in a composition project.

The objectives for this course fit into two categories: first, to develop competencies in basic analytic tools appropriate in diatonic music. These skills include

notation, rhythm and meter, pitch identification, clef reading, scales and scale degrees, key signatures, intervals, triads, and seventh chords. Second, to demonstrate creative application of basic analytic tools in model composition.

Required Materials. No textbook is required for this course. All required reading materials will be available on the course website and *Open Music Theory*. All scores are in the public domain and readily available on imslp.org. If you would like to purchase bound scores, I recommend looking through Dover Music's catalog.

Grading. Because of the emphasis on music skills in our course objectives, all assignments, projects, and demonstrations will be graded on the following scale for each course objective: P = pass, NP = no pass. Each activity may receive multiple grades based on the included course objectives. For example, a homework assignment may receive feedback on scales, key signatures, and clef reading individually, instead of one "blanket" grade or percentage for the assignment as a whole. Assignment grades will be cumulative, which means passing an objective will carry through to the end of the unit and give you an opportunity to improve no-pass grades. Effectively, receiving a no-pass grade before the end of the unit means you have *not yet* achieved a pass for that skill, so keep working on improvement in subsequent assignments. Additionally, informal feedback on your progress will be given during in-class workshops, group and individual activities, and any individual meetings.

Each of these multiple objectives will count toward the specific competencies as follows:

Fundamentals I: Basic Analytical Tools

- Notation
- Rhythm

- Meter
- Pitch Identification
- Clef Reading
- Scales and Scale Degrees
- Key signatures
- Intervals
- Triads
- Seventh chords

Baroque I: Species Counterpoint & Four-Voice Chorale Style

- First Species
- Second Species
- Third Species
- Fourth Species
- Four-Voice Voice Leading
- Four-Voice Figured Bass Realization
- Embellishing Tones

Fundamentals I skills provide the foundation for all music skills and is essential to the two-year music theory sequence. Therefore, all skills will be reassessed during a midterm written skills demonstration. All skills during the midterm demonstration must receive a pass. This demonstration will be held a second time during finals week for any students receiving a no-pass grade. If a no-pass for any Fundamentals I skill remains at the end of the course, the pre-requisite for Music Theory II will not be met. Additionally, failing to complete the final composition project will result in a no-pass for the Baroque I unit.

Final grades will be calculated as follows:

- A: Fundamentals I Pass, Baroque I 6–7 objectives Pass
- B: Fundamentals I Pass, Baroque I 4–5 objectives Pass
- C: Fundamentals I Pass, Baroque I 2–3 objectives Pass
- D: Fundamentals I Pass, Baroque I 1 objective Pass
- F: Fundamentals I No-Pass, Baroque I No-Pass

Assignments. Assignments will feature a variety of activities and may be completed during class activities or individually outside of class. For any portion of an assignment receiving a no-pass for a course objective, it may be corrected and resubmitted. That means that it is the responsibility of the student to read the feedback and hints from the grader, detect the errors, and correct them. Once a pass is obtained for a specific objective, no further assignment portions on that topic are required, though extra practice is always encouraged in future assignments. This flexibility is designed to give each student the necessary means to focus on their own unique challenges. However, all Fundamentals I skills will be reevaluated in a midterm demonstration, so it is up to each student to determine how much extra practice each skill requires for sufficient preparation.

Fundamentals I Written Skills Demonstration. As previously stated, a written skills demonstration will be held during week 7. It will assess each Fundamentals I skill (notation, rhythm, meter, pitch identification, clef reading, scales and scale degrees, key signatures, intervals, triads, and seventh chords). Be prepared to both identify given musical elements and write requested musical elements (for example: you may be asked to both identify a given key signature and write a specified key signature on a given staff). This demonstration is a reevaluation of each skill and all skills must be passed to continue in the music theory course sequence. The demonstration will be offered a second time during finals week for any student receiving a no-pass during week 7.

Final Composition Project. The final composition project will be the final opportunity for students to pass any missing Baroque I objectives and to demonstrate application of the skills from Baroque I. Failing to complete the final composition project

will result in a no-pass for the Baroque I unit. Below are three "pre-built" options to choose from and a fourth "build- your-own" option:

Figured Bass Realization. Select a basso continuo line (an example can be found here) from a movement of a Baroque chamber work and provide a keyboard realization. As a performer, you may find yourself writing your own realizations and publishing them in edited editions of works and/or performing them on recitals.

Chorale-Style Ensemble Warmup. Compose an original four-voice chorale warmup for a middle-school or high-school level choir. This warmup may either be one long warmup (approximately 24–32 measures) or 2–3 shorter warmups (approximately 16 measures each). As a music educator, it may be important to customize warmups for your choir to work out a specific technique or provide new challenges for young musicians.

Fifth Species Composition. While we only covered species one through four in class, the fifth species as established by Fux is defined by Gauldin (1988) as "free rhythm against one [cantus]...use of dissonance [includes] all of the [previous species], including eighth notes, anticipations (portamentos)" (p. 291). For this project, compose a fifth species composition for two voices (either for solo keyboard or two single-line instruments) with a preexisting cantus firmus or your own. As a composer, it is important to understand the culmination of Fux's approach to counterpoint and explore the free combination of all four species.

Build Your Own. If you would like to create your own final composition project, please let us know! A proposal will be due two weeks earlier than the "pre-built" options.

Attendance and Participation. This course will move at a rapid pace. It is recommended to attend every class meeting. The direction of discussions, activities, and each class meeting is dependent on each student in the course; missing a class will be detrimental for both the absent student and the other class participants. Absences do not excuse you from meeting the due date for assignments. In-class discussions and activities are a large component of the course. Therefore, active, professional participation at each class meeting is required. Passing an objective does not excuse you from missing class, as multiple objectives will be discussed and experienced each class meeting.

Schedule. All schedule items are subject to change with notice.

- Week 1: Course introduction, music notation basics, introduction to rhythm
- Week 2: Rhythm, meter, notating rhythm, pitch identification
- Week 3: Clef reading, scales and scale degrees, key signatures
- Week 4: Intervals
- Week 5: Triads
- Week 6: Seventh chords
- Week 7: Review, Written Theory Skills Demonstration
- Week 8: Introduction to species counterpoint, first species
- Week 9: Second species
- Week 10: Third species
- Week 11: Fourth species
- Week 12: Introduction to four-voice composition and basso-continuo style
- Week 13: Realizing figured bass
- Week 14: Embellishing tones, Final Composition Project proposal due
- Week 15: Keyboard-style voice leading, review
- Finals Week: Final Composition Project due, Written Theory Skills Demonstration (only for students who received a no-pass during week 7)

Music Theory II

Course Introduction. Welcome! What is music theory? (Shaffer, 2014b) During the next fifteen weeks you will begin to experience the discipline that examines multiples theories about multiple musics in a variety of different styles. I hope that during this course and the larger two-year sequence of coursework in music theory that we will

accomplish a good deal more than simply acquiring necessary credits and degree requirements. We will be embarking on a journey together to experience, gain an understanding of, and appreciate music fundamentals and music in the Baroque time period. While music analysis may not be a career path for many of you, I hope the musical skills and tools we practice in this class will enrich your experience as a musician, whether you are pursuing performance, education, composition, or any other specialty in music.

Course Description and Objectives. Each course in the two-year sequence of music theory will be divided into seven-week units covering a variety of topics and stylistic periods. This course will include two units: Fundamentals II and Baroque II, building on the skills from Music Theory I. Fundamentals II will introduce basic skills in phrase structure and chromaticism, including tonicization, modal mixture, modulation, and altered subdominant chords, culminating in a written skills demonstration. Baroque II will include an introduction to form analysis with an emphasis on small forms including binary form and fugues, culminating in a composition project.

The objectives for this course fit into two categories: first, to develop competencies in basic analytic tools appropriate in diatonic and chromatic music. These skills include tonicization, modal mixture, modulation, altered subdominant chords, phrase structure, and small forms. Second, to demonstrate creative application of these basic analytic tools in model composition.

Required Materials. No textbook is required for this course. All required reading materials will be available on the course website and *Open Music Theory*. All scores are

in the public domain and readily available on imslp.org. If you would like to purchase bound scores, I recommend looking through Dover Music's catalog.

Grading. Because of the emphasis on music skills in our course objectives, all assignments, projects, and demonstrations will be graded on the following scale for each course objective: P = pass, NP = no pass. Each activity may receive multiple grades based on the included course objectives. For example, a homework assignment may receive feedback on scales, key signatures, and clef reading individually, instead of one "blanket" grade or percentage for the assignment as a whole. Assignment grades will be cumulative, which means passing an objective will carry through to the end of the unit and give you an opportunity to improve no-pass grades. Effectively, receiving a no-pass grade before the end of the unit means you have *not yet* achieved a pass for that skill, so keep working on improvement in subsequent assignments. Additionally, informal feedback on your progress will be given during in-class workshops, group and individual activities, and any individual meetings.

Each of these multiple objectives will count toward the specific competencies as follows:

Fundamentals II: Analytical Tools

- Period phrase structure
- Cadences
- Harmonic syntax
- Tonicization
- Modal Mixture
- Modulation (to closely related keys)
- Altered Subdominant Harmonies

Baroque II: Small Forms & Fugues Binary Form

- Rounded Binary Form
- Compound Ternary Form

- Da Capo Aria Form
- Ritornello Form
- Fugue

Fundamentals II skills provide the foundation for all music skills and is essential to the two-year music theory sequence. Therefore, all skills will be reassessed during a midterm written skills demonstration. All skills during the midterm demonstration must receive a pass. This demonstration will be held a second time during finals week for any students receiving a no-pass grade. If a no-pass for any Fundamentals II skill remains at the end of the course, the pre-requisite for Music Theory III will not be met. Additionally, failing to complete the final composition project will result in a no-pass for the Baroque II unit.

Final grades will be calculated as follows:

- A: Fundamentals II Pass, Baroque II 5–6 objectives Pass
- B: Fundamentals II Pass, Baroque II 3–4 objectives Pass
- C: Fundamentals II Pass, Baroque II 2 objectives Pass
- D: Fundamentals II Pass, Baroque II 1 objective Pass
- F: Fundamentals II No-Pass, Baroque II No-Pass

Assignments. Assignments will feature a variety of activities and may be completed during class activities or individually outside of class. For any portion of an assignment receiving a no-pass for a course objective, it may be corrected and resubmitted. That means that it is the responsibility of the student to read the feedback and hints from the grader, detect the errors, and correct them. Once a pass is obtained for a specific objective, no further assignment portions on that topic are required, though extra practice is always encouraged in future assignments. This flexibility is designed to give each student the necessary means to focus on their own unique challenges. However, all Fundamentals II skills will be reevaluated in a midterm demonstration, so it is up to

each student to determine how much extra practice each skill requires for sufficient preparation.

Fundamentals II Written Skills Demonstration. As previously stated, a written skills demonstration will be held during week 7. It will assess each Fundamentals II skill (period phrase structure, cadences, harmonic syntax, tonicization, modal mixture, modulation, and altered subdominant harmonies). Be prepared to both identify given musical elements and write requested musical elements (for example: you may be asked to both identify a given chromatic harmony and write a specified chromatic harmony with a given staff and key). This demonstration is a reevaluation of each skill and all skills must be passed to continue in the music theory course sequence. The demonstration will be offered a second time during finals week for any student receiving a no-pass during week 7.

Final Composition Project. The final composition project will be the final opportunity for students to pass any missing Baroque II objectives and to demonstrate application of the skills from Baroque II. Failing to complete the final composition project will result in a no-pass for the Baroque II unit. Below are three "pre-built" options to choose from and a fourth "build- your-own" option:

Ornamentation Challenge. Choose a movement of an instrumental work from the Baroque period and rewrite the solo line to include all ornamentation. This ornamentation should be appropriate for the instrument and the final project should be in the style of Telemann's Methodical Sonatas (one example here). Additionally, include a 2–3 page paper detailing your ornamentation choices. What musical elements (phrase structure? harmonic syntax? chromaticism?) influenced your ornamentation decisions?

Baroque Dance Movement Composition. Compose a binary-form movement in the style of a Bach dance movement for one or more instruments. Include a score with an annotated analysis of your phrase structure, harmony, and form.

Fugue Composition. Compose a three-or-more-voice fugue in the style of Bach for a keyboard instrument. Include a score with an annotated analysis of the fugue.

Build Your Own. If you would like to create your own final composition project, please let us know! A proposal will be due two weeks earlier than the "pre-built" options.

Attendance and Participation. This course will move at a rapid pace. It is recommended to attend every class meeting. The direction of discussions, activities, and each class meeting is dependent on each student in the course; missing a class will be detrimental for both the absent student and the other class participants. Absences do not excuse you from meeting the due date for assignments. In-class discussions and activities are a large component of the course. Therefore, active, professional participation at each class meeting is required. Passing an objective does not excuse you from missing class, as multiple objectives will be discussed and experienced each class meeting.

Schedule. All schedule items are subject to change with notice.

- Week 1: Course introduction, period phrase structures, introduction to cadences
- Week 2: Cadences and harmonic syntax
- Week 3: Introduction to chromaticism, tonicization
- Week 4: Modal Mixture
- Week 5: Modulation
- Week 6: Altered Subdominant Harmonies
- Week 7: Review, Written Theory Skills Demonstration
- Week 8: Introduction to form analysis, Binary form
- Week 9: Rounded Binary Form
- Week 10: Compound Ternary Form
- Week 11: Da Capo Aria Form
- Week 12: Ritornello Form

- Week 13: Fugues
- Week 14: More fugues, Final Composition Project Proposal due
- Week 15: Baroque form review
- Finals Week: Final Composition Project due, Written Theory Skills Demonstration (only for students who received a no-pass during week 7)

Music Theory III

Course Introduction. Welcome! What is music theory? (Shaffer, 2014b) During the next fifteen weeks you will begin to experience the discipline that examines multiples theories about multiple musics in a variety of different styles. I hope that during this course and the larger two-year sequence of coursework in music theory that we will accomplish a good deal more than simply acquiring necessary credits and degree requirements. We will be embarking on a journey together to experience, gain an understanding of, and appreciate music in the Classical time period. While music analysis may not be a career path for many of you, I hope the musical skills and tools we practice in this class will enrich your experience as a musician, whether you are pursuing performance, education, composition, or any other specialty in music.

Course Description and Objectives. Each course in the two-year sequence of music theory will be divided into seven-week units covering a variety of topics and stylistic periods. This course will include two units: Classical I and II, building on the skills from Music Theory II. Classical I will continue exploring form analysis and introduce large forms, including sonata form and rondo form, culminating in an oral repertoire demonstration. Classical II will focus on specific theories about music in the 18th century, including theoretical work by Caplin, Gjerdingen, Hepokoski, Darcy, Rothstein, and others, culminating in a composition project.

The objectives for this course fit into two categories: first, to develop competencies in advanced analytic tools appropriate for music written during the 18th century. These skills include sonata form, rondo form, concerto form, theme types, Galant schemata, and phrase rhythm. Second, to demonstrate creative application of these basic analytic tools in model composition.

Required Materials. No textbook is required for this course. All required reading materials will be available on the course website and *Open Music Theory*. All scores are in the public domain and readily available on imslp.org. If you would like to purchase bound scores, I recommend looking through Dover Music's catalog.

Grading. Because of the emphasis on music skills in our course objectives, all assignments, projects, and demonstrations will be graded on the following scale for each course objective: P = pass, NP = no pass. Each activity may receive multiple grades based on the included course objectives. For example, a homework assignment may receive feedback on scales, key signatures, and clef reading individually, instead of one "blanket" grade or percentage for the assignment as a whole. Assignment grades will be cumulative, which means passing an objective will carry through to the end of the unit and give you an opportunity to improve no-pass grades. Effectively, receiving a no-pass grade before the end of the unit means you have *not yet* achieved a pass for that skill, so keep working on improvement in subsequent assignments. Additionally, informal feedback on your progress will be given during in-class workshops, group and individual activities, and any individual meetings.

Each of these multiple objectives will count toward the specific competencies as follows:

Classical I: Analytical Tools

- Classical phrase structures
- Sonata Form
- Rondo Form
- Concerto Form
- Score Reading
- Familiarity of repertoire

Classical II: Theories about 18th-Century Music

- Caplin: Classical Form and Theme Types
- Gjerdingen: Galant Schemata
- Hepokoski & Darcy: Sonata Theory and Rotational Form
- Rothstein: Phrase Rhythm

Final grades will be calculated as follows:

- A: 9–10 objectives Pass
- B: 7–8 objectives Pass
- C: 5–6 objectives Pass
- D: 3–4 objectives Pass, Classical I or II No-Pass
- F: 0–2 objectives Pass, Classical I or II No-Pass

Assignments. Assignments will feature a variety of activities and may be completed during class activities or individually outside of class. For any portion of an assignment receiving a no-pass for a course objective, it may be corrected and resubmitted. That means that it is the responsibility of the student to read the feedback and hints from the grader, detect the errors, and correct them. Once a pass is obtained for a specific objective, no further assignment portions on that topic are required, though extra practice is always encouraged in future assignments. This flexibility is designed to give each student the necessary means to focus on their own unique challenges.

Classical I Oral Repertoire Demonstration. A midterm oral repertoire demonstration, held during week 7, will include a 30-minute analytic preparation of a short piece or movement of music from the eighteenth century followed by a 30-minute

presentation and conversation with an instructor about the work. The presentation should include a rationale for the analytic tools used, your insights into the piece, and an exploration of a likely composer. Additionally, there may be further questions asked about the piece or other topics discussed in class. Failing to complete the oral repertoire demonstration will result in a no-pass for the Classical I unit.

Final Composition Project. The final composition project will be the final opportunity for students to pass any missing Classical II objectives and to demonstrate application of the skills from Classical I and II. Failing to complete the final composition project will result in a no-pass for the Classical II unit. Below are three "pre-built" options to choose from and a fourth "build- your-own" option:

Cadenza Composition. Choose a Classical concerto, preferably for your instrument, and compose cadenzas for each movement. As a performer, it is important to be able to write and/or improvise your own cadenzas for performances. Sometimes there are even national competitions for writing cadenzas in addition to publication opportunities. Include a score with an annotated analysis of each cadenza.

Elementary Arrangement Project. Music from the classical period is often a wonderful introduction to classical music for young students. Arrange a famous work by Mozart, Haydn, or Beethoven to introduce to a K–5-level classroom. Include a lesson plan outline on how you would use the arrangement during your class. The arrangement may be for any application of your choice: singing, recorders, wind instruments, string instruments, etc.

Sonata Composition. Compose a Classical-style sonata form exposition. This may be for a single instrument (keyboard) or for a small chamber group. Include a score with an annotated analysis of the form of your movement.

Build Your Own. If you would like to create your own final composition project, please let us know! A proposal will be due two weeks earlier than the "pre-built" options.

Attendance and Participation. This course will move at a rapid pace. It is recommended to attend every class meeting. The direction of discussions, activities, and each class meeting is dependent on each student in the course; missing a class will be detrimental for both the absent student and the other class participants. Absences do not excuse you from meeting the due date for assignments. In-class discussions and activities are a large component of the course. Therefore, active, professional participation at each class meeting is required. Passing an objective does not excuse you from missing class, as multiple objectives will be discussed and experienced each class meeting.

Schedule. All schedule items are subject to change with notice.

- Week 1: Course introduction, review period phrase structure, introduce Classical phrase structures
- Week 2: Sonata Form: Expositions
- Week 3: Sonata Forms: Expositions and Recapitulations
- Week 4: Sonata Forms: Developments and Whole Movements
- Week 5: Rondo Forms
- Week 6: Concerto Forms
- Week 7: Review, Oral Repertoire Demonstration
- Week 8: Introduction to Caplin's *Classical Form*
- Week 9: Analyzing and Composing Classical Theme Types
- Week 10: Introduction to Gjerdingen's *Music in the Galant Style*
- Week 11: Analyzing, Composing, and Improvising using Galant Schemata
- Week 12: Introduction to Hepokoski & Darcy's *Elements of Sonata Theory*
- Week 13: Advanced Sonata Form Topics, Rotational Form
- Week 14: Introduction to Rothstein's *Phrase Rhythm in Tonal Music*, Final Composition Project Proposal due

- Week 15: Analyzing Internal and External Rhythmic Expansions
- Finals Week: Final Composition Project due

Music Theory IV

Course Introduction. Welcome! What is music theory? (Shaffer, 2014b) During the next fifteen weeks you will begin to experience the discipline that examines multiples theories about multiple musics in a variety of different styles. I hope that during this course and the larger two-year sequence of coursework in music theory that we will accomplish a good deal more than simply acquiring necessary credits and degree requirements. We will be embarking on a journey together to experience, gain an understanding of, and appreciate music in the Romantic time period. While music analysis may not be a career path for many of you, I hope the musical skills and tools we practice in this class will enrich your experience as a musician, whether you are pursuing performance, education, composition, or any other specialty in music.

Course Description and Objectives. Each course in the two-year sequence of music theory will be divided into seven-week units covering a variety of topics and stylistic periods. This course will include two units: Romantic I and II, building on the skills from Music Theory III. Romantic I will continue exploring form and harmonic analysis including expanding chromaticism, expanding forms, and exploring expanded orchestration, culminating in an oral repertoire demonstration. Romantic II will focus on chamber music during the Romantic era, including lieder and song cycles with an exploration of text and music analytic tools, and culminating in a composition project. The objectives for this course fit into two categories: first, to develop competencies in advanced analytic tools appropriate for music written during the 19th century. These skills include linear chromaticism, ternary form, expanded large forms, expanded

orchestration and score reading, hypermeter, and rhythmic dissonance. Second, to demonstrate creative application of these advanced analytic tools in model composition.

Required Materials. No textbook is required for this course. All required reading materials will be available on the course website and *Open Music Theory*. All scores are in the public domain and readily available on imslp.org. If you would like to purchase bound scores, I recommend looking through Dover Music's catalog.

Grading. Because of the emphasis on music skills in our course objectives, all assignments, projects, and demonstrations will be graded on the following scale for each course objective: P = pass, NP = no pass. Each activity may receive multiple grades based on the included course objectives. For example, a homework assignment may receive feedback on scales, key signatures, and clef reading individually, instead of one "blanket" grade or percentage for the assignment as a whole. Assignment grades will be cumulative, which means passing an objective will carry through to the end of the unit and give you an opportunity to improve no-pass grades. Effectively, receiving a no-pass grade before the end of the unit means you have *not yet* achieved a pass for that skill, so keep working on improvement in subsequent assignments. Additionally, informal feedback on your progress will be given during in-class workshops, group and individual activities, and any individual meetings.

Each of these multiple objectives will count toward the specific competencies as follows:

Romantic I: Expanding Analytical Tools

- Linear Chromaticism
- Ternary Form
- Expanded Sonata Forms
- Rotational Form

- Orchestration and Transposition Score Reading
- Familiarity of repertoire

Romantic II: Chamber Music & Lieder

- Strophic and Modified Strophic Form
- Text Painting
- Hypermeter
- Metric Dissonance
- *Other Competencies TBD

Final grades will be calculated as follows (and may be subject to change, see below):

- A: 9–11 objectives Pass
- B: 7–8 objectives Pass
- C: 5–6 objectives Pass
- D: 3–4 objectives Pass, Romantic I or II No-Pass
- F: 0–2 objectives Pass, Romantic I or II No-Pass

Additional Competencies and Topics. The final weeks of the course will be an opportunity for students to choose chamber repertoire for analysis during small, in-class workshops. After repertoire is selected, additional competencies may be added for the Romantic II unit, in collaboration with the students in each class.

Assignments. Assignments will feature a variety of activities and may be completed during class activities or individually outside of class. For any portion of an assignment receiving a no-pass for a course objective, it may be corrected and resubmitted. That means that it is the responsibility of the student to read the feedback and hints from the grader, detect the errors, and correct them. Once a pass is obtained for a specific objective, no further assignment portions on that topic are required, though extra practice is always encouraged in future assignments. This flexibility is designed to give each student the necessary means to focus on their own unique challenges.

Romantic I Oral Repertoire Demonstration. A midterm oral repertoire demonstration, held during week 7, will include a 30-minute analytic preparation of a short piece or movement of music from the eighteenth century followed by a 30-minute presentation and conversation with an instructor about the work. The presentation should include a rationale for the analytic tools used, your insights into the piece, and an exploration of a likely composer. Additionally, there may be further questions asked about the piece or other topics discussed in class. Failing to complete the oral repertoire demonstration will result in a no-pass for the Romantic I unit.

Final Composition Project. The final composition project will be the final opportunity for students to pass any missing Romantic II objectives and to demonstrate application of the skills from Classical I and II. Failing to complete the final composition project will result in a no- pass for the Romantic II unit. Below are three "pre-built" options to choose from and a fourth "build-your-own" option:

Theme and Variations. The Romantic era produced some of the most memorable themes in musical history. Choose a short theme that was not composed for your instrument (for example: a famous opera aria) and compose a theme and at least two variations in the Romantic style for your instrument. Include an annotated score with an analysis of the original theme and your modifications from variation to variation. (Some Romantic examples include Beethoven's variations on "God Save the King," WoO 78 and Schubert's "Trout" Quintet, D. 667, fourth movement.)

Orchestration and Arrangement. Music from the Romantic era is not always a viable option for high-school level wind ensembles and bands, due to the prevalence of orchestral music in the repertoire. Choose a short work or appropriate excerpt of a work

(for example: the exposition of a sonata form) to arrange for a high-school level wind ensemble.

Lieder Composition. Compose a Romantic-style short lieder/art song using a poetic text of your choice. Include at least one compositional technique discussed during the Romantic II unit. Include a score with an annotated analysis of the form and text painting in your piece.

Build Your Own. If you would like to create your own final composition project, please let us know! A proposal will be due two weeks earlier than the "pre-built" options.

Attendance and Participation. This course will move at a rapid pace. It is recommended to attend every class meeting. The direction of discussions, activities, and each class meeting is dependent on each student in the course; missing a class will be detrimental for both the absent student and the other class participants. Absences do not excuse you from meeting the due date for assignments. In-class discussions and activities are a large component of the course. Therefore, active, professional participation at each class meeting is required. Passing an objective does not excuse you from missing class, as multiple objectives will be discussed and experienced each class meeting.

Schedule. All schedule items are subject to change with notice.

- Week 1: Course introduction, review chromatic harmonies
- Week 2: Linear Chromaticism
- Week 3: Romantic Ternary Forms, Modulation to Distant Keys
- Week 4: Sonata Form in the Romantic Era
- Week 5: Rotational Form
- Week 6: Introduction to Orchestration and Transposition
- Week 7: Review, Oral Repertoire Demonstration
- Week 8: Introduction to Romantic Lieder, Schubert's "Erlkönig"
- Week 9: Song Cycles and Schubert's "Winterreise"
- Week 10: Schubert's "Winterreise"
- Week 11: Introduction to Hypermeter

- Week 12: Krebs's *Fantasy Pieces* and Malin's *Metric Displacement Dissonance*
- Week 13: Metric Dissonance
- Week 14: Repertoire Analysis Workshops, TBD, Project Proposal due
- Week 15: Repertoire Analysis Workshops, TBD
- Finals Week: Final Composition Project due

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