AN EXAMINATION OF THE CREATIVE ASPECTS OF MUSIC COMPOSITION LESSONS WITH A FOCUS ON THE USE OF MODELING

by

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ABSTRACT

AN EXAMINATION OF THE CREATIVE ASPECTS OF MUSIC COMPOSITION LESSONS WITH A FOCUS ON THE USE OF MODELING

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Teacher modeling is a widely used pedagogical approach in music education. Several studies have sought to assess the effectiveness of modeling strategies on instrumental learning and have examined the effects of modeling. Nonetheless, not enough scholarly attention has been paid to the comparative effectiveness of such strategies when they are used to teach music composition during one-on-one lessons. The majority of existing research has focused on the successful use of composing techniques as an efficient way of reinforcing composition skills, not as a means of stimulating a learner's creativity.

The purpose of this study is to provide a comprehensive understanding of the modeling strategies that are being used by music composition teachers. The composition

teachers (N = 15) who have been teaching composition in a one-on-one setting at university for five years or more participated in semi-structured, one-on-one interviews.

The study found that in composition lessons, modeling was mainly used for two different purposes, which include “modeling for exercise” and “modeling for actual composing.” In the case of using “modeling for exercise,” all the composers agreed that modeling works as a positive influence on the students by helping them learn musical concepts through imitation. However, in the case of using modeling for actual composing related to creativity, the opinions were varied. The study also found that choosing the appropriate timing, amount, and types of modeling play a crucial role in using modeling strategies while avoiding any possible negative effects.

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H.J.O.

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Chapter I

INTRODUCTION

This research project extends across almost the whole range of my experiences as a music teacher and composer. When I think of a general, one-on-one composition course, most of the time, it involves a lot of demonstrations on the piano for the teacher to show possible options to a student. In other words, modeling is used by the teacher as a manner of communication during composition lessons. It is an instructional strategy that helps students acquire certain concepts or techniques by observing the teacher's performance or being given examples (Patrick, 2006).

Composers' composition process, as well as the characteristics of their composed pieces, are affected by various external and internal factors. Composition as a process (the act of composing) is made up of the actions by a composer leading to the creation of a composition (the resulting product). The act of composition allows time for reflection, development, and revision of the final product (Bowman & Frega, 2012). For me, among all other aspects that influence composers, modeling always occupies a great section of my composition-related experiences.

My composition learning and teaching experience involves a lot modeling. From copying my favorite composer's music note by note to imitating Debussy's way of conveying blurry moods and emotions, modeling was fundamental in my development as a composer. While observing the students' composition processes and products, I further realized that teacher modeling may influence the way that students think. I remember the

moment that led me to question the effects of modeling on students' creative processes. I was teaching a group piano lesson at Teachers College, Columbia University and, at one point, I asked the students to make a bird sound on the piano. When I demonstrated the sound of a bird singing on the high notes, it produced a corresponding high-note melody from the students. In other words, most of the students were making sounds similar to mine. In the absence of such modeling, however, they came up with more original ideas. For instance, one student placed the bird sound in the lower sound range. When I questioned him about why he thought the sound made by a bird needed to be expressed so far down, he responded, "Have you ever heard the sound of a bird pecking at a tree? I thought the pecking sound might be low." My experience in modeling is not limited to music education. During a ceramics class, when the instructor offered the freedom to produce different forms rather than giving a detailed demonstration, students were able to establish their own stylistic preferences. However, while the instructor gave this freedom, he also demonstrated the hand movement and the process of making ceramics at the beginning of the class. His demonstration helped me understand the overall process of construction better than when only the verbal instruction was provided.

Such examples illustrate that when it comes to tasks that require creativity from students, it may be far more interesting and empowering to be able to bring one's own originality into the process of problem-solving. However, the challenge is to determine the proper, creativity-promoting balance of freedom and constraint. A model may either inspire creativity or equally represent a standard or norm that restricts creativity within very narrow bounds. The use of modeling generates many questions. First, what is the true goal of the music composition lessons? Is it to enhance the students' composition

skills, to arouse their creativity, or both? Second, what is the nature of the composition itself, to what extent can it be taught, and to what extent is it, as Mozart suggests, simply a reflection of each composer's unique personality? (Ghiselin, 1985) In a pilot study, I employed in-depth interviews to identify specific approaches that can help us develop better pedagogies. In the course of that undertaking, several questions were addressed, which could be addressed in future studies, such as (a) "What is the nature of the composition process? (b) How does it relate to creativity? and (c) Which pedagogical approaches best facilitate it?". Therefore, this study is built on the foundation of the pilot study but also further incorporates modeling and creativity as the core problem that I aim to study in depth. I wish to determine how music teachers can use modeling strategies in ways that keep students from merely imitating what they—the teachers—are doing.

Rationale

Teacher modeling is a widely used pedagogical approach in music education. Several studies (Dickey, 1991; Henley, 2001; Hodges, 1974; Rosenthal et al., 1988; Zurcher, 1975) have sought to assess the effectiveness of modeling strategies on instrumental learning, and previous research has even reported on the positive effects of modeling on the learning of instruments (Hewitt, 2001; Rosenthal, 1984; Zurcher, 1975). Various studies have examined the effects of modeling on learning improvisation (Bitz, 1999; Davison, 2010; Gendrich, 2003; Partchey, 1973; Watson, 2010). Nonetheless, not enough scholarly attention has been paid to the comparative effectiveness of such strategies when they are used to teach music composition during one-on-one lessons. The majority of existing research (Davison, 2010; Watson, 2010) has focused on the

successful use of composing techniques as an efficient way of reinforcing composition skills, not as a means of stimulating a learner's creativity. In other words, research on the influence of teacher modeling on the creative process of composition is severely lacking.

Many people consider modeling and imitation to be the same thing because both terms can be described as a change in behavior that occurs after the observation of the behavior of a model. However, Bandura (1980) differentiate modeling from imitation. He defined modeling as the learning process that occurs after observing others. Modeling is a type of learning that occurs as a function of observing, retaining, and replicating novel behavior exhibited by others. However, imitation involves merely the duplicated behavior exhibited by the model. Therefore, imitation does not necessarily include learning.

In academic settings as well as in competitions, composition is assessed as a function of student creativity; however, most researchers have evaluated compositions based on a certain level of expertise in execution. They used modeling simply as a way to enhance and complete the result, as an add-on rather than a central component. If we wish to develop more effective pedagogical strategies, we need to examine how and why music composition teachers use modeling and assess its effects on the learning of student composers and on their creativity. Arnold Schoenberg (1984) describes the purpose of learning composition as follows:

> The teacher must convince his students that the study of composition will not make them experts or acknowledged judges, that its only purpose is to help them understand music better, to obtain that pleasure which is inherent in the art. (p. 108)

As Schoenberg points out, teaching and learning composition should aim to foster appreciation and an in-depth analysis of music. Therefore, learning composition is a

means to comprehend and appreciate music rather than a tool to become a master of technique.

The great jazz musician Charles Mingus equates simplicity with creativity as he said, “Creativity is more than just being different. Anybody can be just plain weird; that’s easy. What’s hard is to be as simple as Bach.” In terms of creativity, Allsup (2006) mentioned that the creative process is “beyond cultivation and preservation, beyond testing and standards, to venture into the woods” (p. 11). He added that creativity fosters diversity rather than commonality and inclusiveness and that composition nurtures such creativity and diversity. Creativity “encourages music educators to move past the ‘literature’ by encouraging students to imagine and create a musical path forward” (p. 12). The present study pays heed to the argument made by Allsup, that musicians and music educators should strive to make broad and free use of all forms of modeling rather than employing restrictive and traditional pedagogies. In this study, two terms, improvisation and composition, will be used quite often. Burnard (2000) differentiates the two terms by defining improvising as “the immediate single-event performance of newly created music made without prior rehearsal,” and composing as “a revised piece” (p. 230).

Problem Statement

Previous studies have shown that teacher modeling is one of the most widely used pedagogical approaches in applied music instruction (Rosenthal, 1984). Several studies have sought to assess the effectiveness of modeling strategies on instrumental learning and improvisation (Bitz, 1999; Davison, 2010; Gendrich, 2003; Partchey, 1973; Watson,

2010; Zurcher, 1975). However, not enough scholarly attention has been paid to assessing the effectiveness of modeling strategies on composition learning. Even among existing studies that have sought to investigate the effects of modeling on composition learning, the majority of them (Watson, 2010) have mainly focused on the successful use of composing techniques as an efficient way of reinforcing composition skills, not as a means of stimulating a learner's creativity. Current research is deficient in addressing pedagogic approaches to composition, especially with regard to the role played by modeling.

However, to encourage the creativity brought into the debate on composition curriculum, we need to address the current composition practices as well as the effects of modeling on creativity in terms of music composition and not the act itself. Investigating modeling strategies for composition and examining their effectiveness in focusing on creativity will illustrate how composition teachers can use modeling strategies in ways that keep students from merely imitating what they—the teachers—are doing. Therefore, there is a need to investigate composition teachers' use of modeling strategies when teaching composition to their students.

Purpose

This study has a twofold purpose. First, the I aim to describe the types and degrees of modeling being used by composition teachers. I wish to situate the study's analysis of modeling within a broader inquiry into the nature of composition instruction. This will help us gain a deeper understanding of composition teachers' perceptions of modeling, thereby enabling us to develop more precisely targeted composition

pedagogies. Furthermore, this study also included the use of modeling for different age groups, from young children to adults, and levels from beginner to advanced.

Second, I wish to assess the impact of modeling by focusing on students' creative processes and products. This study also seeks to situate the practice of modeling within the context of creativity, which would investigate whether such pedagogy would enable rather than detract from student creativity. The ensuing pages will be devoted to an analysis of modeling itself; however, the scope has further broadened to embrace an inquiry into composition and its pedagogy.

In the context of the current study, I will return to the core question of how modeling can affect the creative composition process and address the effectiveness of modeling as an instructional method in fostering creativity during this process. The following section describes the core research questions that the study aims to address.

Research Questions

The following are the research questions that this study will seek to answer:

1. How is modeling being used in composition lessons?
    - Identification of modeling
    - What kinds of modeling strategies are being used in composition lessons?
    - What are the goals and the effectiveness of modeling strategies on novice and advanced composers separately?
    - Suggested optimal ways of using modeling strategies
2. How are different and/or similar modeling strategies used during Composition and Instrumental Lessons?

3. What are composers' composition processes and their perceptions of modeling in relation to creativity?
4. Besides modeling, what types of pedagogical approaches are used to teach composition?

Conceptual Framework

The conceptual framework, designed from a review of the ideas gathered from the literature together with the findings of my pilot studies, will be used as a tool to analyze and describe modeling as it occurs in music composition lessons in universities. Creativity has always been central to the framework, and so it is supple enough to encompass my broadened analysis of composition and the pedagogy.

The psychologist Albert Bandura's (1977) social learning theory describes the interactions among personality, behavior, and environment when an individual learns from a social context (See Figure 1). According to this theory, personal (cognitive) factors involve individuals' knowledge, expectations, and attitudes. Environmental factors include the influence of others, and behavioral factors are related to individuals' skills and their level of self-efficacy. In the context of the process of music composition, teacher modeling may be deemed an environmental factor. As Bandura notes, "most human behavior is learned observationally through modeling; by observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (1977, p. 22), thus emphasizing the role of observation of which modeling is one type of learning in a social context.

Bandura also suggests that observational learning, acquisition, and alternative performances of behaviors modeled by others occur in four stages: attention, retention, production processes, and motivation. In the attention stage, individuals acquire new concepts through observation. In the retention stage, in order to imitate the model's behavior, individuals retain a representation of that behavior in their memory. In the production process stage, they actually perform the action they have observed, and in the motivation stage, they figure out the need for the actions.

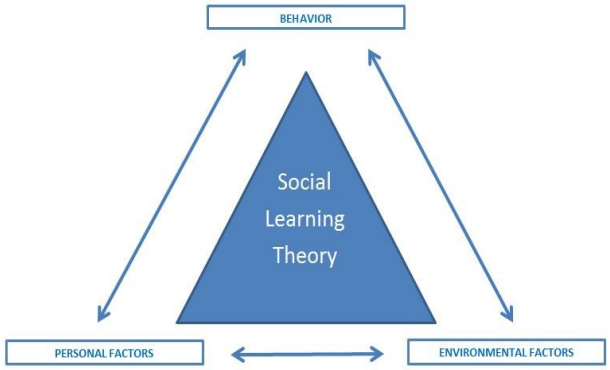

Figure 1. Bandura's Social Learning Theory as illustrated in Bond (2017, p. 1).

Bandura tells us that people learn from one another through imitation, observation, and modeling; furthermore, Gordon's music learning theory (1997) nicely supports and broadens the theory provided by Bandura (1977) as Gordon posits that the musical models that children observe play an important role in determining the extent to which they become musical.

The following conceptual framework (See Figure 2) is produced by adopting the learning theories of both Bandura and Gordon. This conceptual framework shows the process and elements involved in producing a creative product in terms of music

composition. As seen in the figure, making creative products (composed music) calls upon individuals' creative thinking abilities. When they experience enabling conditions and have the enabling skills required to engage in creative thinking, the chances of producing a good product increase. At its best, teacher modeling can foster individuals' learning by offering cognitive alternatives that they might have ignored; at its worst, modeling can hinder the creative thinking process by provoking mere imitations. Despite the possibility of the latter, modeling, when viewed from the social cognitivist perspective, facilitates innovative and creative patterns of behavior.

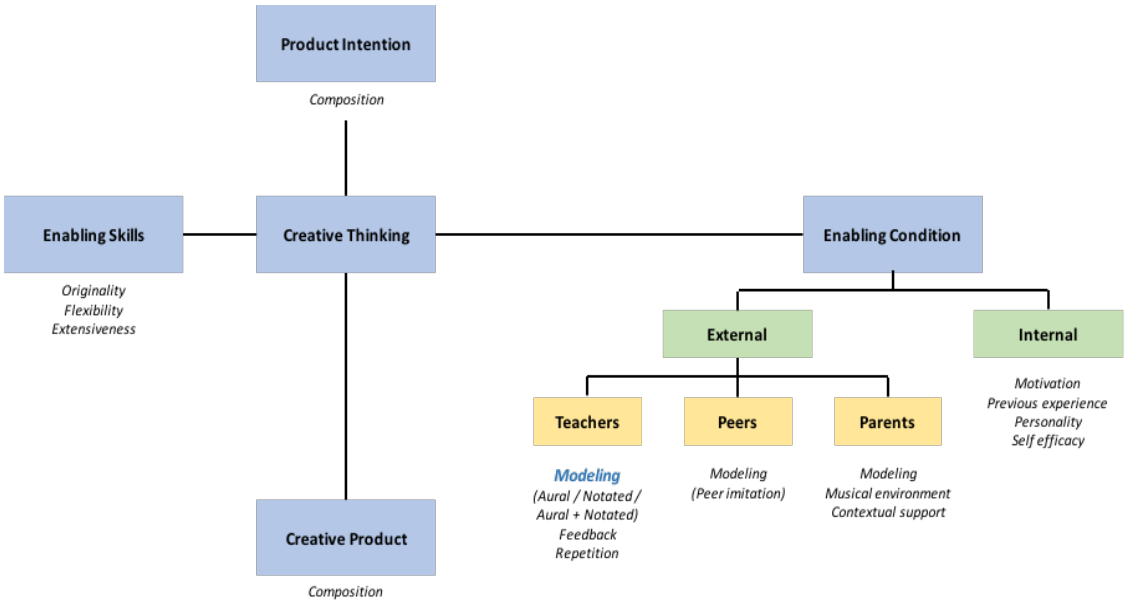

Figure 2. Conceptual framework used in this study; developed from Hickey (2003, p. 60).

Figure 2 illustrates that "enabling skills" include originality, flexibility, and extensiveness, all of which comport with popular conceptions of creativity. Hickey (2003) included "aptitudes, conceptual understanding, craftmanship, aesthetic sensitivity"

in enabling skills (p. 60). The enabling conditions are significant in fostering the creative thinking process, and they include both internal and external factors. The external conditions include the environmental influences around people other than the individual himself, such as teachers, peers, and parents. Here, the teacher's influence, in the form of feedback and demonstrations (i.e. modeling), may directly correlate with the students' creative thinking. Hickey (2003) divided enabling conditions into "personal" and "social/cultural." The personal enabling conditions included "motivation, personality, gender, maturity" and social/cultural enabling conditions included "context, task, interpersonal, past experience" (p. 60).

When teaching strategies are employed at the right time and are used to the proper degree, they have positive effects on students' creative thinking processes. Partchey (1973) categorized feedback as being of three types—immediate, delayed, and internal—and highlighted the effectiveness of immediate feedback on learning. Gagne (1965) also emphasized the importance of internal feedback by noting that feedback does not always emanate from the external situation. Given that immediate feedback and internal feedback is the most effective in learning, a combination of the two—or even some aspects of the two—elements may contribute to fostering creative thinking processes. Internal factors include the individual's motivation, previous experience, personality, and self-efficacy levels. Bandura (1986) found that the amount of effort invested in the learning process can be influenced by the individual's self-efficacy levels. His social cognitive theory demonstrates that students who have high confidence levels when it comes to musical activities tend to set higher goals, show greater effort, and have better self-control when confronted with difficulties. To support his claim, Davison (2010)

found that during the learning process, individuals who have high self-efficacy levels tend to outperform those with lower levels. Sandene's (1997) research further reveals that students' motivation in music learning significantly correlates with their confidence in their ability as instrumentalists.

Used as a teaching strategy, teacher modeling has been known to foster individuals' learning by offering them cognitive alternatives that they might otherwise ignore. Davison (2006) noted that according to Gordon's (1997) music learning theory, the musical models that children observe serve a significant role in determining the extent to which the children become musical. In the case of music improvisation, modeling may have additional significance as well. During improvisation, a performer is expected to create a novel response, or a spontaneous musical thought based on underlying rules observed from the model instead of simply imitating the model. Furthermore, modeling in music education can occur under several conditions, offering the aforementioned cognitive alternatives. A teacher could demonstrate live performances of the desired musical behaviors, play recorded examples (both aural and aural/visual), offer notated examples of modeled performances, and/or facilitate peer modeling in order to provide musical models (Davison, 2006). Additionally, it is crucial to understand which types of modeling strategies (i.e., aural model, notated model, combination of aural and notated) are most appropriate for certain musical-learning contexts.

This study will seek to determine what constitutes creativity within the sphere of composition and, most importantly, how an optimal blend of freedom and constraint can best facilitate its emergence. In order to explore composition teachers' perceptions of modeling strategies used in the composition lessons, in-depth interviews with the 15

composition teachers were employed. Such findings may help music teachers to learn which pedagogical means to induce creativity and help facilitate the creative thinking ability of composition students.

Chapter II

LITERATURE REVIEW

Music educators have stressed the importance of enhancing creativity as well as increasing access to it through music composition lessons. Composition and improvisation are two of the nine National Standards for Music Education laid down by the MENC (1994, cited in Hickey, 2012, p. 5). By following these standards, students are expected to compose music while also demonstrating their creativity. Other researchers discussing the 1994 National Standards of the Arts noted the importance of engaging in music-making activities by mentioning that "the charge is to develop a comprehensive music curriculum in which students explore and expand their musical thinking and skills by engaging in improvisation composition, and analysis" (Robinson, Bell, & Pogonowski, 2011, p. 50). The 2014 Music Standards, articulated by the National Coalition for Core Arts Standards (2014), seek to cultivate students' ability in carrying out three artistic processes—creating, performing, and responding.

The abovementioned standards show that music educators share a common goal of developing creativity in students, and they advocate the use of creative activities as a means of motivating students to explore all of the dimensions of music (Contemporary Music Project, 1966; Regelski, 1981). Despite such advocacy, creative activities are rarely used in music classes (Goodlad, 1984; Webster, 1987). Schmidt and Sinor (1986) accounted for this disparity between professed goals and common practice by saying that we (music educators) still do not sufficiently understand the creative process of music (p.

161). Regarding this lack of understanding, Kratus (1989) stated that "this is particularly true in the case of music composition" (p. 5). Moore (1989) concurs, pointing to composition as "the most neglected aspect of the traditional music curriculum for a variety of reasons" (p. 116). The reason for this neglect may be a fear felt by music teachers. Younker (1996) offers another possible reason for this neglect, noting that most music teachers have a strong "performance background (and many music-listening experiences)" but "few original music-creating experiences" (p. 25). Robinson et al. (2011) agreed that new teachers and undergraduates in training may be intimidated by "any improvisation or composition activity" (p. 51). To achieve the music educators' common goal of enhancing creativity in students through music composition lessons, proper understanding of the enabling conditions for creativity and students' creative thinking process in composition needs to be investigated.

Enabling Conditions

The dialectical tension between freedom and constraints

The fundamental question in the current paper is whether certain constraints hinder or promote creativity. The two following passages heighten the awareness of the dialectical tension between freedom and constraints. Both are drawn from Brewster Ghiselin's *The Creative Process* (1985), with the first passage from Peter Picasso and the second passage from Albert Einstein.

> When we invented cubism, we had no intention of inventing cubism, but simply of expressing what was in us. Nobody drew up a program of action, and though our friends the poets followed our efforts attentively, they never dictated to us. The young painters of today often outline a program for themselves to follow and try to do their assignments correctly like well-behaved schoolboys.

> It is nothing short of a miracle that the modern methods of instruction have not yet entirely strangled the holy curiosity of inquiry; for this delicate little plant, aside from stimulation, stands mainly in need of freedom; without this it goes to wrack and ruin without fail. It is a very grave mistake to think that the enjoyment of seeing and searching can be promoted by means of coercion and a sense of duty. (p. 19)

Both Picasso and Einstein believed that creativity could be limited or even crushed by traditional teaching methods.

Mozart, who is considered the ideal of the utterly unique genius in music, said:

> But why do my productions take from my hand that particular from and style that makes them Mozartish, and different from the works of other composers? It is probably owing to the same cause which renders my nose so large or so aquiline, or, in short, makes it Mozart's, and different from those of other people. For I really do not study or aim at any originality. (Kanack, 1997, p. 8)

This passage suggests that we all already have our own uniqueness; however, through his humility, Mozart reminds us that uniqueness is also a limitation. Thus, there seems to be a dialectical tension between freedom of innovation and the constraints imposed by both the artist's personal nature and social norms.

Modeling: A beneficial constraint?

Modeling is an instructional strategy in which the teacher demonstrates a new concept or approach in order to help students acquire the requisite concept or technique by observing the teacher's performance or being given examples (Patrick, 2006). It is inherently a constraint on the students' freedom; however, the true question that we will be exploring is whether this process ultimately helps or hinders creativity.

Eggen and Kauchak (2001) tell us that the purpose of modeling is to promote "changes in people that result from observing the actions of others" (p. 236). In other words, modeling influences the outcomes by providing the student with expected actions

prior to his or her undertaking the task. Additional research (Hewitt, 2001) has shown that teachers can enhance students' learning by allowing them to observe the teacher's demonstrated thoughts and behaviors. The social learning theorist Albert Bandura (1986) made this essential point:

> Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22)

When the modeling strategy is used appropriately, teacher modeling makes for an effective instructional strategy. Several researchers (Gordon, 1984; Matthews, 2014; Suzuki, 1993) described the positive effects of modeling on students' learning when used properly. For instance, Matthews (2014) investigated the effects of teacher performance and instrument modeling in the band classroom and collected data through questionnaires and interviews. The results showed that teachers use modeling to teach many musical phenomena and that modeling allows them to replace verbal instruction.

Even among studies that have demonstrated positive effects of modeling, the overall results have been mixed. While modeling can be used across disciplines and on all levels of study, its effectiveness can vary along with variables such as music-learning settings, the teacher's modeling skills, the student's attitude, and characteristics of the tasks (Hodges, 1974; Rosenthal, 1984: Zurcher, 1975). Thus, while there is research support for modeling as a useful pedagogic tool, the key question remains unanswered: Does modeling help students to chiefly achieve or chiefly hinder them from acquiring musical independence?

McKeachie (1983) informs us that the use of teacher modeling in music education has a huge impact on student motivation and creativity. In terms of its usage in music education, Brooks (1995) cautions against using modeling as the sole music-teaching technique. Brooks notes that while relying upon a model may initially lead to success, a learner may become overly dependent on it. Amabile (1983) sees both danger and potential in the use of modeling: "It is possible that, under some circumstances, modeling might lead to a slavish imitation of response algorithms, but to a properly applied set of creativity heuristics under others" (p. 207). Given these two possibilities, with modeling by turns enhancing the student's improvisation skills or leading not to creativity but to its antithesis - "slavish imitation," further research is needed to determine how modeling can successfully be used in ways that inspire improvisation rather than produce mere imitation.

Modeling research in instrumental learning

In order to imitate others, one must first be able to recognize their specific actions. Initially, at least, this is no great challenge for most of us, because we start to learn things by observing our environment right from the moment we are born. Hamann and Cooper (2016) state that "this observational learning is sometimes called modeling or indirect learning, as the new behaviors are learned through watching the behavior and consequences of others" (p. 73). From everyday life to classroom settings, people are constantly obtaining new information and learning new concepts and behaviors by watching others. Hamann and Cooper have categorized these models we often draw upon into four types: "Visual and physical; Positive or negative; Student/peer or teacher; Verbal or nonverbal" (p. 73).

While the use of modeling in instrumental learning has long been a topic of interest for education researchers, a consensus regarding its effects, or even a clear definition of the process, is still lacking. Eggen and Kauchak's (2001) *Educational Psychology* sees the outcome of modeling in the "changes in people that result from observing the actions of others" (p. 236). More specifically, they assert that modeling influences student outcomes by providing the expected actions prior to the student's undertaking of the task. While some research is supportive of the effects of modeling in instrumental learning, the majority of the research has delivered mixed results, (Rosenthal et al., 1988; Zurcher,1975) and even those studies that have indicated positive outcomes for modeling have remained contradictory in their final evaluations. Zurcher (1975) investigated the effects of model-supported practice on beginning brass instrumentalists (N = 43). Subjects were assigned to either the model-supported group or the traditional practice group. By following the instructions given to each assigned group, they practiced the instrument for a total of 119 minutes per week. Post-tests results indicated that the model-supported practice was more successful than the traditional practice in reducing pitch/rhythm errors, developing pitch-matching skills, and increasing the amount of time spent practicing; however, there was no significant difference in establishing tempo stability, reducing the number of fingering or slide position errors, or the time spent in terms of practice achievement. Essentially, the results show that modeling did not influence all aspects of instrument mastery equally.

Following Zucher (1975), Rosenthal et al.'s (1988) study also show mixed results. They investigated the relative effects of five practice conditions (modeling only; singing the musical exercise; analyzing the musical exercise; freely playing their instruments; and

practicing an unrelated musical composition) on instrumentalists' performance of a musical composition, and college music students (N = 60) were randomly assigned to these five practice conditions. After practicing in different conditions, the students were scored in separate tests for notes, rhythm, articulation, phrasing or dynamics, and tempo. I found that there were significant differences among the practice techniques in the subjects' performance of phrasing or dynamics and tempo. However, practice techniques in the subjects' performances of correct notes and articulation showed no significant differences. Rosenthal also showed that listening to a model alone (without opportunity for practice) was as effective as practicing on the instruments. Furthermore, Rosenthal pointed that listening to a model helped students to master the musical composition, and this effect appeared after only a three-minute practice treatment. These results seem to advocate the use of modeling as a teaching technique, as is done in the Suzuki (1993) method.

While Henley (2001) partly favors the use of modeling in line with Rosenthal et al.'s (1988) findings, his study arrived at slightly different conclusions. To explore the effects of modeling and tempo patterns as practice techniques for performance, Henry conducted an experiment by randomly assigning high school wind instrumentalists (N = 60) to two different groups: half of the students were assigned to a group that received recorded aural modeling, and the rest were assigned to a "no model" group. The results demonstrated that while aural modeling affected rhythm gains, there was no effect on the tempo gains. These results differ from Rosenthal et al.'s findings that there were, in fact, significant differences among the practice techniques in the subjects' performance of tempo.

Dickey (1991) also investigated the effects of modeling in instrumental learning; however, he researched the effects of modeling by comparing it to the effects of verbal instructions. Dickey (1991) juxtaposed verbal and modeling instruction in instrumental music classrooms. Four middle-school band classes (N = 128) were assigned to two distinct groups. For ten weeks, two of the classes were taught with verbal instructions and two with modeling instructions. The results revealed that one of the groups that received modeling instruction showed significantly higher scores in the tests of ear-to-hand skills and kinesthetic skills while the other group did not; however, there was no significant difference in a test of general music skills. This finding suggests that instrumental ear-to-hand coordination and kinesthetic response skills could be improved through teacher demonstration-student imitation modeling strategies. The researcher mentioned that modeling should play a more prominent role in instrumental learning and should not be limited to the imitation of melodic patterns and rhythmic movements but should be extended to the demonstration of any and all musical phenomenon in instrumental music class.

To further investigate the effects of modeling, Rosenthal (1984) compared the relative effects of a guided-model, a model-only, a guide-only, and practice-only treatments on the accuracy of advanced instrumentalists' musical performances. The participants were assigned to four different experimental conditions in order to examine the effect of aural and verbal models on a musician's ability to accurately perform a musical selection, specifically Kopprasch's "Etude No.22." The guided-model group played the entire selection while reading an integration of the script with relevant performed illustrations from the original musical selection. The model-only group

listened to three performances of the piece. The guide-only group was provided a verbal script alone, with pauses after each main point. Last, the practice-only group rehearsed the etude for ten minutes. The researcher found that the highest scores were consistently attained by participants in the model-only group across all variables. Although the guide was designed to help subjects focus on the most important parts of the piece, the guided model did not have any positive effects on the subjects' ability to perform. The researcher emphasizes that direct modeling is most effective with regard to the accuracy of the performance. A verbal explanation becomes effective when it occurs in conjunction with a direct model; however, verbal explanation isolated from a direct model does not produce any effects on performance accuracy.

While most studies noted thus far have supported the positive influence of modeling on instrumental learning under certain conditions, Hodges (1974) found modeling to be of limited value in certain group configurations. Hodges conducted research to investigate the effects of recorded aural models on performance achievement when these models were presented during rehearsal. Beginning band students (N = 200) were assigned either to an experimental or to a control group; teachers attempted to instruct these groups in the same way, apart from the additional inclusion of aural models in the experimental group. These aural models contained model performances of the selected exercises, and students in the experimental group listened to recorded aural models at nearly every rehearsal. The results indicate that the aural models used in this experiment had no considerable effects on the performance achievement. Hence, we can infer that although a model can be an efficient teaching tool in a one-on-one setting, it may not be as effective in a group setting.

It is apparent from this review of prior research that a debate regarding the effectiveness of modeling in music education does exist, and that the findings have been somewhat inconclusive. Hewitt (2001) mentions that the majority of previous studies found positive effects when using aural models; however, further research is required with regard to which type of models are more effective under specific conditions. Brooks (1995) cautions against using modeling as the sole music teaching technique, arguing that although the initial provision of a model may aid success, a learner may become too dependent upon such models. This can ultimately hinder the development of musical independence in students.

The above literature suggests that modeling unambiguously holds a positive influence on instrumental learning; however, the effectiveness of this modeling could differ depending on variables such as music learning settings, the teacher's modeling skills, the student's attitude, and characteristics of the tasks. Ultimately, depending on the context, modeling could either help students achieve musical independence or hinder the development of their musical independence.

Modeling research in improvisation and composition

An exploration of the literature on the subject of music composition in the context of one-on-one lessons uncovered few studies that pertain to the intersection of modeling and music composition. To find relevant literature, the search was broadened to include studies addressing the effects of modeling on music improvisation. The role of modeling has been well-documented in improvisation pedagogy literature and this will be discussed in the following paragraphs. Although the results have varied to a certain degree, there is also a common ground with regard to the use of models in improvisation, as the majority

of the research supports the idea that it is more effective to use aural modeling than to use notated modeling. For example, Watson (2010) conducted a study to research the effects of aural versus notated pedagogical materials on achievement and self-efficacy in instrumental jazz improvisation performance. Collegiate instrumentalists (N = 62) were assigned to two separate modeling conditions while receiving identical instructional materials. The aural modeling group received instruction primarily through aural imitation procedures, while the notated modeling group received instruction through notated exercises. They joined in three 70-minute instructional treatment sessions and completed pre- and post-instruction improvisation performances. Four expert judges evaluated the results by using the researcher-constructed Jazz Improvisation Performance Achievement Measure. The researcher found that the aural instruction group demonstrated significantly greater gains than the notation group. With regard to the results, he mentioned that educators should consider the incorporation of aural imitation tasks and exposure to exemplary models as part of their improvisation teaching pedagogy.

Moreover, Davison (2010) conducted a study to discover whether different modeling conditions (aural and aural/notated transcription) made marked differences on improvisation achievement among intermediate music students. Middle school wind and mallet percussion instrumental music students (N = 76) were divided into either aural-only or aural/notated transcription combinations. Prior to the experiment, both groups underwent the same improvisation instruction and then received different examples of modeled improvisation solos. The aural-only group was presented with model improvisation performances—listening only—while the aural/notated transcription

modeling group was presented with model improvisation performances involving a combination of listening and notated model transcriptions. The researcher found that there were no significant differences on improvisation achievement between the modeling conditions of aural-only and aural/notated transcription combination for instrumentalists with one to three years of experience. The result shows that for intermediate level instrumentalists utilizing either the condition of aural-only or aural/notated transcription, the outcomes were the same.

The above studies (Davison, 2010; Watson, 2010) reached the same conclusion, that aural modeling is an effective method for teaching improvisation. However, with regard to the effect of notated modeling, they reached somewhat divergent conclusions. While the above research investigated the effects of different modeling conditions—aural and notated—the following studies focused on the effects of aural modeling compared to other variables such as the manner of feedback provided. Bitz (1999) investigated the effects of musical modeling and direct instruction sequencing on improvisation performance. Middle school and high school double bassists (N = 24) were assigned to either a musical model group or to a no-model group. The musical model group was required to improvise after receiving instructions with musical modeling, while the no-model group received the same instructions without musical modeling. The recorded improvisations were then rated using the Jazz Guitar Improvisation Rating Scale (JGIRS; Horowitz, 1994) as well as by comparing them to the recorded musical model to investigate how the improvisations were either similar to or dissimilar from the model. The JGIRS results revealed that the model group scored higher than the no-model group in all aspects: musicianship, expression, structure, and overall scores. However, one

particularly interesting note from the researcher was “the Pearson correlation coefficient (r = .82) showed a positive correlation between overall score and similarity to the musical model” (p. 78). In other words, the closer a participant’s improvisation was to the model, the higher it scored. This result suggests that modeling could disrupt the natural creative process by triggering imitation in improvisation.

Amabile (1983) mentions that “it is possible that, under some circumstances, modeling might lead to a slavish imitation of response algorithms, but to a properly applied set of creativity heuristics under others” (p. 207). This “slavish imitation” might be a positive example of how modeling enhances the student’s improvisation skills; however, this tendency could likewise result in a negative effect, hindering students from developing both creativity and the ability to produce original improvisations.

Another study, by Partchey (1973) compared the effects of feedback, modeling, and repetition on the ability to improvise melodies. 90 participants were randomly assigned to three groups, and all groups received a pre-test and post-test. The feedback group heard a replay of his/her immediately preceding improvisation before attempting to perform the next one. The modeling group heard a positive model of the correct response, with this model interjected immediately between a subject’s first response and the following one. The repetition group was provided the same number of opportunities to improvise the melody as the first and second groups. The results were evaluated according to performance and creativity criteria. Performance criteria were based on rhythmic clarity and pulse accuracy, and creative criteria were defined in terms of tonal and rhythmic variety and unity. The results indicated that there is no statistically significant difference between the effects of feedback, modeling, and repetition on one’s

ability to improvise melodies; however, feedback was found to be perhaps the most effective in promoting creativity. Partchey (1973) evaluated participants by focusing only on performance and creativity, and there was no comparison between models and improvisations from the model group's subjects. However, Partchey's (1973) results demonstrate that subjects in the "feedback group's melody" had a tendency to be more creative than the "model group's melody." Thus, we can imagine that modeling might obscure the subjects' creative ability to improvise an original melody by unconsciously leading them to imitate the model. However, further research is needed to completely determine whether modeling leads to imitation. If so, how does it influence the creative process? If we need modeling, what is the right balance to strike between modeling and imitation in an improvisation setting?

Finding the right balance of freedom and constraint

Despite the growing presence of composition within music curricula, the quest to understand the role played by creativity in composing music is an ongoing one (Burnard & Younker, 2002). Especially open to questioning are the relative impacts of constraints and freedom, with too few studies seeking to determine the perfect balance between these two factors for the task of composing. Igor Stravinsky (1947) has pointed to constraints as an essential part of his composing process by saying that "my freedom consists in my moving about within the narrow frame that I have designed myself. … The more constraints one imposes, the more one frees one's self of the chains that shackle the spirit" (p. 68).

Rather than going to that extreme, previous studies have resulted in diverse outlooks on this issue of constraint and freedom when it comes to music education.

Kratus (1989) argues that certain constraints, such as limited composition resources—be they related to time, models, or an expected teacher assessment—can make composing more manageable. In contrast, Paynter (1992) posits that constraints represent an environment of insufficient freedom and views this as a threat to the expressive act itself, one that could limit individuals' opportunity to fully experience what it means to be a composer and taking on the related responsibilities of self-determination.

Regarding this issue, Sternberg and Lubart (1991), in defining creativity, provide an appealing blend of the two factors; they assert that the interdependence of constraints and freedom in the course of creative production amounts to a group of choices that are constrained by largely implicit mental criteria that defines the genre and the individual's style. When examining the composing strategies of students, Burnard (1995) found that although students experienced constraints and freedom differently, individual approaches to composing remained consistent across tasks. Surely, we can assume that in composition lessons, the creative quality of the students' composition will be impacted by such considerations as open versus closed assignments, time, procedure, assessment, and group versus individual work.

Creativity

The definition of creativity

Among psychologists, the definition of creativity has been a subject of much discussion. Amabile (1996) notes that while some have seen it as being closely linked to "products or persons or thought processes," she notes that others stress on the "quality of the response that a product elicits from an observer." Still others believe that "creativity

cannot be defined" (p. 19). For Koestler (1964), creativity is all about "the displacement of attention to something not previously noted, which was irrelevant in the old and is relevant in the new context; the discovery of hidden analogies as a result" (p. 119). In contrast, Guilford (1950) framed his definition of creativity in terms of the person, considering it as "the abilities that are most characteristic of creative people" (p. 444). More recently, Hickey (2012) listed traits commonly shared by creative people as including "risk taking; humorous; independent; curious; attraction to ambiguity; complexity, and novelty; open-mindedness; capacity for fantasy; and heightened perception." These definitions show that creativity can have multiple meanings.

As for Hickey (2012), she views creativity through the lens of the created product. She notes that merely playing some random notes in an original order cannot be deemed true creativity, as she says that "Creativity implies not only novel, but also appropriate or aesthetically interesting within the domain" (p. 9). Extending from Hickey's definition of creativity, in this study, creativity will be defined as not something simply original and aesthetically beautiful but as something that serves a timeless purpose across a broad audience.

Creative thinking in music

The U.S. Department of Education has repeatedly stressed the paramount importance of eliciting creativity in students, and former president Barack Obama himself said that "In addition to giving our children the science and math skills they need to compete in the new global context, we should encourage the ability to think creatively that comes from a meaningful arts education" (quoted in Varner, 2010). Indeed, "critical and creative thinking, metacognition, and thinking processes such as problem solving and

decision making are receiving attention on the part of teachers and curriculum designers" (Moore, 1989, p. 111). However, school districts often cut instructional time for art and music education, and the focus on music education tends to rest too exclusively on training students to play an instrument or to sing well. This shows that in the process of focusing on training students, the music teachers may diverge from other aspects of learning such as inculcating an independent thinking process and fostering creativity.

What does creative thinking mean within the domain of music? More specifically, how can music educators help their students to think creatively? In *Music Outside the Lines*, Hickey (2012) distinguishes creative thinking in music from the traditional thinking related to musical talent. Creative thinking in music results in the genesis of new ideas, which means that even someone who has extraordinary talent and technique in terms of playing an instrument is not necessarily creative. Granted that his or her outstanding musical talent might aid him or her in making a creative musical product; however, this does not mean that "musical talent" is synonymous with "creative thinking ability." We must even consider that when we talk about creative musical activity, most people think of music composition. Hickey (2012) points out that "being musically creative does not necessarily manifest itself only thorough music composition or improvisation activities; one could be a musically creative performer or listener as well" (p. 8). Perhaps Hickey's most important point pertaining pedagogy is that the creative thinking process through composition lessons may be altered depending on the teaching method.

Then how can music educators strategically address the creative thinking process? Robinson, Bell, and Pogonowski (2011) assert that "the core of the creative music

strategy is in the student thinking about music, making musical choices, and expressing those ideas through musical performance." From this, it follows that "one of the most important components of a creative music strategy . . . is the degree to which we invite them [the students] to reflect upon their musical thought processes." However, reflection alone does not suffice: "Because of the supple nature of the framework, creative music strategies need time to develop and may lead to extended sessions of music-making" (p. 51). Although both the reflective and the active aspects of music composition lessons bring into play what Hickey (2012) calls convergent and divergent thinking, the reflective component is perhaps more marked by convergent thinking, defined by Hickey as "the ability to think logically to find the one best solution to a problem." The more active improvisatory component is characterized by divergent thinking, which "does not require one correct answer, but the ability to render many possible answers" (Hickey, 2012). Since the best sort of education is that which actively engages the student, one can understand why Hickey concludes her discussion of the two kinds of thinking by saying this: "Music composition and improvisation require both kinds of thinking but offer the best opportunities for students to exercise their divergent, or creative, musical thinking" (p. 8).

Composition

Einstein said, "Logic will get you from A to B, but imagination will take you everywhere." Randles and Sullivan (2013) said, "teaching students to compose . . . is essentially tapping into the second way of thinking that Einstein advocates. The preliminary and essential steps to be taken, then, if we wish to help music educators

conduct creative music-composition lessons are to define music composition, to trace its process, and to explore its enabling conditions."

Defining music composition

If we wish to understand the teaching and learning of music composition, we must begin by accurately defining the term "composition." Music composition is broadly defined by John Cage (1961), who says that "The material of music is sound and silence. Integrating these is composing" (p. 62). However, this very broadness could prove problematic, and one can thus turn to Kratus (1989) for additional perspective and the reminder that "the word composition refers to both process (the activity of composing) and product (the resulting music)" (p. 24). When referring to a product, composition is a unique sequence of pitches and durations that its composer can replicate." That last word is key for Kratus and he elaborates upon the idea here:

> A composition reflects closure on a compositional problem. If one cannot replicate an original melody, then it can be inferred that there is no closure, and the music does not exist as a composed product. When referring to a process, composition is the act leading to the production of a unique, replicable sequence of pitches and durations. (p. 8)

As Kratus, Bowman and Frega (2012) define music composition by saying that composition as a process (the act of composing) is made up of the actions by leading to the creation of composition (the resulting product). However, Bowman and Frega expand the Kratus' definition of composition by stating that "a recording of music that reflects the composer's intentions may also be considered a composition" (p. 372).

> The act of composition allows time for reflection, development, and revision of the final product, while the act of improvisation does not. Improvisation is sometimes defined in terms of composition, as simultaneous composition and performance. It may be more accurate to define composition in terms of

> improvisation – as improvisation that allows the time for reflection, development, and revision. (p. 372)

Browman and Frega (2012) elaborate on the difference between composition and improvisation.

Exploring the composition process

Composition is a process whereby one fashions a unique and creative musical product by exploring and developing musical ideas. Composing music is an experience through which students interact with musical elements just as they do when they play an instrument or sing. Younker and Smith (1996) place the latter observation within the context of educational theory: "The focus in this kind of music learning episode is on the process (not product), knowing (not knowledge), active involvement (not passivity), and discovery (not memorization)" (p. 25). Dewey also emphasized the significance of process rather than the product as he argued that "real learning takes place when the student is actively engaged in the process, discovering what is important through testing, evaluating, retesting, and reflecting" (quoted in Younker & Smith, 1996). To identify successful strategies for teaching improvisation and composition, Schopp (2006) conducted an internet survey regarding composition, improvisation, teaching strategies related questions, and he also interviewed band directors and observed band programs. The results show that the common characteristics of successful programs are (a) a non-threatening environment for learning, a simple approach, (b) flexible delivery of instruction, and (c) commitment to performing student improvisations and compositions.

In terms of evaluation, instead of solely evaluating the product of composition, understanding the creative thinking process could enhance opportunities to help students

engage in real composition learning. Webster's (1987) comprehensive model of creative thinking in music helps us understand the creative thinking process. He mentioned that the nature of the creative process is affected by enabling conditions and skills. He too sees an interplay between divergent and convergent thinking. Wallas (1926) sees creative process moving as one progress through four stages:

> (a) preparation—understanding the dimensions of the problem and exploration of tentative solutions; (b) incubation—consideration of possible solutions and development of ideas; (c) illumination—arrival at tentative solutions; and (d) verification—evaluation and refinement of the final product. (p. 6)

With regard to the creative thinking process in music, Sloboda (1985) differentiates the composition and improvisation processes while noting that "the constraints of improvisation—immediacy and fluency—make it likely that there are processes which improvisation and composition do not share" (p. 103). However, different from the improvisation process, the composition process is an activity that includes continuous rumination and revisions while discovering initially unnoticed properties of what he or she has already composed. Because they do not need to compose music extempore, the composition student experiences "processes such as exploring, developing, decision making, evaluating, refining, repeating, practicing, and performing in a recursive and dynamic fashion" (Burnard & Younker, 2002, p. 34). Younker (2000) also noted that the processes occur "in a discursive fashion: exploring, recording, listening, evaluating, and editing" (p. 30).

Some researchers try to understand whether different aspects such as age, sex, and level of expertise affect the composition process. Kratus (1989) shows a relationship between age difference and the activities of exploration, development, and repetition. Kratus (1989) assigned 60 children of different ages the task of composing a song on an

electronic keyboard within ten minutes to investigate the amount of time that children of different ages, sexes, and proficiency levels devoted to composition processes. His analysis revealed that

> There were no significant age differences ($p < .05$) . . . in the use of silence, and there was no significant difference between boys and girls ($p > .05$) in the use of any of the four compositional processes [exploration, development, repetition, and silence]. (p. 11)

When it came to the students' use of composition time, however, the "result indicated significant age differences in the use of exploration ($p < .001$), development ($p < .001$), and repetition ($p < .01$)" (p. 10). However, Younker and Smith (1996) compare the level of expertise of composition and its relation with different approaches to composition. Younker and Smith model the thought-process of both expert and novice composers by asking their participants to think out loud as they composed a unified melody. The results revealed that the novices took the approach of using a "note-to-note" progression instead of having an overall perspective on the composition. In contrast, the experts approached the composition task in a whole-part-whole manner.

The use of modeling strategies in music education has mainly been considered as effective during pedagogical instruction among the other pedagogies in music lessons. Previous studies have discussed both the dangers and potentials in the use of modeling. Modeling studies in instrumental learning have discussed that modeling likely holds a positive influence on instrumental learning.

Studies on the subject of music composition in the context of one-on-one lessons uncovered few studies that pertain to the intersection of modeling and music composition. To find relevant studies, the search was broadened to include studies addressing the effects of modeling on music improvisation. Previous modeling studies in

composition and improvisation have discussed how does modeling influences the creative process and what is the right balance to strike between modeling and imitation is. The creative quality of the students' composition was impacted by variables such as type of assignments/work, time, procedure, and assessment.

In summary, even if music educators agree on the importance of enhancing students' creativity through music composition lessons, the composition process or the aspects that affect students' creative thinking process during composition are one of the least studied and understood areas of all musical processes. Even in composition-related literature, researchers rarely study the relationships between the process and the product of composition in terms of creativity. Instead, educators and researchers evaluated the product based on execution. Moreover, even if students' creative thinking process is massively affected by teachers' pedagogies, the effects of those pedagogies, such as modeling and feedback, are rarely investigated. The majority of literature regarding modeling is focused on instrumental learning instead of composition learning. Therefore, I felt the necessity to investigate not only the composition learning process but also the effectiveness of modeling on creativity in composition lessons. The following sections will describe how I will delve into and investigate the topic.

Chapter III

METHODOLOGY

The phenomenological study employed a qualitative method for data collection (Creswell, 2012) by focusing on the dialogue with composition teachers (N = 15) who have been teaching composition in a one-on-one setting at university for five years or more. Interview questions were mainly focused on their teaching experiences as a university one-on-one composition teacher. However, the interview data included their overall teaching experiences—in various ages/levels and different class settings. Additionally, the interview data also included their composition and instrument learning experiences.

The data was collected from composition teachers through in-depth interviews. Interviews with composition teachers identified crucial points for analysis, that is, those that address the effects of teachers' modeling on students' creative thinking process and product. Interviews was conducted one-on-one with me, and each interview lasted approximately 60 to 90 minutes. Themes were extracted from each data collection point, and the collected data was analyzed to better understand the effects of modeling.

The purpose of this study is to provide its readers with a more comprehensive understanding of the chosen teaching strategies (with a focus on modeling strategies) that are being used by music composition teachers and the effects of those strategies on both the creative product and the thinking process. The main objectives of this study are to (a) describe the experience of being part of a music composition lesson (e.g. pedagogical

approaches, class procedures); (b) investigate the use of teacher modeling as an instructional technique in an attempt to understand the relationship between teachers' modeling strategies and their students' creative thinking processes and products; and (c) analyze the composition process, with particular reference to the creative thinking process.

Research Design

Preliminary steps were taken to bring research approaches, including research questions, in line with the purposes of the study. It was decided that a qualitative phenomenological research was the most suitable to address the subject of this research. Richards and Morse (2013) argue that "phenomenology offers a descriptive, reflective, interpretive, and engaging mode of inquiry from which the essence of an experience may be elicited" (p. 67). Qualitative research helps researchers understand how and why certain behaviors or social phenomena take place by gaining deeper insights into people's feelings and thoughts (Creswell, 2012). Creswell provides a comprehensive definition of qualitative research:

> Qualitative research begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is both inductive and deductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the problem, and its contribution to the literature or a call for change. (p. 44)

This research method allows me to be where the event occurs so as to better observe certain social phenomena or situations. Qualitative research involves an interpretive,

naturalistic approach to the world, and qualitative researchers obtain data through field notes, interviews, conversations, photographs, recordings, and memos. At this level, researchers "study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Denzin & Lincoln, 2011, p. 3).

I aimed to have a deeper understanding with regard to the individual experience of being part of a music composition lesson, the use of teacher modeling, and the composition process, with particular reference to the creative thinking process. Thus, one-on-one interviews with composition teachers were the most appropriate means of collecting data.

> Interviewing is one of the most preferred methods for qualitative data collection. Interviewing participants provides the researcher the indirect means to accessing the events and environment. In addition, the researcher can learn about settings that he or she has not experienced. Therefore, the researcher will use interviews as a means to discover and understand the perspective of music composition teachers and students. (Creswell, 2012)

Interviews were conducted in one-on-one with me, and each interview lasted approximately 60 to 90 minutes. Interviews were conducted in semi-structured formats, which allow for open dialogue. This means that even though I prepared interview questions, the composition teachers had the opportunity to openly discuss their views on composition lessons, modeling, and the composition process.

Participants and Settings

This study included composition teachers (N = 15) who have been teaching composition in a one-on-one setting at university-for five years or more. I purposely selected "participants who have experience with the central phenomenon or the key

concept being explored" (Creswell, 2012, p. 112) and utilize a purposeful sampling procedure. Given that less than 20 participants in a qualitative research study allows a researcher to build and maintain a close relationship and enhance the open exchange of information, I selected 15 composition teachers for the interviews (Crouch & McKenzie, 2006).

The composition teachers participated in semi-structured, one-on-one interviews. The interview questions were mainly focused on teaching experiences of the teachers of composition as a university one-on-one composition teacher. However, the interview data included their overall teaching experiences—in various ages/levels and different class settings. Furthermore, the interview data included their composition and instrument learning experiences.

Table 1. A List of Composition Teachers

#	Name	Gender	Ethnicity	Current Position	Teaching Years	Musical Background
1	Rick	Male	White	Music educator, composer	12	Western classical music
2	Yannis	Male	White	Music educator, composer, guitarist	8	Western classical music
3	Chan	Male	White	Music educator, composer, multi-instrumentalist	5	Western classical music
4	Carl	Male	White	Music educator, composer	15+	Western classical music
5	Peter	Male	White	Music educator, composer, cellist, conductor	15+	Western classical music
6	Jane	Female	White	Music educator, Composer	15+	Western classical music
7	William	Male	White	Music educator, composer, trumpeter	5	Western classical music
8	Min-Jie	Female	Asian	Music educator, composer, pianist	10	Western classical music

9	Den	Male	White	Music educator, composer	15+	Western classical music
10	David	Male	White	Music educator, composer	10	Western classical music
11	M	Female	Asian	Music educator, composer, guitarist	10	Jazz
12	Alex	Male	White	Music educator, composer, pianist	6	Western classical music
13	Ken	Male	White	Music educator, composer	5	Western classical music
14	Dominic	Male	White	Music educator, composer	7	Western classical music
15	Chris	Male	White	Music educator, composer, multi-instrumentalist, singer	15+	Western classical music, Musical theatre, Film music

Composition teachers shared their learning or teaching experiences with a focus on teacher modeling and its effect on creativity. Teachers informed about the topics and the process of the study. The interviews were conducted in a quiet environment of the participant's choice so that I can record the interview.

Procedure

Part One: Recruitment

I recruited participants through snowball sampling and contacted by email over 20 composition teachers in New York by email. These teachers were chosen based on their teaching experiences – a minimum of five years of teaching at university was required. For sufficient data, the researcher recruited participants from a minimum of four to a maximum of ten institutions (Creswell, 2012). I received the contact information of a prospective participant and reached out via email to enquire about participation. Among

20 composition teachers, 15 teachers (three females and 12 males) responded to my email and agreed to participate in the study. Composition teachers who expressed interest in the study received a letter of invitation via e-mail. All the teachers had been teaching at university for a minimum of five years. In addition to the college teaching experiences, most of the teachers had been teaching in various ages/levels and different class settings. In this study, the teachers' actual names and schools have been replaced with pseudonyms for their interviews.

Part two: Composers one-on-one interview procedure

In order to collect data on the effects of teacher modeling and on students' creativity, data was collected through interviews. One-on-one interviews were conducted with music composition teachers, and each interview lasted approximately 60 to 90 minutes. The interview was conducted over Data collection. It took place over a year-period and comprised 15 one-on-one interviews with composition teachers depending on the teachers' schedules. Interview questions was focused on the teaching strategies used in their lessons. They are ordered in such a way as to move from broad questions to specific ones that are closely related to this study's topic. All interview participants were given an interview consent form.

Part three: Interview data analysis

Responses from interview participants were transcribed and reduced to key words and phrases relevant to each question. A list of common words and phrases were compiled and counted for each question. I combined terms that have similar meanings, and the transcribed interviews were coded for emerging themes related to the purposes of

this study. The emerging themes were compared against the theoretical framework of Bandura (1977) on social learning.

Instrumentation

The interview questions that were used for the current study was based on the aforementioned three research questions. Questions were categorized into four sections regarding background, modeling, creativity, and other pedagogic approaches. I decided to begin the conversation by enquiring about the backgrounds of the composition teachers in order to smoothly transition into the three core questions that target the research questions. Modeling-related questions aimed to obtain data on the current and past use of modeling in different courses. Creative thinking process and product-related questions incorporated modeling so that the composition teachers gave insights into their perspectives on the effects of modeling on their composition processes and product. Last, other pedagogical-related questions were asked to determine the effects of other teaching methods in composition lessons.

Data Collection

Data collection took place over a year period and comprised 15 one-on-one interviews with composition teachers. Interviews were used as the method of data collection for the current study in order to gather information from a large pool of participants. Both short and long answers were utilized to gather specific information regarding modeling as a teaching method and its effect on creative thinking processes and products.

Table 2. A List of Interview Questions for Composition Teachers

Interview Questions for Composition Teachers
Background questions
1. Explain your composition learning process. How did you start composing?
2. How many years of experience (including the current year) do you have in teaching music composition in schools?
3. What class do you currently teach? Can you describe the classes you have taught in the past?
RQ 1. How is modeling used in composition lessons?
1. Do you use modeling in composition lessons for instructional purposes? If so, what goals do you seek to achieve by using modeling composition lessons?
2. What is your definition of modeling with respect to composition lessons?
3. What kind of modeling (i.e., aural, notated) strategy do you often use in composition lessons for your students, and why?
4. Explain the timing and circumstances that impacted your decision to choose to or not to use modeling for your students.
5. How often do you use modeling as a teaching strategy for your students during the class?
6. Do you adjust the use of modeling strategies depending on the student's level of composition (novice/advanced)? If so, can you describe how your use of modeling strategies differ according to the students' level?
RQ 2. How different and/or similar are the modeling strategies used during composition and instrumental lessons?
1. Do you use modeling in instrumental lessons? If so, can you describe these modeling strategies?
2. How different and/or similar are the modeling strategies used during composition lessons to those used during instrumental lessons?
RQ 3. What are composers' composition processes and their perceptions of modeling in relation to creativity?
1. Describe your composition process.
2. How do you use modeling as a part of your composition process?
3. In your opinion, how does modeling positively and/or negatively affect the composition process and the product of students' creativity?
4. In your opinion, how does modeling similarly and/or differently affect novice and expert composers' composition process and products?

RQ 4. Besides modeling, what types of pedagogical approaches are used to teach composition?
1. What other teaching methods (e.g., feedback, repetition) do you currently (or previously) use in lessons for teaching composition?
2. How often do you use a particular teaching method for your students and in which context? Please explain the context (how and why) where you have used that teaching method with your students.
3. Did those teaching methods positively or negatively affect your students' composition process?
Ending questions
1. Were you aware of any effects of teacher modeling before participating in this study?
2. Explain or describe any additional circumstances relevant to this study. Feel free to share your views on this subject.

A semi-structured interview protocol was implemented to investigate participants' experiences with teaching and learning composition. A list of questions was prepared to guide the interviewee; however, the questions were intended to solicit a friendly conversation to acquire a deeper understanding. I took notes on a laptop during the interview. Simultaneously, all interviews were recorded on an iPhone and will be saved as audio files. Audio files were saved to a password-protected computer to protect the anonymity of the interview participants. Each interview recording was transcribed using Microsoft Word. In order to ensure the anonymity of the subjects, each participant was assigned a pseudonym. Data sources included the individual interviews with composition teachers. To enhance the validity of the study, I sent the interview transcriptions to each composition teacher via email for member checks. Through the member-check process, the composition teachers confirmed that the transcriptions were accurate. The transcribed interviews were coded for emerging themes related to the purposes of this study.

Methods for Data Analysis and Synthesis

Data analysis is more than simply studying the raw data. Creswell (2012) has established this very clear:

> Data analysis in qualitative research consists of preparing and organizing the data (i.e., text data as in transcripts, or image data as in photographs) for analysis, then reducing the data into themes through a process of coding and condensing the codes, and finally representing the data in figures, tables, or a discussion. (p. 180)

Additionally, Agar (1980) has made this useful suggestion: “Read the transcripts in their entirety several times. Immerse yourself in the details, trying to get a sense of the interview as a whole before breaking it into parts” (p. 103). In order to benefit from that advice, I planned to begin the data analysis by looking over the interview transcriptions, thereby gaining the sort of thoughtful, holistic overview of the data that Agar has recommended.

In order to analyze the data collected during the interviews, I transcribed and summarized each interview. After preparing transcriptions by using the translation website Rev.com, I not only wrote down thoughts that occur but also marked relevant concepts and themes using different colors or typeface while reading the prepared transcriptions. I kept reflections and notable quotations from the interviews in a separate computer file. These quotations were used in the future as “notable quotes often indicate concepts you want to explore more systematically or suggest themes you want to test” (Rubin & Rubin, 2012, p. 191). Furthermore, I wrote a summary of each interview that includes the interviewee’s main point and insight. The transcripts and all the relevant files on the My computer were password protected. When I had completed the process of reading and memoing, I moved on to describing, classifying, and interpreting the data.

Data collected from composers' interviews were compared in order to identify differences and/or similarities between the composition teachers' perceptions.

I then developed elaborate lists of codes that can be used to describe the information collected—a process called coding—and then develop the theme by reviewing databases. I planned to make this structural coding method the basis of analysis for the interview data, using it "as a categorization technique for further qualitative analysis" (Saldana, 2016, p. 100). Structural coding allows "researchers to quickly access data likely to be relevant to a particular analysis from a larger data set" (Namey et al., 2008, p. 141).

Thematic analysis was used to further code and analyzed the already structurally coded data so as to extract further data related to the research questions. My personal interpretations were then linked to the larger body of research literature moving beyond coding by "taking the text or qualitative information apart, and looking for categories, themes, or dimensions of information" (Creswell, 2012, p. 186).

Last, after I developed the codes, forms themes from the codes, and organizes themes into units to make sense of the data, I represented the data by creating a visual image.

Pilot Studies

From Fall 2015 to Fall 2016, over a period of one year, I conducted two small-scale pilot studies in order to gain insight into the impact that the practice of teacher modeling has on students' ability to compose music. These preliminary inquiries provided the basis for my current research to build upon.

In the first pilot study, which sought to investigate the influence of a model on the composition of melodies, I chose two graduate-level music-composition students who had no prior composition-lesson experience as subjects. During one semester (Autumn, 2015), the composition lesson was conducted in a typical practice room at Teachers College, Columbia University, and all classes were video recorded. The students were participating in eight 1-hour composition lessons, once a week. At the end of each lesson, the students composed eight-measure melodies by following the assigned two-measure motif according to two different instructions—no model and aural model—and then they played those on the piano. The relative effects of each strategy on learning efficiency were compared by introducing experimental variables during the instruction as follows:

1. *Aural model*: Subjects listened to the teacher's modeling three times before attempting to compose a melody based on the assigned 2-measure motif.
2. *No instruction*: Subjects directly attempted to compose a melody by following the assigned 2-measure motif.

In the next step, I analyzed the students' composed melodies while seeking to investigate whether modeling leads to imitation. I notated the recorded students' melodies that had been composed according to the two different instructions by using the software *Finale*.

This pilot study's results revealed some correlations between the musical model melody and the students' melodies that were composed after listening to it. Modeling impacted both note and rhythm choices.

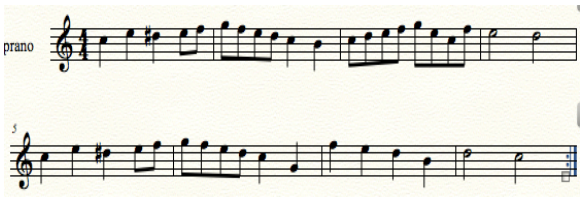

Figure 3. Model

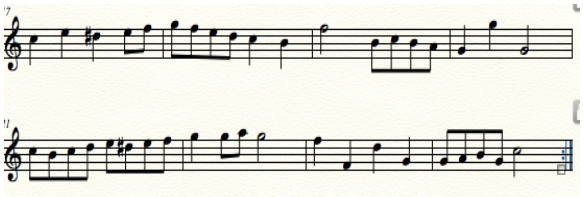

Figure 4. Melody created without listening to the model

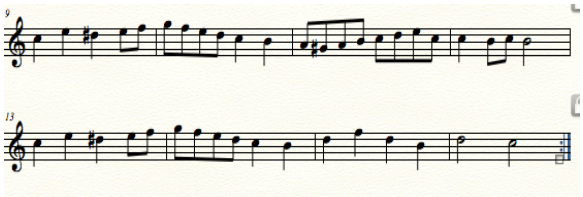

Figure 5. Melody created after listening to the model

The melody (see Figure 2) created after listening to the conjunct model melody (see Figure 1) tended to also be conjunct; however, the melody created without listening to the modeling tended to include disjunctions in its melodic lines. This means that the melody is very original and free from any restrictive approach.

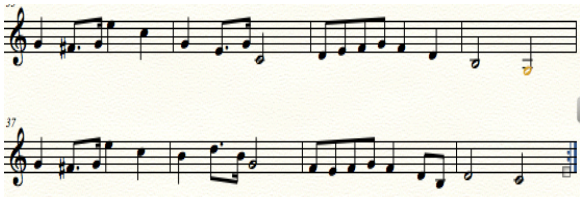

Figure 6. Model

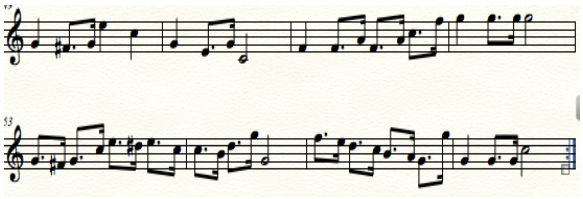

Figure 7. Melody created without listening to the model

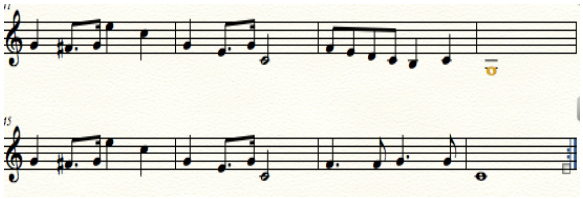

Figure 8. Melody created after listening to the model

Similarities in rhythm choices were also discovered between the modeling melodies and the melodies that were created after listening to the model. The melody depicted in Figure 7, which was created after listening to the model (see Figure 6), reflects the model's rhythmic patterns, whereas the melody created without listening to the model contains distinct rhythmic patterns. Furthermore, the melody line of the latter composition is more unpredictable.

These results again suggest that when the teacher provides a model melody prior to the creation of a student composition, the student tends to produce a melody similar to the teacher's melody instead of producing their own creative melody. For this reason, compared to the melodies developed without modeling, the melodies created after listening to the model were less original. Additionally, more original and unexpected melodies were found more frequently in those ones created without any prior modeling.

Seeking to delve deeper into the effects of modeling on musical outcomes, I conducted a second mini-study that foreshadows the current research design. This research was conducted in Fall 2016, by interviewing ten graduate-level, music-

composition majors (N = 10; 4 males and 6 females). In addition, in-depth, one-on-one interviews were conducted with ten students who were randomly selected from a conservatory in New York. The interview questions focused on their overall impressions of the use of modeling as an effective teaching strategy. The material in each interview ranged from participants' overall experiences in composition class to each student's musical background; however, the interview chiefly focused on their impressions of the impact of modeling on improvisation experiences. Each interview took approximately 40 to 50 minutes to complete. With respect to the interview questions, I modeled them after the question from Gaunt's (2009) study. After the interview had concluded, the recordings were transcribed, and the data written up in the form of brief portraits.

The following are some extracts drawn from the interviews. When I asked "Do you prefer to compose with or without modeling? And can you tell me the specific reasons?" Scott answered that he prefers to compose without listening to the model. He said, "When the teacher does modeling before me, sometimes I cannot get the melody out of my head." He added this comment: "I think that starting with my own inspirations and ideas was better and then having you guide my creativity and show me other possibilities was great."

In her response to this question, Deffany said this:

> The teacher's demonstration actually makes me competitive in some sense; something like I need to make something better than that one. I prefer to compose without modeling. I think the demonstration is good after the student has thought first, so that there are now alternate ideas that the teacher and student can discuss.

It is interesting to see that both students prefer to compose before any input is received from the teacher's modeling, especially since this contradicts most of the

research findings. The subjects' answers made me wonder if the use of teacher modeling in relation to composition is an example of excessive intervention.

It is worthwhile to consider these results before immediately concluding that modeling has a restrictive effect on creativity. Perhaps the perceived limits might not have been set by the modeling itself but by inherent tendencies brought into the classroom by the students: language patterns, for example, or a desire and ability that we carry from infancy, or how one connects and communicates with others. For example, equating how we learn in general and how we use language to how we learn music by responding to modeling. In the case of modeling for composition, if the teacher models prior to the student's attempt, the fact that he/she approximates the model might not be a limit on creativity but a manifestation of the inherent human desire to communicate and connect (i.e., call and response). Is it possible then that an effective music teacher could use modeling as just one of the tools used not only to teach composition but to enhance creativity altogether? If so, what is the right degree of engagement modeling in a composition setting?

Chapter IV

RESULTS

The purpose of this study is to listen to and learn about the views and practices of composition teachers in order to understand and compare their perceptions of the modeling strategies used in composition lessons. The following are the research questions that this study will seek to answer: 1. How is modeling used in composition lessons? 2. How different and/or similar are the modeling strategies that are used during Composition and Instrumental Lessons? 3. What are composers' composition processes and their perceptions of modeling in relation to creativity? 4. Besides modeling, what types of pedagogical approaches are used to teach composition?

This chapter presents portraits of 15 composition teachers who have more than five years of teaching experiences. The teachers shared not only their current and past composition teaching experience but also their current composition learning experiences. The interview data includes a wide range of each teachers' composition learning and teaching experiences throughout their lives. Most of the teachers mainly shared their composition-related experiences as a teacher, but some also shared their experiences as a learner. The demographics of the composition teachers who participated in the interviews for this study includes their gender and ethnicity. Among 15 composition teachers, 12 teachers are male and three are female. For background information on ethnicity, 13 White and two Asian composition teachers participated in this study. For musical

background, majority of the teachers (14 out of 15) have a background in Western Classical Music and one teacher has a background in Jazz.

Each interview summary was designed to provide a comprehensive portrayal of the individuals, a description of their education/musical background, how they learned/taught composition, and their composition process while focusing on the effect of modeling. Since semi-structured interviews were conducted to collect the interview data, the range and amount of the participants' collected data vary. To protect the identities of the composition teachers and the institutions, the teachers' actual names and institutions have been replaced with pseudonyms. The teachers are not ordered in any particular manner.

Overview of Interview Settings

I conducted semi-structured interviews with the composition teachers (N = 15; 12 males and 3 females) who have been teaching Composition for more than five years at university. The interview was conducted in a quiet environment for 60–90 minutes. During the interview, the teacher participants shared and described their perceptions of the teaching strategies that are or were being used during composition lessons, with a focus on teacher modeling and its effect on creativity. I contacted composers by email in 2018/2019, and those who were positive about being involved in this study participated in the interview.

1. Interview with composition teacher – Rick

Background

Rick—a male composer, pianist, and music educator—is a graduate of one of the School of Music in Southern California and has been teaching music composition at the university for over 12 years. He has taught at a college in Florida and is currently teaching music composition to master's and graduate students at a college in New York. As a composer, he has composed over 19 operas.

When asked how he started composing music, Rick answered that for him, building a close relationship to music was very natural because he was raised by parents who loved music even if they were not musicians. Rick said that he had been improvising and making music with his family members for a long time, and he started composing music when he was 10 years old. Rick said that he was a kid who was very into listening to music, saying that "I was constantly buying records, and listening to every kind of music and could never get enough." He added that by doing so, "I got to know all of the backbones of the classical repertory and created this sort of garden in my brain of sounds." Over time, he became more focused on the piano and on composition.

Identification and characterization of different modeling strategies

Identification. When asked to identify the modeling strategies he uses when giving composition lessons, Rick stated that his models are not only limited to great composers' music. It could be their peers' music as well. He noted that "they get the experience of listening to what their cohorts have done and going 'Oh, that's interesting'

or ‘Well, I wouldn’t have done it that way.’ Whatever. So, they learn from listening to what the cohorts have done.”

Specific modeling strategies used in the composition class. When asked about the goal/reason for giving models to students, Rick replied “to show that everyone has a different idea.” He added that “students all come in with their own musical ideas, and none of them are good or bad, they just are different. In my opinion, some of them might be more successful than others.” When asked to describe the modeling strategies he used in the composition class, Rick answered that he uses different modeling strategies for different purposes. He emphasized the importance of choosing appropriate notated/aural models that fit the students’ abilities, because “different people have different levels of ability.”

He shared the experience that made him realize the importance of choosing the appropriate score as a notated model. He said that “some people respond very strongly to the analysis sort of template. Like if I bring in Beethoven’s Pastoral Symphony, and we start to look at how this symphony is all built on these little motifs, but some people really respond to that, some people don’t have that ability. Or some people really don’t have the ability to look at an orchestral score, so we might look at a piano score.” He added that “depending on the students’ score-reading abilities, the effect of modeling was varied. It was only beneficial for those students who feel comfortable reading and analyzing the orchestral score.”

With respect to employing notated modeling by sharing scores, Rick said that through the given scores, the students could learn how the composer expresses who he is

and what his ideas are. Then, “I expect my students to take the composer’s style and make it his/her own. I don’t want my students’ music to sound just like the other composers.”

When asked to provide a further description of the notated modeling strategy, Rick said “music analysis” is an effective way to spark students’ imagination. He added that especially for a student who needs to learn how to compose, “I could just pull out a Beethoven piano sonata, and we’ll look at how he put it together.”

He then shared his common practice of modeling when a student comes in with some written music. He said he sits down at the piano and then picks the piece apart, striving to show the possibilities within what the student has written. He often says, “Okay, these are the possibilities I see, given what you’ve written. You could take this theme here and could turn it upside down, and could put it in the bass over here, etc.” When asked why he models based on what a student has written, he answered that “I want them to have their own original ideas. I try to let it come from the student. I try to let the composer find her voice, his or her voice. The reason for modeling was to show them different directions.” He added that showing possible options on the piano is a way to provide feedback to his students, saying that “I try not to give simple/direct feedbacks such as ‘that’s bad.’ Instead, I would say, ‘Let’s see if we can change directions here.’”

When asked about his strategy for using an aural model, Rick replied that “I often tell my students, ‘When you hear a sound that you like, find the score and look at what it looks like on the page, to learn how the composer makes that sound.’” He added that using the music that students like as a starting point can be a good option. He tells his students, “Well, I need you to go and next week bring in something that you really like and show me on the page how it’s put together.”

Rick added that even for himself, as an expert composer, he still sets out to see what it looks like on the page after listening to some amazing orchestral music and said that the "Journey of discovery fascinates me still."

Sharing his own composition process is also a kind of modeling that he often uses in his class. After playing recordings of his music (aural modeling), he usually speaks about his composition process in terms of how he arrived at a particular piece and then asks the students to share their reactions. However, Rick added that since "everyone's preferred composition process is different," he often simply shares his own composition process and lets the student take it or leave it.

Similarity/differences in using modeling strategies when it comes to teaching composition/instruments. Rick noted that teaching the technical aspects of composition, such as "Oh, the violin can't play that note," is similar to teaching the playing of certain notes on instruments and doesn't feel very creative. He added that the "direct form of modeling such as showing motions" is often used in instrument lessons; however, there is "more freedom" in composition lessons.

Composition process

When asked to describe his composition process, Rick answered that his initial activity is to go to the piano and start improvising a bit, since he is a pianist.

> I do a lot of theater and vocal music. All right, so there's a text involved there. But even if there's not, if it's a cello sonata or whatever, I might go and improvise and . . . I sort of see what my subconscious comes up with because at this stage of my life and my career, there's no real filter between my hands and my brain. So stuff just comes out. I trust that.

He then sees what his subconscious comes up with and makes little notations of how his idea works.

> Sometimes a whole piece will occur to me. Maybe even a harmonic structure for a piece. Then I go through these chords and just sketch it out. I don't fill it all in. Then I'll probably go to the computer and will create some sort of score template using those ideas, and then I tend to kind of go back and forth.

The final stage of his composition process includes notation and score-presentation. He said that "there's always a little bit of 'you have to squeeze these ideas into those five lines and the time signatures that we use as our tools.'" He added that "that's my process, I'll go back and forth. Like whatever I've sketched out, I've put into the score, I print it up. Then I'll go back, and I'll plan it, and I'll work on it, and I'll think about it."

The effects of modeling on composition processes. When asked what kind of modeling effect he most uses in terms of composing music, Rick spoke of "listening to music (aural modeling)." He made the point that while many of his students listen to a lot of music before they try to compose because they need some sources to draw upon, he already has so much music in his head that he doesn't feel the need to refill it before beginning to compose. He stressed the importance of composers listening to music.

> Beethoven's symphonies are like the alphabet. Every composition student has got to know these pieces. To invent something creative, you need to have a point of reference. Let me get into the whole subject of musical literacy. Understanding and knowing music requires studying all different kinds of music from different eras. I think it's essential for anybody who wants to write music. For example, by studying Beethoven's range, structure, and heart, students could get all kinds of other sounds that composers came up with later.

He added, "I would try to get my students out of their box a little bit by listening. Like okay, if they're listening to mostly K-pop, okay, but I need you to listen to a piece by Stravinsky, or Debussy or something that just gets them out of their box a little bit, and then they can go back to what they feel comfortable with."

The effects of modeling on novice/expert composers' composition processes and product. When asked about differences and/or similarities in the effect of modeling on novice and expert composers' composition processes and products, Rick began by noting that "students need to have the ability, talent, and experience to write good music. If you have a student who doesn't have any of those things, they're probably more likely to follow the teacher's model."

He then said the following:

> For really young students, why not start with imitating, and see how they respond and develop? Giving models to students could be sort of like a teacher putting a safety net underneath them. And then at a certain point, a teacher could encourage them to make their own music without giving any models.

Rick said that when it comes to advanced students, he rarely uses direct models; instead, he uses different strategies. "I don't really ever model. All I'm really doing is analyzing. I'm analyzing and suggesting."

Other pedagogical approaches

When asked to describe the teaching methods he has used the most, Rick said that "feedback, guidance, analysis are really the main things." He believes in the beneficial effect of giving guidelines as a sort of restriction. He further surmised:

> I believe that one of the important teaching roles is to give such guidelines, as opposed to just saying "write." Instead of just throwing it wide open, and saying "write whatever you want," I prefer to give my students some guidelines, not only to make their work more manageable but also because giving some restrictions often ends up helping them to do more creative works.

Rick then shared his difficulties when it comes to evaluating students' composed music. He mentioned that "a big percentage of my evaluation is just doing work. Just coming in each week and having done some work. I'm not going to grade on whether or

not I think a piece is good, but rather, I'm going to grade on the student's work ethic." He added that "some people are very slow. Like for them to do eight bars of music is really hard, but another student every week can come up with a big new piece." For that reason, he believes it is unfair to evaluate students based simply on the results. His compassion was evident when he said that "when my student doesn't bring his work or doesn't have any talent and passion for making music, it's sort of like after 20 minutes I say 'Well, I guess you can go because you haven't done anything.'"

As often as he can do so, he likes to go to the piano and put his hands on it. He thinks one can get into trouble by writing with a computer that can play in any range, for that approach can lead one to write things that are not playable. He added that bringing in instrumentalists to help one compose is always a good option.

He also suggested that "using non-musical materials" is a good way to stimulate students' creativity. He added that "I might share a picture with my students and ask them to provide a melody for a poem."

2. Interview with composition teacher – Yannis

Background

Yannis—a male composer, guitarist, and music educator—earned a bachelor's degree in Music Composition from one of the Music Conservatories in Puerto Rico and a master's degree in Music Education from one of the universities in New York. He is currently teaching composition to graduate students at a university in New York and elementary-level students at a Community School in New York. Now in his middle 30s, Yannis has been taking and giving composition lessons for ten years.

When asked about his composition learning process, Yannis began by describing his instrument-learning experience. He began playing the guitar when he was around 14 years old. As soon as he was able to play a few chords, he started a band with his neighbors. Thus, he began making music prior to taking any formal composition lessons. Soon, his love for music had reached the point where he decided to attend a music conservatory as a classical guitarist. However, he felt that creating music was what he wanted to pursue; so, he decided to change his major from Classical Guitar to Music Composition. After he was accepted into the Music Composition department, he took formal one-on-one composition lessons for five years with one of the three composition teachers at the Puerto Rican Music Conservatory. He described his teacher as "one of the most prominent composers in his own country." Yannis is a passionate and intelligent person who describes himself as being a hard-working musician who plays four roles: a doctoral student, music teacher, performer, and composer.

Identification and characterization of different modeling strategies

Identification. When asked to identify the modeling strategies he uses when giving composition lessons, Yannis stated, "For me, modeling is the process of giving my students different options." The purpose of Yannis's modeling is "to share my thought process with my students so as to let them make their own creative music as opposed to just recreating the exact same sound."

Yannis went on to speak about how much modeling others' music was crucial to his musical development.

> I spent so much of my musical-development time paying attention to how other people make music. Not only in classical, but also in popular music. Oftentimes, and it happens a lot with popular music, I can tell you, "I know where this comes

> from. I know what they were listening to. I know what they thought when they did this. They're thinking about this other song." Like if you go to see *Star Wars*, John Williams has so many things that he takes from Wagner. So, the tools that I study say a lot about music. They sometimes show me the way as a composer.

Specific modeling strategies used in the composition class. When asked to describe the one-on-one composition class that he took for five years, Yannis began by describing the class setting. It took place in his teacher's office at the school: "As I enter the room, I see a piano and a desk." Yannis said that every lesson began with some conversation about his personal life and his composition work. During this time, Yannis often shared difficulties related to his music. Every lesson, his teacher sat at the piano and read the homework he had brought and played the melody on the piano. When asked about assignments, Yannis answered that "there were two assignments per semester. One of them required me to study an earlier era and its techniques, while other one allowed me to compose freely with no guidelines."

When asked about modeling strategies used in this composition class, Yannis explained that his teacher used the modeling strategy of "demonstrating possible options by playing on the piano." He continued thus:

> My teacher would always demonstrate so many possibilities. For example, let's say I bring in a melody. Let's say we're working on Impressionist melodies, right? Or that age. I would bring my melodies, and he would play them, and he would harmonize them in front of me, telling me, "You can do this, you can do that."

He added that "my teacher always demonstrated everything he wanted to tell me through the piano." For example, his teacher would say, "Oh, I think that you're staying too much in the higher range. You can do this," and his teacher would play it. "But then, you can do that."

Yannis noted that teacher modeling was fundamental to his development as a composer. He explained:

> My teacher communicated with me through modeling. By listening to my teacher playing things on the piano, I was able to see a little bit of the teacher's thought-process. When he did modeling, I would see the elements he would use, and he was always trying to be open about everything that he was thinking about. He was not trying to keep things to himself.

Yannis shared an interesting point in terms of the timing of the teacher's modeling.

> When my teacher did modeling, most of the time, 95 percent of the time, he would use my own submissions as the starting-point for his modeling. If he asked me to do a small piece for two clarinets, I would bring it in, and that was his starting-point. The material for him was what I did. It was both a challenge that I wanted to take on, and at the same time I don't think I would've learned as much as I would have learned if I would not have seen him demonstrating these things the way he did.

He added that "When I teach composing to my kids, I try as much as I can to give them the mechanics of how to do it, and I do model some stuff for them, but I always encourage them to use their own ideas as a starting-point."

When asked if there was any negative effect of the teacher's use of modeling, Yannis answered that, sometimes, watching his teacher's modeling was intimidating because it made him feel like his teacher was on a different level of understanding music and the craft of composing and of knowing how to deal with the material. Yet, he added:

> I was intimidated but in a good way. It was like he was infinite. The way that he generated ideas was so impressive; it was something I wanted. I would cherish and appreciate every second of him doing this, even if that meant that I was so far away from my goal.

Yannis further surmised that among the various teaching pedagogies his teacher used "aural modeling" the most and rarely used other pedagogies such as verbal description.

> Mostly my teacher illustrated his point through the actual music, instead of giving me a verbal description such as "Well, you have to be careful when you do a melody. A lyrical melody, maybe you should start with a perfect fourth." Stuff like that he would never say. He would just play it.

When asked to describe other modeling strategies besides aural modeling, Yannis describes his teacher's use of notated modeling. "When a piece I had written didn't represent the technical aspect that was being taught, my teacher explained the reason by sharing various musical examples." Yannis added that his teacher also used "music analysis" as a part of his notated modeling strategy. He believes it was an important element in his instruction.

> My teacher often emphasized the importance of analyzing music. He said that one of the best ways of obtaining great composers' techniques is by analyzing their music because in that way one can obtain other composers' knack when it comes to such aspects as phrasings and dynamics. For example, he asked me to analyze the first prelude from Bach's Well-Tempered Clavier.

After he had turned in his analysis of the piece, his teacher took "these little cells" and let him expand them. Yannis continued to stress the importance of modeling to him, both as a student and as a teacher:

> My teacher was definitely modeling a lot of things. Even though they don't know they're doing it, when I look at the music of the composers that I read, in a way, they're modeling too when I see their scores. You know? I'm taking it as a model. I model for my students, too. Yeah, maybe I cannot articulate it, but I think it was always there.

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. When asked to address the differences in using modeling when it comes to teaching composition and instruments, Yannis responded thus:

> Since composing is a creative process, a generative process, maybe as a teacher you can model an approach. You can model the way you think about things. When I model for my students, and I have composing students that are my age,

> when I model for them, I really want . . . What I'm trying to do is to give them a glimpse, or to show them the way I think about things, you know? To show them my process. Sometimes I sit at the piano and I say, "Okay, I will do this," and I put my hands on it and then, "Okay, I'm using these two notes." As I work through an idea, I say what I'm doing, or what I think I'm doing.

Then Yannis compared the difference in terms of the use and the goal of modeling when it comes to teaching instruments:

> Teaching and/or learning instruments also requires personal interpretation, but as compared to teaching music composition, there is less freedom and more guidelines. For example, when a teacher is showing how to play a certain note with a certain finger, this is a very direct form of modeling. So too, it is common during instrument lessons for the teacher to ask the student to just look at the teacher's hand-motion or body-position and to expect them to copy those exactly. By contrast, during composition lessons, teachers don't expect their students to exactly imitate their ideas. They want to hear their students making their own sounds that have been elicited by the teacher's modeling.

Composition process

When asked about his composition process, Yannis began by saying that "my composition process varies depending upon the type of music I am writing. Sometimes I have to write music for a particular reason, while at other times I write music for myself as my own art. When I write music for a particular project, I often begin with research. For example, when I wrote the music for a documentary about a woman who has cancer, I started by meeting her and listening to her story." He went on thus:

> If I embark myself on a long-term project, let's say I want to write a big orchestra piece, I have a pretty long process of research. It's not as serious as it sounds. I mean, not as structured. I just listen to a lot of music, I look at scores, so I have this pretty long phase of sort of like, incubation, trying to understand what I want to do. Just trying to get inspiration.

Yannis added that the goal of the process of modeling, of all the listening and reading, is to gain inspiration.

> When I finally get to the writing point sometimes a melody comes to me, and I write it down and start from there; but most of the time I begin with harmony,

> because I am fascinated by the way harmony works and amazed by how different voices combine to make one harmony and how they move internally.

The effects of modeling on composition processes. When asked how he uses modeling as part of his composition process, Yannis underscored how crucial modeling is to this process by sharing a famous Stravinsky quote: "A good composer does not imitate, he steals." He said that sometimes he uses the structure of other music. "Let's say I have a piece for orchestra that is reflective a lot of the Debussy piece that I studied for a long time, and I use some of his structures. I use them, and they change, and they become my own." He continued thus:

> Listening to other stuff. It's like a long incubation and research. I imitate a lot of stuff, too. Sometimes I like a piece of music, and I would use the skeleton of the form; I would use it as a starting point. Sometimes I would use rhythmic things that I like. Let's say I have a piece for orchestra that's reflective a lot of the W.C. Handy piece that I studied for a long time and I use some of his structures. I use them, and they change, and they become my own, but you know. . . So many ways.

Yannis added that modeling for him is like a map, helpful when he has lost his direction. "I was often in the dark. Okay, I know about music, I listen to it, but what should I do to make music? Sometimes I didn't even know where to start. Should I write down a melody first? Or do chords? Then when I see my teacher modeling different things, it opens up my composition process."

The effects of modeling on novice/expert composers' composition processes and products. When asked how modeling similarly or differently affects novice and expert composers, Yannis replied by remembering his initial days as a composer.

> When I was a novice composer, since I didn't have a lot of experience, it was hard for me to break free from what can almost be called "imitation." I would see my teacher doing something, and then I wanted to do that. But doing that was not enough for me, because inside me I knew that it was not really me. Maybe I was a good observer, and I was imitating it. So, it was a conflict for me.

By sharing that thought, Yannis was emphasizing "the importance of transforming others' ideas into your own." He stated that novice composers often make a mistake by exactly imitating the given models, simply because they don't yet know how to expand things from there. Yannis said, "What has changed, now that I have more experience, is that now I know better how to take ideas that influence me and transform them and make them my own, in a more effective way."

Yannis added that when his teacher used modeling, he emphasized that "You can get influenced by anybody. You choose what you want to listen to, you choose what your tastes are, and they will change. But you always need to try to make them your own." Therefore, when Yannis teaches composing to his students, he always encourages them to use their own ideas as a starting point; then, he tries to make them understand the mechanics, the ways he uses to develop their musical ideas, by using models. Last, he noted that

> The degree and type of modeling I use vary depending upon the goal. By using models such as the great works of great composers, teachers can teach students about forms and techniques. Ultimately, however, it is the student himself or herself who must decide whether, and if so, how, the forms and techniques work to make a piece an artistic success.

Other pedagogical approaches

Yannis noted that the composition lessons he received were not always confined to the classroom.

> My classes were not always in the classroom. Sometimes I would go to the class, and he would just take me out of the classroom and walk around and tell me other things. I was sometimes like "What is he talking about?" But then I understood what he was trying to say. It was a very interesting, very special, important relationship for me with him.

Yannis added that "feedback, guidance" helped him a lot. He said, "My teacher would always say, this is something about being brave and taking that risk. Not constraining yourself too much with what you learn." His teacher would always say:

> "I'm not trying to tell you what to do, but let's look at all the great works or what I call 'great works.' All the works of music." They always have form, they always have form even when the form is like, there is no form. There's still some consideration, so that was the aspect that he was trying to . . . I think it's the biggest thing I got from his class. It was like, again, not only what is inside your heart, you write that. But then you have to negotiate with this to make it art, to make it artistic. That's where technique comes in, and we change these things.

3. Interview with composition teacher – Chan

Background

Chan—a male, composer, multi-instrumentalist, and music educator—studied Music Composition at one of the universities in London and received a Master of Arts in Music and Music Education degree from one of the universities in New York. He is currently teaching composition at a university in New York and elementary-level students at a Community School in New York. Chan has been taking and giving composition lessons for eight years.

Chan started composing music when he was eight years old. After learning the piano for two years, he began composing music by himself. He then formally started studying composition in high school. During his undergraduate years, he was formally taught composition by a professor within a group setting.

Identification and characterization of different modeling strategies

Identification. When asked to identify modeling strategies used within the composition lesson, Chan first shared the modeling done by his professor. He noted that

after playing a certain motif, his teacher asked him how the composer used this simple unit to compose an entire symphony. Then, his teacher played the motif again and talked about the variety of ways in which it could be manipulated, as written by that composer. Chan believes that "the modeling strategies are all about presenting students with a variety of musical ideas that they could use to manipulate their own motifs: diminution, rhythmic variance, etc."

Specific modeling strategies used in the composition class. When asked to describe the different modeling strategies that are used in his composition class, Chan began by describing "notated modeling." He noted that "during each composition lesson, my teacher shared scores and printed written examples and went through them." He added that "notated models aided me in seeing how I could notate what I heard." He also believes that one of the benefits of using notated modeling is that the various notated models have allowed him to learn different styles of music.

When asked which modeling strategy he likes best, Chan said the following:

> A mixture of both aural and notated actually works best for me, as it provides both visual and aural approaches to understanding music. Sometimes what we see on the music score is not what we imagine it would sound like, and vice versa. I feel that it is necessary to use both, in order to fully understand the written and aural aspects of the music.

Chan noted that "my teacher used the aural and notational strategy during every consultation. I think that mixture of aural and notated modeling is the most frequently used in composition lessons." He went on thus: "When my teacher wanted us to feel and listen to what the music is like before seeing the notation, as sometimes what we see is not what we hear upon first hearing, he first used aural models before moving to the notated models to show how it looks on paper."

In terms of the effects of modeling, Chan made the interesting point that "modeling could be a positive restriction," by sharing his own experience as a student.

> Students would be given an assignment with certain restrictions. For example, "to compose a duo for wind instruments"; "to compose using the bell sequence"; "to compose a trio, in any combination of the following instruments: voice, piano, violin, clarinet, oboe"; or "to compose a piece using only one motif." I think that such parameters not only helped me and my fellow students to focus on what to compose but also ignited musical creativity through musical problem-solving.

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. Chan has learned how to play the piano, flute, clarinet, saxophone, guitar, and violin. He feels that instrumental modeling is always physical, in the sense that it involves looking at the fingers/arms/posture and not so much the notation. He explained the characteristics of modeling strategy when it comes to teaching composition by saying "I feel that giving examples is very important for composition modeling. However, modeling has to be given with explanation, especially for novice students (i.e., a teacher explaining how the motif developed and what compositional techniques are used), to avoid having them exactly copy the teacher's given examples."

He added that examples of both successful and unsuccessful compositions should be given to the student so that he or she will see the more successful way of composing. "Examples also provide a base of referral for students when they are out of ideas or stuck on a compositional problem. These examples would then be creative tools for the students for problem-solving." Chan emphasized that the modeling used in compositional studies is different from that used in instrumental learning; this means that compositional studies do not require the teacher to demonstrate a particular technique but rather to make

known the different techniques through given examples so that students have a variety of creative solutions when they encounter compositional problems.

In composition, Chan values authenticity above all. Being authentic is just about not having your own compositional ideas but also who you are as a person. He added that into every piece of music, the composer's personality, style, and experiences of the world should be infused. He added that these days, new compositions seem to rely too much on techniques and the creation of sound effects. Even though the result might be musically novel, it seems to lack that essential authenticity of the composer, that "personal touch full of the emotions of the composer" that he values so highly.

Composition process

When asked to describe his composition process, Chan said, "First, I choose the instrumentation that I want to compose in. This sets the parameters of the piece." Next, he reflects upon his life experiences and the message he would like to convey in this particular composition. Sometimes, he writes the main melody first "by fiddling around at the piano"; at other times, he writes the introduction, then improvises in search of the main melody.

Chan added that "depending upon the instrumentation, I develop the melodic passage for about a phrase, then fill in the harmonic accompaniment on the other instruments. I use extended techniques when necessary to evoke a special feeling." Most of the time, he continues composing in this manner, adding the next phrase of the melody followed by the appropriate harmony. He added that "even when I generate many new ideas, I always seek to link back to the main motif through either rhythm or tonality."

When he has finished one section, "I think about the form of the piece, whether is it in two parts, three parts, or is a set of variations. This judgment depends both on the music I have written and the feeling I got when I listened to the playback." After he has finished the entire piece, he listens to the playback several times, checking its dynamics and harmonies and making amendments if they are not smooth enough.

The effects of modeling on composition process. When asked about the effects of modeling on his composition process, Chan replied, "Modeling helps me to move on whenever I run out of ideas. I can learn so many different aspects of music by modeling/listening to other great music."

The effects of modeling on novice/expert composers' composition processes. When asked to compare the effects of modeling on novice and expert composers, Chan spoke about how his views on modeling have changed over the years.

> When I was just a novice composer, modeling opened up many valuable perspectives on various aspects of music. Since I did not have any formal composition training before I started taking composition lessons at my college, modeling other great works was a crucial part of my composition learning process. Now, as an expert composer, modeling has become less useful, but I still find it useful as a refresher of what I already know and of what else I could know or have left out.

Other pedagogical approaches

When asked to describe other pedagogical approaches that were used in the composition lessons he received, Chan replied that "verbal description and feedback were always there during all the one-to-one lessons, and I found that to be extremely helpful."

> My composition teacher did not specifically teach me how to compose, or set any parameters for my compositions, but rather reviewed my compositions through consultation and feedback. Every class involved listening to the Midi playback of my composition on the composition software. After listening through my compositions and holding brief conversations about the inspirations and compositional intentions of that piece, we sought to determine whether my

> intentions had been expressed efficiently through my own music. Then we would have a discussion about what worked well and what could be improved upon.

He further described his composition teacher's method of using verbal description and feedback by stating the following:

> Usually, my composition teacher would ask such questions as "What could you do with this motif in another section?"; "Do these instruments sound good when played together?"; and "What if you played that passage of music on a different instrument? What would it sound like?" These questions not only prompted me to think about possible ways I could improve my compositions but also enabled me to imagine the sounds and interactions of instruments that cannot be heard just by seeing the musical notation.

In terms of feedback, Chan emphasized "the importance of giving constructive feedback." He noted that "I prefer a teacher who gives ample feedback on how to improve, rather than giving compliments" Referring to one of his composition teachers, Chan said that "the teacher was trying to be nice, and thus his comments on my compositions were just 'good' all the time, and thus it wasn't helpful to me." Chan broadened the range of feedback by saying that "in group settings, other peers also can provide feedback on one's composition."

Last, Chan noted the positive effects of learning different instruments as a composer. He said that "instrument-learning experiences helped me to understand the perspectives of performers and made my view as a composer significantly wider." He continued as follows:

> Learning several instruments has greatly helped both my creative thinking process and the final product. Instrumental knowledge makes me further aware of the kinds of music that are best suited to a particular instrument. For example, the flute and clarinet work well for running passages, whereas the clarinet is better at negotiating playing leaps and sudden and huge dynamic contrasts.

4. Interview with composition teacher – Carl

Background

Carl—a male composer and music educator—holds a master's degree from one of the universities in North Carolina and a Ph.D. in Composition from one of the universities in New York. He is currently teaching advanced composition, harmony, orchestration, contemporary music practice, and an advanced ear-training course at one of the universities in New York.

He has composed over 50 songs and numerous choral, chamber, and orchestral pieces that have been performed internationally by distinguished choirs and ensembles. Carl has received several awards, including grants from the National Endowment for the Arts and prizes for his Mass. When asked how he started composing music, Carl answered, "I began making music by myself prior to taking music lessons. I had a desire to write down my emotions by using music. I wanted to write down what I heard inside me."

Identification and characterization of different modeling strategies

Identification. When asked to identify the place of modeling strategy in composition, he said that "Modeling is not direct in composition. I do modeling for my students to show my thought process rather than expecting them to imitate my idea."

Specific modeling strategies used in the composition class. Carl was asked to describe the modeling strategies used in his composition class, and he replied, "I often use modeling strategies when I teach college students." Going into the specifics, he said, "First, I try to get some sense of where their passion is. Then once I have discovered that,

and what it might resemble, I point my students to a model. If they sound like Debussy, we go listen to Debussy. Or if they want to write something conservative or classical, we go listen to Mozart or Beethoven."

> If you're going to write an eight-bar phrase or a 16-bar period, it's like "okay, so this is what Beethoven does; this is what Mozart does; this is what Haydn does. Write something of your own." Maybe you just get them in another key or something, something to jolt them away, but follow that model. Once you follow that and observe and follow exactly four squares, like four bars plus four bars, eight plus eight, follow exactly the model, once they can do that, then say, "Okay, now break the model. Write a five-measure phrase. How are you going to write a five-measure phrase? You've got a four-measure. What are you going to do to make it five? Then what are you going to do to make it three?" Make it five plus three or do something that throws them off and then forces them to think creatively that they're breaking the model.

Carl uses multiple models to let his students learn different ways to compose a phrase, but his ultimate expectation is for his students to compose their own creative music by breaking the model. He said, "At the beginning, imitate, fine, and then find little ways of forcing them out to grow beyond that. Then you just build technique."

When Carl was asked if he was ever concerned about the possible repercussions of modeling, such as strict modeling killing the students' creativity, Carl brought up Miles Davis's saying that "it takes a long time to sound like yourself." He said, "I wouldn't fight it so much. I think it's perfectly fine for students at the beginning to imitate and model, because the act of composition, it's like an exercise for a while. It's okay for students to imitate others and sound like them for a long time because they aren't themselves yet. I think that it's okay for them because at least students can learn basic principles by just copying it down." He then further articulated why he believes that finding and studying models is essential for composition students.

> I believe in finding models and studying them. For the students who are not musically well developed, I think imitating a model is fine because I think that's

> where all musicians and creative artists, like in jazz, when you're training a jazz student, like somebody young, what the teacher mostly will send you to do is go listen and transcribe solos. You literally copy them, write it down, first learn to hear it, to write it down. That's really important. That's even much better than, say, studying a written score by another composer, because when there is no written score and you've got to listen to it, then you really absorb the music. Even if you can write something that's exactly like it or modeled very closely upon it, you've still learned an enormous amount. You've built technique, and you built technique as a musician.

Next, he provided his advice for composers who may be thinking about avoiding using modeling: "Unless a student is super creative and he doesn't need to cultivate the creativity since he's already got it, everyone is going to imitate something, since most people don't have the natural creativity." He continued thus:

> Nobody is coming up with the new stuff out of a band. You're always imitating something. You're always imitating something, somebody that you like. That's perfectly fine. You should listen to the music that you like and imitate it until you become yourself. But that comes about. You can't teach somebody how to do that. They have to live as musicians. Perform, create, perform, and create. Experience the world, and gradually, their voice will emerge.

When asked how he goes about choosing models for his students, Carl replied that students get a spark from the music that they like to listen to.

> If they're interested in video games like a lot of kids, that's what they want to write. Like, "Fine, okay. Well, listen to one, and write something like that." Show me that you understand it, and then now find ways of building out of the model. When I had students that were interested in imitating a classical composition like Mozart, I was like, "It's very hard to do that, by the way, but if you want to do it, it's a wonderful exercise. You will learn a lot." Whether it's a video game or something that they're listening to, they're going to imitate that. If you tell them just to be creative, just write anything you want . . . I would rather direct their attention, find out what they're interested in and then maybe direct it.

The interview moved on to discuss setting parameters and restrictions in order to cultivate creativity. Carl said the following:

> I think with very few exceptions, children can't really be immediately creative in music. It's hard. I think it's easier in art because you don't have to worry so much about . . . you can always get something down. In music, you have to be able to play an instrument, and you have to have some technique. You just can't

> bang around; you've got to have some kind of technique. So, I think that discipline is very important. For a college student, if they're serious, then you should really have strict models. And even if they're not modeling, they should set strict boundaries.

I then queried "Do you think that restrictions make students more creative?" To this, Carl responded by sharing what famous architect Frank Gehry once said: "The most difficult commission I ever had to make a building was when they told me 'Just make something, we don't care.' I need a very strict . . . I need a grid, and I need to know exactly what to do." Carl then shared how Stravinsky put it:

> Don't tell me; give me parameters, give me restrictions! I cannot write if I just take a piece of paper and try to write on it, I can't write. I have to put it up against something hard. And then when I have something that's resisting, then I can get strength from that.

Carl elaborated on the correlation between restriction and the creative process:

> The creative process is very different. It's like going on a car trip. If we get in a car and just go across the George Washington Bridge, we might go someplace interesting or we might not. I might just get stuck in New Jersey someplace. But if you say, "I'm going to the Grand Canyon, and I'm going to go here and here. I'm gonna go to this national park, I'm gonna do this, I'm gonna do this. It's gonna take me ten days." Now, see, you have a really interesting trip, and spend as little time as possible doing boring things. You know exactly how long; you map out the piece ahead of time.

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. When asked to address the differences in using modeling when it comes to teaching composition and instruments, Carl responded that "the use and the goal of modeling when it comes to teaching composition and instruments are different. Teaching instruments requires more direct/physical modeling as compared to teaching music composition."

Composition process

The interview moved on to discuss the composition process. When asked to describe it, Carl began by sharing his current opera-writing process: "I'm writing an opera right now, and one of the first things I did was write the ending. Just like I do with a little piece of counterpoint because I want to know where I'm going."

> I certainly can't write a drama without knowing how I'm gonna end. And I have to have a very clear idea like a map for a trip that I'm going to take. I have to know where I'm going, and how I'm going to get there, and what I want to do. Even if I want to take a circuitous route, I still want to know so that I can do interesting things.

With respect to his opera-writing process, Carl said he comes up with a scenario, then summarizes the whole story, and then lays out the acts and scenes. In that way, he creates a basic map. After he has drawn the map, he starts writing the text that tells the story and infuses emotions into each scene:

> I look at the text and then decide what musical structure, what musical style it suggests. Then I go to the musical model and structure the text to fit the musical model. It's both. It's going text, musical idea, back to text. They shape each other. So, in that regard, it then fits much better, and you get a much more satisfying creation because the music, it ultimately drives the piece.

When asked to describe the process involved in his songwriting, Carl said the following:

> First, I'll look at the poetic texts. If it's in verses, then that already suggests a musical structure. If it's not in verses, then I kind of have to look at it and decide what the structure of the poem is. What's the emotional structure? At what point does . . . where is it leading to emotionally?

Carl further emphasized the importance of following emotions rather than following the musical structure by saying that "your music has got to follow that [emotion]. So, you have to devise a musical structure that is going to support that. It

might be a strict one, or it might not be a traditional form at all. You may just have to make it up."

The interview moved on yet again, this time to a discussion on the concept of conflict in the music-composing process. He began by saying that "there needs to be a conflict. Structure in music is created by working out conflict. So, set up a conflict. A little seed of conflict will develop into a big structural conflict." He elaborated on the concept of conflict by comparing it to the process that creates a pearl:

> What creates a pearl is sand, a bit of sand in there. It needs to be an irritating conflict . . . something it might be. So, if I look at their music and maybe there's some accidental or there's something that takes me in a different direction that I didn't expect, then I latch onto that. Like, that. "This is all white notes, but you put a G sharp there." Or "Everything is a triad or a fairly constant, but then you've got this tri-tone and a half-step here." There's something that's odd there. That is going to be your new key area. So now when you move to another area, what was an odd thing there is now going to be the main thing.

When asked to speak about other ways to compose music, Carl began by describing the influences of technology on 21st-century composers' composition and creative processes:

> In Hollywood, musicians and orchestras are not playing actual music anymore. It's all done digitally with sampled sound. These days computers can play anything so composers who even don't know how to read scores can make music. For example, Hans Zimmer; he doesn't know how to read music and can only write in one key, but he is one of the wealthiest and one of the most successful composers.

When asked to further describe the influence of technology on the composers' creative process, Carl began by noting that "technology cannot be avoided. You just cannot avoid it. So, we have to figure out how to make it . . . to be creative with it." He said that even during his class, he usually reviews students' scores by assessing an audio file that the student has made. Carl has his reservations in this respect, however: "Audio

files make the process of sharing composed music easier. However, I think that it's a problem because whatever you put in, the computer will play. That doesn't mean a human being can play it." Carl continued: "In this century, the technology has circumvented the composers. Most composers go straight to the computer and make music."

Carl believes that "any 21st-century composer has got to learn how to work with the computer and the technology and to manipulate sounds into sample sounds because, in this period, the creative process has to be interacting with the technology."

The effects of modeling on the composition process. When asked how his own composition process is affected by modeling, Carl replied that he is always helped by models, before and during the composing of new music. He elaborated by recalling his experience of writing an opera based on the life of Nelson Mandela:

> I used to always go with notated models. But when I wrote an opera on the life of Nelson Mandela 25 years ago, there was not much South African music recording, and there was no notated African music. The recording was very limited, but I found a few, and I notated them, and I ended up making my own notated models.

He gave another example of using modeling during his composition process:

> These days, I'm writing an opera about an African American artist, about an activist who was a singer herself, and nowadays it's very easy to find recordings as compared to 25 years ago when there was no YouTube. So, I notate them. And also, I have some other models I've chosen from the world of pop music, so I have to write down the music. I have to notate it. And that's more like a jazz musician, where you have to listen and note and transcribe. That to me is really important, because the task of notating is hard, and it makes you listen really hard.

Eventually, Carl pointed to the optimal ways of using modeling during the composition process by saying that "if I had listened and found recordings and notated

them, that would have been a more productive way. That would have been more interesting."

The effects of modeling on novice/expert composers' composition processes. When asked about the best ways to use modeling with novice and expert composers, Carl shared his belief that "regardless of the ages and levels of students, the exercise of listening to aural models and making your own notated models can help students to absorb different composition techniques thoroughly." Carl further emphasized the importance of "the process of listening to aural models and making your own notated models."

> To write down takes a good ear and good technique, and you build technique. Then as a composer what I've found, and this is true, I know it's true for everybody; when you struggle to figure out what they're doing, especially if they're doing something really hard, then you've absorbed it, and now that's your technique. You can now do it.

Carl then further described how this process can also help beginning students to learn notation:

> So, this idea of listening and notating, I think it's important. I think if you can get little kids to do it, just as long as they don't think it's work, just as long as they think they're creative . . . And then, over time, if they're serious, then they need to transition. It's kind of like the Suzuki technique. I don't know much about it, but I do know at the beginning they don't read. They just imitate. Then getting them to read is sometimes difficult. They have to, at a certain age, start learning how to read.

Other pedagogical approaches

The interview moved on to discuss other pedagogical approaches. He began by describing the assignments he gives in his class. "Every semester, there are two assignments. For the first assignment, students should write for the instrument that they play and they're comfortable with." He added that "for the first assignment, I expect my

students to feel free to experiment and venture out because they are familiar with the chosen instrument. For the second assignment, writing for something they have never written for, the students tend to go conservative with composition, but they could learn how to write for the new instrument or new genre." In terms of giving two different assignments, Carl said:

> You should always be writing for something you're comfortable with and exploring new sounds and new techniques and harmonies and ways of thinking. But you should also be learning how to write for new instruments. So, after three years, you pretty much know how to write for all instruments. But you've also expanded.

When asked about other helpful approaches/qualities that composers should inculcate, Carl responded, "I want my students still to perform, because students will grow as musicians by performing other peoples' work." He added:

> I often insist that my students perform as much as they can, even if they want to be a composer and they aren't very good performers. They just need to keep performing and growing as a musician. They can't just be a composer. I think that all . . . over the years of performing, studying composition, mastering certain models and deriving, over time, if they're creative, they'll start to get more comfortable creating their own thing.

Last, he shared his thoughts regarding the most important quality that a 21st-century composer should have. He mentioned that "for me, the most important kind of trained 21st-century musician is someone who can improvise and read. Someone who can perform and compose. That they're not separate activities, so kind of a jazz musician is a good model. Though jazz musicians will not write, read, and even if they read, they won't play from the score. Strictly improvising."

5. Interview with composition teacher – Peter

Background

Peter is a composer, cellist, and conductor. He earned his master's and doctoral degrees at a conservatory in New York. He taught composition at a university in Washington and taught composition for majors and non-majors, chamber music, orchestration, music theory and advanced tonal analysis courses at a university in New York and taught elementary-level students at a Community School in New York. Peter has been taking and giving composition lessons over 15 years.

Peter has composed numerous choral, chamber and orchestral pieces, which have been performed or commissioned by distinguished symphonies, choirs, and ensembles. Peter has been composing music since he was seven; by the time he was 14, he had composed many pieces. The earliest influence upon his composition learning process was his family of jazz and pop musicians. While performing and sharing ideas with family members, he also learned many techniques from them. The next big influence was a professor at MSM. Peter values him as the person who encouraged him to find his own color instead of forcing him to adapt to the standard pedagogy. Peter's approach to composition has always been very hands-on, as he was always directly related to performance and to the properties of specific instruments.

Identification and characterization of different modeling strategies

Identification. Peter emphasized that modeling is essential for him as a composer. He said that "the idea of being and having an influence, having a model and then offering a model, to me is like breathing." With respect to modeling in composition,

he said that "In composition, modeling is not direct. It's more of a, instead of saying, 'here's the treasure,' I'm saying, 'here's the map to the treasure.' Or 'here's the key.' Instead of 'here's the door,' 'here's the key to the door.'"

He believed that "modeling has deep roots within the classical tradition," citing a famous statement of Ravel's: "If you get a block or you can't decide what to do, or you can't think of anything, choose a model." He added that "even when you think of Ravel's own music, most of his pieces are inspired by another piece, by another composer, by a style. The Jupiter Symphony would not exist if it wasn't for Mozart's love of Bach." Then he shared Stravinsky's statement, similar to Ravel's: "If the composer doesn't have anything to say, then they're just going to wind up copying, but if they have something to say, then the model becomes a useful springboard."

As one aspect of his broad conception of modeling, he suggested that many great composers have in a sense used their whole environment as a model:

> Mahler, Beethoven, Schubert, Monteverdi, almost all of them, of course, were responding to the immediate culture around them. Mozart is an incredible example because he traveled all over the world, assimilating the culture-music around him, the gypsy music, the salon music, and the other kinds of folk music. There's an argument to be said that Mozart might be the least original composer ever. Mozart wasn't directly copying or not copying other music. Mozart was influenced by all of these different musics and assimilating and synthesizing them. In Mozart's short life, he traveled all over the place and so absorbed Italian opera, the symphonies of Gluck, etc.

After providing the above example, he rendered his conclusion that "what an artist, I always think, essentially does is to assimilate and then to distill."

Specific modeling strategies used in the composition class. When asked to describe the modeling strategies used in his composition class, he began with "the idea of learning through modeling. It started to happen when I was playing music with my family

members when I was young." Peter added that "the idea of learning from each other, sharing records, sharing techniques on the guitar was way important for them, and these can all be deemed aspects of modeling in a broader sense." In his composition classes, Peter does use modeling by having his students rethink and reshape particular works, either their own or those of other composers. He added that "by closely looking at a great piece, students can learn so much about the techniques of composition."

With respect to the different types of modeling, Peter said he favors the broad-based sorts of modeling, such as those that let the student explore an instrument's tonality through another composer's score; however, he also is a great believer in old-fashioned note-for-note direct modeling. He said that in his composition classes, he often asked his students to simply copy by hand a great score, saying that "The act of just like literally copying every note . . . it forces you to see how they all relate to each other. That's very valuable. Students can learn so much about how the notes are related to each other." When asked about the positive effects of using models, Peter replied:

> Models could make the work more manageable by playing the role of a positive constraint. I mean just like, for really beginner students, you just can say, like "only use this note" or "only use this rhythmic pattern to make it." That could help them to make the work more manageable.

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. When asked about similarities and differences in using modeling strategies in those two areas, Peter replied that "during instrumental lessons, direct modeling, such as exact melodic repetition, is often used. There's a more technical aspect to giving instrument lessons. That sort of direct modeling is actually easier and more restful for the teacher than the other more indirect sorts of modeling that are often used during composition classes."

Peter went on to say that when it comes to teaching composition, he rarely uses direct modeling; instead, he tries to let his students acquire certain conceptions or ideas through indirect modeling. “It’s much more challenging to go ‘What is this student’s needs, and what am I going to say that can really be of help?’” He further shared his concern regarding the use of modeling when teaching composition by saying that “the degree of modeling, possible options, is not an easy thing to decide. It is hard to decide how much he should structure and guide.”

Composition process

When asked about his composition process, Peter began by saying that “The idea of performing and creating music is, like, they dance together.” He added that his fluid and eclectic composition process stems from his background of having grown up in a family of jazz and pop musicians, where no distinction was ever made between composing and performing. He added that the instrument-based approach he often takes when composing music is an attempt to get his students directly into the feel and sound of music, as an antidote to the more abstract and sterile nature of composing either on paper or by making use of the *Finale* software. In terms of making music by solely using software, he said that “I do take advantage of the playback, but it’s a tricky thing. Sometimes, you can start composing to the playback instead of really hearing, really imagining, really composing idiomatically.” He warned about the overuse of playback by saying that “using the mini playback could be a certain kind of modeling, and an overuse of this particular type of modeling could make the sounds all the same, and this particular form of modeling is injurious to true creativity.”

The effect of modeling on the composition process. When asked about this issue, Peter noted that modeling is "an integral part of my composition process." He added that "all of the great composers are my teachers." He says he has learned so many things from those written notated models, and "that's what I've tried to encourage with my own students in the kinds of models that I've shown. Mahler was my model. I never learned so much about orchestration as through his music."

The effects of modeling on novice/expert composers' composition processes. When it comes to this topic, Peter noted that the degrees and ways of using modeling do indeed depend upon the student's track record, or lack of it, as a composer, along with the presence of his or her innate talent.

> Students who always been involved with music, their music tends to come out of them naturally. For these students, wherever they were in their musical development, I could latch onto that and help them. However, for students who never composed anything in their life and came in as a blank slate, starting from imitating other composers could be the only option that could help them since these students don't have any ideas of their own yet, unlike talented students who would come in with well-shaped ideas and desires.

Peter added that when it comes to teaching relatively untalented students, the challenging part for him is "selecting the kind of model that would work best for that particular student."

Other pedagogical approaches

When asked to describe any other pedagogical approaches that he has used during his composition class, Peter replied, "One of the oldest pedagogical approaches is engaging in dialogue with the student."

Peter also believes that it is very valuable to fully explore the sounds of the instruments by playing and listening to music before composing for that instrument. He

noted that even for very young students, the sounds they hear while playing instruments can be used as colors to help them build a piece. He added that what students play is immediately linked to what they like. For this reason, he has always found the experience of playing different instruments really valuable.

Peter went on to suggest that a similar instrument-based approach to composition can be utilized, by very young students as well as graduate students who have composed a good deal of music. He added that these days, students are used to notating a piece on the computer. With respect to that practice, he said that "sometimes, the shape of the piece can be beautiful, certain expressive ideas of the piece can be really beautiful, but oftentimes what tends to be missing is a real sense of identification with the instruments." He emphasized that in order to compose in a way that is truly idiomatic for a particular instrument or collection of instruments, the process of exploring and playing the instruments is crucial.

He added that besides simply copying great scores, the process of "making arrangements of other pieces or orchestrations of other pieces" is great practice. In this regard, he shared the example of how he brought his own approach to modeling to his work with a student who had not written much vocal music. He wound up having her orchestrate a short Schubert song, "to just simply orchestrate the piano part to really feel the relationship between the piano and the voice, like a real connection."

6. Interview with composition teacher – Jane

Background

Jane—female, composer, and music educator—received her doctorate from one of the universities in Illinois and she has a 30-year career in music education from early childhood to graduate level. She is currently teaching composition pedagogy at a university in New York. Her research addresses the impact of teacher-imposed structures on students' composition and focuses on the revision process in those compositions. When asked how she started composing music, Jane answered, "I have been composing music since I was young. Even before taking any formal music lesson, I always had a desire to write music inside."

Identification and characterization of different modeling strategies

Identification. When asked to speak about her use of modeling in music education, Jane replied that she often used modeling to expand students' boundaries. She said:

> When students are stuck in their own composition style or try only to write a certain genre of music, sharing other people's interesting work could help them to push their boundaries. Once students find interesting new music, they often try to imitate that sort of thing to make it their own. Children sometimes get into a rut, where they write the same piece over and over again. Everything they write comes out sounding like that, so you have to push the boundaries. I think that's another place where models come in really handy.

Jane added that "modeling happens when students are exposed to new genres of music and try to imitate the music that they are not familiar with by adding some new ideas to make it their own."

Specific modeling strategies used in the composition class. When I asked, "How do you choose the right modeling strategy for your students?", Jane replied that she considers three things: "How much musical knowledge do they have? How much composition experience do they have? How old are they? It depends. I really think it depends on those three things. It depends on what you're having them see. Students may be already familiar with the models."

The next segment of the interview concerned the effects of modeling on students' creativity. When she was asked to share her thoughts on this subject, Jane replied that "total freedom is never good with children." She elaborated on how different conditions of structure can affect students' compositions by sharing her own research. In her dissertation, which investigated how different conditions of structure affect the students' compositions, she gave students a motive and let them write a piece that creates a specific mood of their own choosing. She further described her study in the following manner:

> 20 students participated in this study. However, in general, the more structure you provide, the less creativity you will get. But no structure is less creative than some structure. With respect to the condition of absolutely no structure versus a really tight structure, both of them tend to impact creativity, and everything else falls in between.

With regard to this issue, she made the interesting point that "giving structure could help students to learn composition techniques by making composition more manageable. However, if a teacher is looking for expressive compositions, restrictions could be an obstacle." She continued as follows:

> If you say to a child "Make up a piece that uses just . . ." Teachers do this all the time. "B, A, and G," those three notes, or "Just the black notes of the piano," or "Just the" whatever, and that it has to be in 4/4 time, and it has to have a four-beat phrase, then you will get almost no emotional impact because you don't give them the chance to be creative. If you say to a student, "you can use any notes you

> know how to use, and make up a piece that sounds scary," you will get original ideas.

She further commented that "depending on the teacher's goal, whether she or he is trying to teach students how to notate or is looking for expressive compositions, the teaching pedagogies should be varied."

The interview moved on to discuss the use of different kinds of modeling in composition lessons. Jane began by noting that "models are not limited to music. It could be poems, pictures of scenes from a calendar, mountains, and waves of the ocean." She then added that "the idea behind models is often choice, giving them a choice of models." She shared her use of poems as models by saying that "I give seven poems as models to choose from, then let the students pick one of these to use as an inspiration of composition."

In the next portion of the conversation, I inquired about the use of aural modeling. Jane began by sharing her use of listening as a part of a composition exercise. She referred to "listening to recordings and following a listening map. A diagram of how the piece goes, or a pictorial graph of how the pieces go." This pedagogical approach is called "guided listening." She often plays a couple of highly contrasting movements that are related to the given assignment without commenting on them, just to let her students see how professional composers handle them.

Regarding the use of aural models, Jane said that "for novice composers, the experience of exposing them to all different kinds of sounds and having the opportunity to manipulate them will let them build a sonic palette or aural palette."

> The more sounds you're exposed to, the more sounds you can use in your compositions. That's related to the genre, but it's also related to timbre and knowing how to manipulate those sounds. The experience of "sound exploration,"

> exploring different ways to make different sounds such as high and loud, high and soft, low and loud, could help students to have an aural image in their head. Helping them develop those images and helping them understand what sounds sound like, and how that impacts the way your music feels, is part of what we're doing. It's the actual sound sources.

She continued: "Another place that models are really helpful is at the end of the lesson after they've done it, to show them how a composer did it." Jane emphasized that for her, the best approach to composition starts from the students' feeling-full intentions as opposed to "how to do it" instructions. She insisted that real composition is based upon feeling. It's all about "What is it you're trying to say? What are you trying to convey?" Jane further described how she uses models after her students are done composing. After her students composed seasonal pieces throughout the school year, she eventually played them some of Vivaldi's "Four Seasons" and some of Tchaikovsky's "Four Seasons." She added the crucial point "but not to start with, at the end. Because then you're building toward the future. If they do that activity again, they have the professional models to go from. If you start them with the professional models, they'll give up before they start."

> We've tried it both ways, where we give them the jazz examples first and then say, "Okay, now make one," and where we play the jazz examples for them afterward. With my older students, my college students, I tend to play them afterward, because I don't want them to feel they have to write jazz poems. With the children, I've done it both ways. I really think saving the professional composition models for the end works better than it does to play them at first. Again, it's a question of them wanting to do it right, as opposed to them wanting to do it. I don't worry too much about the rightness of it.

Similarity/differences in using modeling strategies when it comes to teaching composition/instruments. When asked about this topic, Jane replied that "in both, composing and instruments, it has to do with the age of students and their level of experience." Then, she shared some thoughts regarding the use of modeling strategies when it comes to teaching instruments.

> There are people who say that the Suzuki method is bad because the kids listen to the recordings, and they imitate the recordings. That they imitate them so exactly, and so forth and so on. I don't buy that. If I could make every young violinist sound like Yo-Yo Ma or Itzhak Perlman, I would do it. But it never works that way. Just because they listen to those recordings doesn't mean they don't develop any artistic-ness of their own.

However, Jane said that the approach to modeling strategies in composition and in instrument instruction should be different.

> Teachers who have a performance mindset tend to make a mistake when they teach music composition because they want everybody to succeed and want everybody to be perfect, but composition isn't like that. When it comes to teaching composition, teachers should give students the structure. Then they can have the ideas to start from, and they can go on from there. Teachers must accept the different talents of students. Because children who have had piano lessons, or clarinet lessons, or whatever, are much less creative in what they produce because they want it to sound "right." Their definition of "right" is very different than ... Their definition of "right" is often idiomatic rather than creative. That's an interesting whole field that nobody's investigated a whole lot is how does instrumental experience affect children's compositions?

Composition process

Jane believes that students will create more expressive pieces if teachers encourage them to "start from a feeling, even if you're looping software." She disagrees with the approach of "just turn them loose and let them do it." She said, "I think that it's better if they think about it before they do it, rather than just mess around." She supported her idea by saying the following:

> Real composers don't sit down at the keyboard and say, "I'm going to make up a piece," and then they sit there and doodle until they do it. Okay? That's not usually it. The technology is like notation. It's a tool. It's not creative ideas, which is . . . organized sound. Expressive sound. That's what composers try to do. It's not about what tools you use. This is about your ideas, and how you communicate them.

She added that "if you start from the feeling, and 'how does music sound like that,' even using looping software, you'll get more expressive pieces."

The effects of modeling on the composition processes. Jane gave an example of her way of using modeling when she is working with young students.

> If we're making up songs, we might make the chorus of the song up together, but the groups of children or individual children may make up the verses. So that they have some structure and modeling from making up the chorus, but that there are other opportunities for their versions of things to appear. The older the child gets, the more I am inclined just to give them the directions and turn them loose.

She said that "if you provide a model, you have to provide two or three, or they will do exactly what you said, especially young children will." She then added that for this reason, when she does use a model, she tries to give her students some structure and directions; however, she also gives them options to consider these things as opposed to her just giving them the exact model to imitate. She elaborated thus on the reasons for giving multiple models:

> If you're going to say to a student, "Have you thought about trying it this way?" or "This way?" or "This way?" so that you give them three or four different ways of doing it. I think, quite frankly, advanced composers benefit from being given multiple models, too. If you don't, you tend to stifle the composer's voice, their own voice.

The effects of modeling on novice/expert composers' composition processes. When Jane was asked to compare the effects of modeling on novice and expert composers, she replied as follows: "The effect of modeling could be varied depending on the musical experiences of students, such as can they play an instrument, what do they know about music and their composition experience." She gave an example of how students' different proficiency levels can impact the effects of modeling, saying that "inexperienced composers do better without the models because when you model it, they think that's what they have to do." With regard to this issue, she further responded that "young children tend to be more influenced by teachers' modeling because they want to

please you. However, teenagers who aren't so interested in pleasing teachers are less affected by teachers' modeling." Therefore, Jane emphasized that

> With young children, I think it's really important to do as little modeling as necessary to get the idea across. Unlike professional composers who already have their own voices, novice composers don't have their own voice until they have some experience. In other words, novice composers' music could be greatly influenced by other's music.

Other pedagogical approaches

Jane differentiated among assessment, grading, and evaluation. She said that "assessment" is a formative assessment, conducted by composition teachers during the learning process in order to get students moving forward, make progress. Evaluation is a summative assessment that happens after students submit a completed piece to the teacher. Grading is the rating and/or grade that students receive at the completion of the process from the teacher. As a composition teacher, she suggests ways to use them effectively so as to enhance students' improvement.

> One of my standing rules that I give teachers is "Do not grade first attempts." If you're going to give a grade, make sure they've done the activity like that very similarly once before. Because otherwise, you're grading the first attempt. I don't want anybody grading my first attempt at anything I do, all right? I need to practice it and try it out a few times "before I get graded." Then the rating is something that I can work toward once I've tried it. What I tell teachers is "if you're going to grade the students, do an activity at the beginning of the semester for practice" They do it, and they learn it. Then at the end of the semester, repeat the activity and see if it's any better.

She added that "I really feel schools place way too much emphasis on grades, anyway. It should be about progress." She suggested that a good way to measure students' progress is to "design an activity, teach it, have them do it once or even more if you can. Then, in the end, have a rubric and have them do it again, and show you what

they can do. Emphasize to the students that you want them to show you what they've learned."

7. Interview with composition teacher – William

Background

William—a male composer, trumpeter, and music educator—received his master's degree from one of the colleges in New York, his bachelor's from one of the universities in Georgia and is currently pursuing his doctorate in Music Composition from one of the Universities in Minnesota. He has been composing for 15 years and has taught composition for five years at a university.

William began playing the trumpet when he was 14 years old. Soon, he had written a list of trumpet music using the composition program *Finale*; however, he did not really start composing until he was 15 years old, and he had his first composition teacher when he was 19 years old. He was entirely self-taught until he got into college. He listened to a lot of film scores, taught himself how to write music in every clef, and learned rhythms by listening to band music and by studying orchestral scores. Thus, he has a broad range of composition techniques gained, almost entirely, through reading and listening to music.

Identification and characterization of different modeling strategies

Identification. When asked to speak about the use of modeling in music education, William replied that he often uses modeling "to introduce performance skills or musical concepts." He added "I often use modeling to demonstrate musical concepts such as phrasing, dynamics, before students see the score."

Specific modeling strategies used in the composition class. William began by describing the composition class he had been taking then: a one-on-one composition class with his former composition teacher at one of the universities in Minnesota. He says that his teacher's teaching style is very laidback as compared to most teachers he has had. His composition teacher does not give a certain type of assignment or requirement but rather feedback based on what his students bring in. William added that it can be challenging for some students to figure out what they need to do. In William's own case, he generally brings around 20 or 30 bars each week, and his teacher goes over those. His teacher often asks him to play it back a few times and find spots that do not fit well together. Then, William and his teacher go over those bar by bar, usually starting with harmonics and then going into rhythmic changes.

When asked about the modeling strategy that his teacher uses the most, William replied "aural modeling." His teacher likes to play YouTube videos of various pieces to show him possible options. William thinks that aural models such as these YouTube videos can be very helpful but that teachers should be specific as to what he or she is showing on the videos. He added that "listening to an entire movement from a violin concerto [on a video] actually wastes a lot of time because one's point is made within the first forty-five seconds." William then added that "I feel like you get a more positive effect if you have a score accompanying it than if you're just listening." When asked why he finds such a combination of notated and aural models to be more helpful, he responded as follows:

> I think as composers, especially as young composers that are trying to figure out the way they're doing things, I think we get a lot of insight from seeing how other people have written things down. I feel like a lot of confusion comes from

> not necessarily "what do I want?" but "how do I want to demonstrate that in a way that other people will understand?"

He added that "you can't visually write something unless you've seen it done. Otherwise, you're making things up that people could interpret incorrectly."

William then pointed to the importance of finding a good balance when it comes to using models, doing so by sharing his experience as a novice composer. He said he was very affected by what he was listening to. "Before I started taking lessons, I did nothing but listen to film scores. My compositions up until the middle of my bachelor's degree sounded exactly like film scores all the time." He added that "I was beating myself over the head with film scores, and I started sounding exactly like it, and there's nothing I could do to get away from it." He went on as follows:

> You have to gain your balance, because I feel like if you give too much listening, then people will try to emulate what they're hearing more than coming up with something that is inspired by what they're hearing. I like to think of it as, if you're writing a string quartet and you listen to everything Beethoven's ever written on string quartets, you're probably going to write something that sounds like Beethoven. That's not good now, because Beethoven is way out of date at this point. You need to be listening to many, various artists and composers and not just one specific thing, where you just beat it down your brain until you get used to it.

Then, William shared his composition learning experiences with his previous teacher, Min Jie. He said that unlike his current teacher who mainly uses aural modeling as a teaching pedagogy, his previous teacher used lots of notated models. He said she often brought in different scores and they analyzed them together. Then, she would ask him to write music in the style of the composer. He shared an example of analyzing Schoenberg's music. He said he did some matrices stuff for Schoenberg pieces and it taught him a lot about 12-tone music. William added that "this process really helped a lot

with finding things that you like and that you don't like about composers, to find your own voice." In terms of her use of aural models, William said the following:

> Instead of listening in class, she would give me examples of what I should be listening to when I go home. Every time I would be taking notes, I'd have probably ten or 15 different pieces that I have to listen to when I get home, and she would give me sections of each piece instead of just like, "you should listen to this."

William emphasized that one of the most effective composition teaching methods involves showing the students how to use a certain compositional technique by giving short, 8- to12-bar excerpts and telling them where in the piece they should listen. He added that by listening carefully to excerpts from Beethoven pieces, he learned about melodic transformations, whether they be inversions, augmentations, or diminutions. Conversely, listening to excerpts from Mozart's pieces taught him how to create whole new pieces out of his own melodies.

With respect to optimizing the effects of modeling, William believes that the length and quality of the models are important; however, he also states that finding the perfect moment for modeling is crucial. He said that when he gives composition lessons to students, he tries not to show them anything that would influence them until after they have slightly developed as composers. "I don't give them anything until after they're done constructing something. So, I start giving modeling whenever they start getting to the point where they can construct full ideas." When his students have finished constructing some musical ideas, he then gives them examples of how to finish their ideas and/or how to bring everything together into one. He also provides the students with a couple of models (examples) as a form of feedback. "I'll give them a couple of examples of why it (what they have written) doesn't make sense, and we'll go over it

with some other music so they can actually model after other people and hear how other people incorporate this."

William believes that aural-plus-notated modeling is the most effective way to go. "Listening with a score is my preference because that really gives them an example, audibly as well as visually, of how people are constructing things. It's been the most helpful for me. I have binders of, like, four orchestra pieces that I've just gone through and gone through and gone through." Whenever he finds something he really likes, "I circle it, and then I burn it into my memory forever." He added that the process of listening along with the score also helps him improve his notation.

William shared a negative experience of a teacher's over-use of modeling as a cautionary tale. He had to write a piece using a matrix, and he was allowed to decide the pitch order; however, after that, he had to emulate Schoenberg's pitch order. He said that in such a case, he feels that the student not only has the pitch order defined but the composition style defined as well. "It left me with almost no creative control of what I'm doing because if you're emulating someone else and you have all the pitches designed for you, I feel like it really takes all of the creativity out of your hands. Whenever you're following a set list of instructions on how to write something, it gives you a lot less room to be creative with what you're doing." William respects the pedagogic usefulness of modeling; nonetheless, he is cautious about it. "If you're doing it in small doses, it's a great tool, but if you start relying on it to come up with everything, then you're going to fail yourself as a creative person. It's a lack of creativity when you start imitating."

He emphasized that the types of modeling should vary depending on the level of the students. He said that for novice composers, it is important to choose models that are

as simple as possible, such as the simplest example of a quiet ending and the simplest examples of slow endings, fast endings, exciting endings. He added that when he works with novice students, he just shows them a piece for piano or piano and voice, and always in C so that the students do not have to do any transposition. He also usually stays away from the viola because, generally, young kids cannot reach all of the clefs.

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. William has learned to play the trumpet, piano, and a little bit of horn. He believes that "you're a lot more inclined to model after your teachers with instruments than with composition." He said that when it comes to private instrument lessons, "a lot of teachers play everything for you, and you emulate them almost as if you're playing by rote." He added that "in composition, you're supposed to create your own voice, whereas on instruments, at least while you're taking lessons under someone, your goal is to become more like that person."

Composition process

When asked to describe his composition process, William said that, first, he usually comes up with the instrumentation, then he begins to improvise something on either the piano or the trumpet. After he has improvised for a while, he writes down the melody and then starts "just messing with the melody for a bit." When he has come up with 15 or 20 different examples of how he wants the melody to go, he then starts to think of ideas for how he wants to accompany the melody, such as if he wants a counter-melody, just chords, rhythmic accents, and so on. Then, once he has come up with a general plan, he starts writing things out bit by bit. William added that the more

instruments there are, the longer it takes, because then he has to decide what colors he wants.

The effects of modeling on the composition process. When asked to share his thoughts on this subject, William said the following:

> Generally, what I'll do is while I'm working on a piece, I will try my best not to listen to a lot because I generally tend to sway towards whatever I'm listening to. If I'm writing, like, I'm working on an oboe and piano piece right now. I don't listen to anything with oboe and piano in it, like just solo oboe and piano. I'll listen to ridiculous stuff like the Jackson 5 and pop music. But when I get stuck, then I'll start listening to things. So, I try not to listen to anything until I get stuck, and then I'll listen to some stuff for inspiration.

The effects of modeling on novice/expert composers' composition processes. Speaking to this issue, William said "great works can be an excellent model, especially for novice composers who want to improve their techniques. However, for advanced composers, the goal of modeling is different. It's more like to get inspired by other music, rather than trying to learn techniques."

Other pedagogical approaches

When asked to describe other teaching methods he has used besides modeling, William said "feedback and analysis." He continued thus: "Giving appropriate feedback is an important teacher role. When I found a clue about a student's creative idea, I tried to help him to develop it."

8. Interview with composition teacher – Min Jie

Background

Min Jie is a female composer, pianist, and music educator. Born in China, she was a known piano prodigy by the age of five. She received her bachelor's and master's

degrees from one of the conservatories in New York, and her doctorate in composition from one of the universities in New York. Currently, she is teaching composition at one of the universities in New York. Min Jie's music has been commissioned and/or performed by the New York City Opera, American Composers Orchestra, Detroit Symphony Orchestra, The Minnesota Orchestra, Fort Worth Opera, Music-Theatre Group, ICE, Curtis Symphony Orchestra, Continuum, among others.

When asked how she started composing, Min Jie replied "by doing Solfege." She could read music when she was just three years old, and she started composing simply by writing what she liked. Her piano teacher, who also helped her with her compositions, often told her "all these composition stories, and stories of composers and stories of instruments." After she auditioned to be a composer, she was admitted to various programs and granted scholarships.

Identification and characterization of different modeling strategies

Identification. When asked to speak about the use of modeling in music education, Min Jie replied that she often does modeling "to try to guide students by making suggestions."

Specific modeling strategies used in the composition class. When asked to describe how she uses modeling to teach music composition, Min Jie opened up about her approach to teaching composition. She said that "it is the combination of three steps which are establishing paradigms, building notation skills, and enriching inner ear." She shared her process of "modeling existing music" during this period of "establishing paradigm."

> Our ears are learned and trained from these historical paradigms, so this is . . . for me, it was a solid ground to start. The paradigm period is characterized by a lot of writing in different genres of music by modeling existing music. For example, I've gone from writing canons to writing motets to writing fugues and the whole development of musical forms.

The question then was what kind of modeling strategy she used during the period of "building notation skill.". She replied as follows:

> My teacher would play me different options that he sees and he hears that I was not aware of, and so what I discovered was that so much of what is preventing me from realizing my own compositional voice was because my notation was so unclear and so open to interpretation.

When asked what kind of teaching approaches were used during the "enriching the inner ear" period, she replied "my teacher would just sit there and look at my score and say, 'Here, add this here. Add this there, and you over-wrote here, but you under-wrote here.' She elaborated further on that period: "I had so little experience with orchestra, whatever suggestions he gave me, I could not hear so well; but as soon as it's played by an orchestra, it was a world of difference, and I think that really enriched my inner ear for the larger forces." She went on to say that "combining these three steps of how I learned composition is what I do for my students at different stages in their academic careers."

In the next portion of the conversation, I inquired about the types of modeling she uses in her composition lesson and their respective effects. Min Jie began thus: "I do modeling to help undergraduates who are at the beginning level of learning to effectively translate what's in their head, to improve their comprehensive notation skills." She then gave a specific example.

> I will show them how to notate this idea my way, and then they can take it or leave it, but most of them thought, most of the time . . . and they would be like, "Oh, yeah yeah, that's actually what I heard. Ah, that's clearer." And then I will

> play what they wrote on the piano, and then I will play what I notated, what I think they want to notate, and then I will play it on the piano. I want them to tell me which one sounds more like what they heard, and then most of the time, they will prefer my notation, and then they'll go home and incorporate that. So that's almost like rolling a snowball, so each lesson, with each solution I give them, they're able to get at least a sense of what clear notation is about.

When I asked Min Jie to speak about other types of modeling, she replied thus: "I give repertoire lists, and students have to study these pieces in order to understand what is the true ear to that sound world, to the best teachers in that sound world."

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. Min Jie differentiated between instrumental and compositional modeling by saying that "instrumental modeling is the more visible form, but composition modeling . . . I think, it has to do with a lot more invisible and a lot more versatile styles of modeling." She added that "unlike instrumental skills, the composition skills and techniques are invisible, it is very difficult to show."

Min Jie explained the goal of her use of modeling in her composition lessons by sharing how her piano professor used modeling as a teaching method, one that she has come to emulate.

> I actually learned this from a piano professor. It's really interesting. I was working on Chopin's Ballade No. 4, so I was working on that piece, and it was, you know, a really difficult piece, musically speaking, so I was going to play it for him one more time.
>
> And then he played for me how he would play that, and I was like, "Oh, that sounds so nice. I'm gonna go practice that way." So, I went home, and I practiced it his way, and then I went back the next week, and I played it exactly the way he played it the week before, and then he played me another. . . "Oh, it's different, but that's also so nice." So, I learned that as well, and then I go back, and I practice that one . . . and then I went back the third week . . . You know where I'm going with this story. So, every week . . . so one time I got really tired of this. You know, it's been like over a month, and I'm still working on this piece, and I still don't know what the best way to play this is. And he said, "Well, you know, there is no best way. I'm not showing the best way. It's just 'Well, today, this is

> the way that I prefer to play, and I have the option to do so, so why not?'" And I thought, 'Oh, he has the option, and I don't." Why is that? Because my awareness was not as broad and I did not have as many options comings to me simultaneously, so I can choose the best one for this particular time.

That anecdote makes it clear why in her own composition lessons, Min Jie tells her students that "the next bar can be anything, and 'here's an idea, and this idea can be expressed in all these possible options.' So, I show them that, here's what I think you're hearing, and here are ways to represent your idea in notation form.'" She added that "I usually give them a few options so they can see what kind of options, are available to me at one time."

> And again, they'll come back next week. If they're still stuck on that bar, then I'll give them another few options. "Here's today, here's what I hear today. What do you think?" And then they can pick and choose what seems to be more agreeable to them or what they like better, or what they like better this week. Or the next time, they'll come back, and they'll be like, "Actually, the other option that I ignored from last week, it turns out that that one had more potential to be developed for the later part of the piece."
>
> Like, they would at least have the option now to play with a few things. So, this is what I mean by I show them what I know. I'm always keeping it so that they are aware that the way to expand their voice, to cultivate their own creative power and talent, is to develop that awareness so that they have more to choose from, and their intuition, at some point, will develop to be more precise, to be quicker, and then hopefully, hopefully that can lead to a degree of certainty that it has to be this way and not any other way. And that, I think, is the key to the kind of mastery that I hear and I see in the greatest composers that I admire.
>
> This is very, very delicate work because instrumentalists . . . because their techniques are so visible, and you can show so much just by being the teacher and demonstrating, but composition skills are mysterious and they're invisible, and there's not . . . there's not etudes. Like, we can talk about, "Okay, here's this area of technique. Here's the octaves. Here's how you practice that." There's no . . . you don't really have that for composition, so for me . . . the more I can show my students that my awareness is like this, and it's flexible, and it's versatile, the more I can get that through, the more they will do work on their own.
>
> So, you know, my point is not to feed them what I think is best for them, but if I can show them how to fish, then they'll fish themselves.

Min Jie noted that "composition lessons are a lot like therapy sessions. It's very different from instrumentalists. The composers . . . they don't practice until there is the first rehearsal." She elaborated as follows:

> It's not like instrumentalists. You know, I'll tell you, "This week, you go practice this. This thing. Here's how to do it." Then they can go to practice that. Composers can't practice. What do you have to practice? Everything is speculation and uncertainty, overwhelming uncertainty. Composers only start to practice at the first rehearsal when their piece is read. The musicians have prepared, and they've [the composers have) heard what they've [what the musicians] have done. That's the first practice. It's a very, very nerve-racking concept.

Composition process

Min Jie noted that "Composing doesn't mean you write the beginning first and write the ending last. It could be any order in your piece."

The effects of modeling on the composition process. Min Jie explained how she uses models in her composition process by sharing her approach to writing music for guitar. First, she does a lot of listening. "I've asked the guitarist to send me a list of his favorite pieces, and I've listened through them. I've studied them, tried to see like, 'Okay, how to notate this?' and then figure out what's what in the score. What does this trill mean for a guitarist?" She said she uses several notated and aural models, such as recordings and scores, to enhance her understanding of certain instruments and/or genres of music. She asks herself, "Here are my favorite composers, and have they written for guitar? If they did, what are the pieces? What do they sound like? What do they look like?"

Before she begins to compose, in addition to using various models to enhance her understanding of the instrument, she also spends time with the performers "in an intimate setting, 'just play something for me', or 'I just want to know, like, what are the really

sweet notes on the instrument, just talk about your instrument.'" She then emphasized that because composition is a very "collaborative field," composers need to be social, working closely with the performers.

The effects of modeling on novice/expert composers' composition processes.

When asked whether she is concerned about the possible negative effects of modeling such as direct imitation, Min Jie responded as follows:

> Composers, at the beginning level, it's not that the composer, him or herself, does not have their own voice, it's that their technique hasn't formed to nurture their own voice. Everything that they do, even if it becomes a copy, is only going to enrich their vocabulary. This is the equivalent of learning the alphabet. The alphabet is not yours. The alphabet is something that we share. And the basic vocabulary and grammar are not yours or mine, it is just there. Music is just pouring out of them, but all of them are imitations of the pieces they have played and learned, and there is nothing wrong with that, and this is all necessary for them too. . . Let's see . . . okay, so that's building. They're building their vocabulary. They're building a foundation from where they could take off one day, because we can only be innovative if we are not always inventing wheels. The wheel is already there; take advantage of that, and we can learn to fly, but learning to fly comes from learning that somebody already made the wheel and failed 100 times.

When asked yet again, "Have you ever been concerned about possible negative effects of modeling?" Min Jie made it clear that she has no great fear in this regard:

> No, I don't think imitating, copying is going to suffocate someone's potential. It's the exact opposite. I think the more that you are able to memorize, the richer your memory is, and our brain does the rest. It'll infuse in the life-experiences, and it'll all become an infusion, and it'll imbue everything. It'll come out. It just gives you more options. I know he's imitating me, he or she was imitating me. I love that. I love that!

Min Jie underscored the positive effects of modeling by sharing a famous Stravinsky quote:

> Stravinsky once said . . . okay, you know the saying. You know, the best composers steal. "Good composers imitate; best composers steal." Now, do I steal? I have found that some of my strongest writing, even today, I know that I did not invent these things. I know that these moments come from years of

> observing, imitating, trying to get into the mind of those composers that I love so much.

She then shared the words of an American composer, Julia Wolfe:

> Julia Wolfe once said something to me that I'll never forget. You know, "Write the kind of music that you love." The idea is "don't feel sorry about the music that you love, even if it's a guilty pleasure, because that tells you a lot about yourself, and write music that you want to hear again."

She added that "In my opinion, the important thing is to find the music that you love so much and imitate all you want. We can start from there." Since starting from one's favorite music is so crucial for her, right in the first meeting, she asks her student what s/he likes to listen to.

Min Jie said that when she is working with an advanced composer, she often uses a combination of notated (scores) and aural modeling and lets her student simply "copy and paste" the scores that s/he likes.

> I'll make him copy some of the orchestration solutions; I call them orchestration recipes. The orchestration recipe. So, we got a few pages and he'd copy it out, and then the more we do this, the more he understood that writing for the orchestra is very different from writing for trombone ensembles.

She added that "he [her student] was making very good progress copying scores just from copying scores."

> I would take pieces that I love, orchestration-wise. I want to study it anyway. Take it out and copy a page a day for a few days, for ... you know, as much as I'm in the mood for. So just copy. Copy scores. Straight into the notation program. I was influenced by modeling the great composers that I admire, that I love, and I learned from. So, my modeling is a continuation, is a curated collection of my influences and what I have learned from studying the great composers. And I think for me, that's more important than what I personally think about what my students should do.

> Mahler, for example. You know, I just was so infatuated with his courage to be so exposed, to be able to say so much with so little notes. That moment I remember very well because I was not able to be this courageous. My notes just

> don't . . . it's not as valuable as every note in Mahler's slow movements, so I had a period where I was thinking about that a lot. Can I say more with less?

Other pedagogical approaches

When I asked Min Jie to describe other pedagogical approaches, she said "Being a composer doesn't mean that you strap yourself to the desk and produce music and churn out pages. For more advanced master's students, the biggest obstacle standing in the way of them is expressing what is trapped in their voice." She added the following:

> What I do is I let my students know that working with musicians . . . getting constant feedback is about the most rewarding experience a composer can have. We might not see the effect immediately, but I believe it's gonna happen if enough composers are willing to be more social and working more closely and make our process transparent, so this is when I also try to, in some of my extra curriculum, not academic work but in the classical music field, this is some of the work I've done, so I make sure my students know this part of your job as composer.

9. Interview with composition teacher – Den

Background

Den is a male composer and music educator. He earned his master's and doctoral degrees in composition from Universities in New York. He has dedicated his life to the field of student composition. Over the last 30 years, he has taught composers of all ages, from five to 80, but most of his professional works revolved around teaching Music Composition and Theory at a university in New York. Den has worked to encourage and develop individual student composition efforts, making it possible for students to receive feedback from established professional composers.

When asked about his composition learning process, Den replied that "I started playing the piano when I was around five years old. Since then, I began making simple melodies with a few chords."

Identification and characterization of different modeling strategies

Identification. When asked to identify the use of modeling in his composition process, Den responded by comparing composing to puzzle-making: "We're all just recombining elements, right? Probably a deck of cards has never been in this order before." He continued by sharing the words of the composer William Bolcom: "Never, ever throw anything out. Just keep it. Sometime, ten years later, you will use it." Den added to this by providing some examples of how even great composers composed their music by stealing from, or at least being motivated by, other composers: "Stravinsky stole a lot of Rimsky-Korsakov's octatonic stuff. Pathetique piano sonata, the second movement, Beethoven stole that from Mozart's C minor sonata. It's like he took the register, the harmony, the theme."

Specific modeling strategies used in the composition class. The interview moved on to a discussion of the modeling strategies used in his composition class and their possible effects on those who were doing the modeling. When I asked Den to describe his rationale for using different models, he replied, "I'd sometimes try to have a composer see how many other characters could that idea have." He continued as follows:

> Same thing. You see it in good novels, that the characters they're so related but they're so different, and you see this in, I think, great music, how an idea can have a completely different feeling, the same idea. That's partly what I mean about helping them see the consequences of their own ideas.

He then spoke about what students might learn by being exposed to other great composers' music. He said that in great composers' music, there are "unity and variety; it could be fast, it could be slow, it could be loud, it could be soft, but the actual thematic material is kind of turned around." He then provided two examples of "unity and variety" in great composers' music:

> You see this in Schubert's Unfinished Symphony, how the two main themes in the first movement, they're very different, but they both have this fifth and fourth falling, sort of using polar views of the same thing, or Beethoven's First Symphony. You have this rising fourth and these falling fifths, so they're kind of two faces of the same thing. It's like there's two sides of a coin that are . . . They're on the same coin, but they're sort of the other side.

Asked to further explain why he uses modeling with his students, Den shared an interesting purpose. Unlike most teachers who model so as to push their students to make better products, one of Den's goals of modeling was to let his students know that it was okay to make mistakes because what they were really doing was "modeling a whole attitude of being."

> I would model, just improvising, and trying things, not related, just modeling a way of being, you know, a way of improvising and pushing it too far, where I'd screw up, so they know. . . Or modeling, making mistakes, and embracing them, you know? It's so important because you're modeling a whole attitude of being. If you're showing them, "I must be right about everything!" then they're gonna be too afraid of mistakes, and usually. . . It's interesting. A lot of mistakes that people make, that students make, they're really getting something else right. There's a kind of logic in the error.

When he was asked how often modeling was used in his composition class, Den responded by saying, "I would never just show them one model." To help his students find what they want to express, he often played multiple options on the piano; however, again, he emphasized that "I would never just show them one thing."

I then asked, "When should I, as a teacher, do modeling for my students?" He replied, "You see their intention. You have to read their intention, and then help them find a path to that. Not so much your intention." Den elucidated by saying that when his students had the melody and were trying to do harmony, he often helped them to see "how their melody implies harmony already, because the harmony's hiding in the

melody, so show them that. Say, 'Oh, well, that could be this, or this, or this, or, for something really different, maybe that.'" He continued as follows:

> But you don' go, "Well, sentences have nouns and verbs, and then you can put an adjective in front of the noun, put an adverb. Put a semicolon." You don't start that way. For instance, even when teaching theory, I was always stressing, no, these rules are not . . . This is like a specific game, like common-practice harmony, parallel fifths, and I improvised in front of them great stuff that's all parallel fifths, you know? That's a kind of modeling that's very important that I did all the time, now that I'm thinking of it.

Den further elaborated on how he used modeling to show harmonic sequence:

> Well, you know, a lot of composers have this place. They might use a harmonic sequence. Thus, I play a harmonic sequence, play the harmony of harmonic sequence. Then, they (the students) improvise melodies that go with that, you know, and then I say, "Oh well, yeah, well, you could then maybe do it again but different."

In terms of the best use of modeling during composition class, Den said, "I think the key thing is trying to find the intention or helping them see the logic of their own ideas. I think a key to successful teaching, in my view, is to help the students see the implications of their own ideas. Help them see the logic, not where you think it should go, but what their own idea implies." He added that even for very young students who can write only a phrase containing three notes, teachers could help them expand this phrase:

> If they just have three notes and then, "I don't know what to do," then we'd play their three notes, and everyone is kind of singing something that could help them, and then we start to see how it goes because almost all the students can make a phrase, and a phrase always can give birth to another phrase.

The interview moved on to discuss the differences and similarities of "modeling for exercise" and "modeling for actual composing." Den began by saying that "there's a distinction I would make between modeling for an exercise, to build some skill, and modeling for a free piece." Den said that for exercise/practice purposes, he often used

modeling to limit the musical elements and, thereby, make the composition more manageable. He gave examples: “Make your own scale, which is limiting, or using composition to reinforce theory ideas such as only using two different intervals in the piece.” He continued thus: “I often modeled the improvisational things. To show my students that everything can be taken in a million directions, I’ll show them how you can make something out of three notes.” In terms of the use of modeling for actual composing, Den replied that he often used notated models “to show different examples of how this person developed motives and what they did to get more out of their material.”

I asked Den to explain in greater depth the use of modeling in any other situation, to which he replied: “I’m considering modeling could be a part of the evaluation. To write excellent evaluations for every student, I do some modeling.” Then, Den broadened his conception of modeling by saying that “especially for young composers, peers could model each other, because kids tend to get stuck easily and, in that situation, students could find solutions naturally in this group setting.”

The next segment of the interview concerned possible drawbacks to teacher modeling such as its leading students into exact imitation. He replied, “I don’t know how much it really happened, because it was like showing different possibilities. Then, it would change, it would morph, and then they would revise.”

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. Here’s what Den had to say on this issue: “Compared to teaching instruments, I tend to give more freedom to composition students. Not many occasions to do direct modeling, for example.”

Composition process

When I asked him to describe his composition process, Den replied by emphasizing the importance of composing with an intention and with emotion:

> First, finding these kinds of polarities of feeling. Where they are in every transposition, like, backward, upside down, you know, permutations, and then the harmonies and the melodies. Almost never starting just like notes or scales but an intention, idea, emotion, and especially a pair of emotions.

The effects of modeling on the composition processes. Den started by making this comment: "I always am listening to all kinds of things." He continued as follows:

> Sometimes, I look at how people use instruments, things like that, but you don't wanna copy someone else's style so much, and yet if it's not really linked to any style, you're in a wilderness also. If I'm writing for strings I'm not going, "Oh, let's listen to every string quartet," you know? But then you do look for techniques, look for technical limitations.

Furthermore, Den also said this, which clearly relates to direct modeling: "Music analysis; I used to analyze a lot of music. I would write the whole thing, or I would do a reduction."

The effects of modeling on novice/expert composers' composition processes. Den began by noting that "for novice composers, I tend to do more modeling, because to write good music students need to have lots of great music already in their head. However, expert composers don't need a lot of modeling, since they already have great models, music in their head."

Other pedagogical approaches and their effects

When I asked Den to describe other pedagogical approaches, he replied, "Dialogue." He gave an example of how he used "dialogue" to get his students "to

express ideas, emotions. I said, ‘Go around the room and tell me some emotion, some idea, and I’ll make something up right now for that.’”

He also elaborated on how he used repetition as a pedagogical approach. He began by saying that “your own music can be your own model.” Speaking of his interaction with a student, he said, “I’d play again his/her composed music and I’d ask their own impression. It [the piece produced by listening to that model] would be good afterwards.”

10. Interview with composition teacher – David

Background

David is a male composer and music educator. He received his bachelor’s degree from one of the music institutes in New York and his master’s and his doctorate in Music Composition from a conservatory in New York. Currently, he is an assistant professor of Music Theory and Composition at a university in New York. He has taught Music Composition; Introduction to Musicianship/Ear Training & Sight Singing; Counterpoint; Diatonic Harmony; Chromatic Harmony; and Music Analysis. His compositions include pieces for orchestra, concert band, ballet, chamber ensembles, and voice. Noted for his works for dance, he has composed several ballet scores. His pieces have been performed all over the world including at Carnegie Hall, the Kennedy Center, Lincoln Center, the Guggenheim Museum, and the Louvre.

When asked how he began composing music, David answered that “I was very into listening to music and playing and writing music was a natural process for me because I was raised by a family who loved playing music.”

Identification and characterization of different modeling strategies

Identification. When asked to identify the various modeling strategies used in a composition class, David replied that "there are big differences in the conservatory modeling and composition modeling." He added that "even in composition modeling, depending on the educational setting such as secondary education or public-school education, types of modeling that are used and their effects on students could be varied." In terms of the use of modeling in composition, David began by sharing what his undergraduate composition teacher used to say: "The way that you reveal yourself is to copy a model as precisely as possible, and then whatever is within you will come out." He added that he "usually restricted the instrumentation and the length of their composition for novice students, to make their work more manageable."

Specific modeling strategies used in the composition class. When I asked, "how do you use modeling during your composition classes?" David replied as follows:

> Suggesting listening-lists is a kind of modeling that I used the most. I used modeling as a teaching pedagogy by suggesting very specific listening-lists. When a student has a problem, I try to call upon my own knowledge of the repertoire in the moment to find a solution to a particular problem, such as [saying] "Oh, Stravinsky does that. Why don't you go listen to the Dumbarton Oaks Concerto?"

He added:

> I'm not necessarily presenting really specific models to copy, I'm trying to get them to learn the repertoire and also realize that the problem you're trying to solve has been done before by somebody, probably better. And look at what they're doing. And so, yeah, that's kind of how I approach modeling as a teaching strategy. I try to get inside what the student is trying to do, and then suggest solutions that others have used.

He then shared how he uses a combination of aural and notated modeling:

> I often played a piece of music for my students, and we watched a score together while listening to music. During this time, I told my students "Look,

> here's how he takes that first theme and how he transforms it into a romantic melody, and it's the whole B section of this piece."

Last, in terms of learning achieved by simultaneously studying scores and recordings, he said that "exploring great composers' scores on their own will let them solve problems when they confront them because what those composers did is amazing."

When asked, "Are you ever concerned about the possible negative effects of teacher modeling, such as hindering the students' creativity?" David replied, "If you do some modeling, you present some ways in which it could work. You tend to get a lot of copying of those ideas, even in undergraduates. But to me, okay. I think that imitation is actually one of the most fundamental ways we learn. Usually, what I do is, I try to give a few tools and techniques that they can try." David continued: "I feel like the creative process starts to really take form with them when they have concrete things to work on, and they have concrete ideas that they can begin to manipulate." He then provided examples of giving a few composition tools as models, saying that "in terms of rhythmic development things like inversion, retrograde could be fundamental tools." He added that the following:

> I always tell the students that the tools should not be applied as a correct way to proceed in your work; they're there for you to discover. So, if you find that by manipulating a motive, turning it upside down, trying it backward, augmenting the rhythmic ideas, changing the modality of it, whether it be triad in major, triad in minor, triad in different formats, that they're to trying to discover which of those options actually might yield something.

David added that even though he often uses modeling as a teaching approach when he is helping his students to learn how to develop motivic ideas and/or to musical ideas, "I steer away from models in terms of forms, don't say, 'We're going to make a sonata form.' But I do talk about cyclical forms a bit, as being a great way to organize

material." He added that "you don't have to write a binary form unless you feel like a binary form is what best expresses what you want to do in the music, or unless it helps you in some way."

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. When asked to address the differences in using modeling to teach composition and instruments, David replied, "Modeling is essential for both composition and instrumental teaching. Instrumental modeling is mostly physical, such as demonstrating a good posture to hold a bow. However, modeling in a composition is more conversational, like giving opinions or examples of successful compositions."

Composition process

When I asked David about his composition process, he replied, "I typically work on commission, so most of the time, there's already a solid reason for a piece of music to exist. I spend a certain amount of time thinking about a shape of music altogether." When asked to elaborate further, he said the following:

> In the case of a piece about a mountain, I actually created a work in the shape of the mountain. I traced the outline of a mountain and I said, "This is going to be the narrative structure of the piece." So that was taking a conceptual thing, very much, and applying it to a composition.

David then went on to speak about when he engages with, and when he withdraws from, other composers and orchestral pieces during his composition process.

> If I'm writing an orchestra piece, I try not to listen to a lot of orchestra music. At this point, I don't necessarily model on another work. So, when I'm not composing, I do a lot of listening, and I go through phases. I might go to a particular composer and just say, "I love what they're doing. I want to listen to everything." I do a lot of listening to many pieces by a particular person.

David spoke to the issue of the composition process for novice composers by describing his class at the University. The students who are taking this class have either not composed anything previously or, at least, have not attempted composition on the kind of scale he was doing in this class. David added that the goal of this class was to compose a short work, two to three minutes long, for a chamber ensemble, typically three or four players, purely instrumental with no electronics and no singing. David teaches the class as a workshop, which means that players in an ensemble, a chamber group in town, are in the class during the whole semester. He said that when dealing with students who have not done much composing before, his teaching has to involve fundamental topics such as orchestration and/or music notation. For this reason, he begins by helping his students choose the instruments and the ensemble that they want to compose for. He said that in this class, "composition is taking a practical approach as opposed to a theoretical approach." He added the following:

> I find that theoretical training doesn't help much in a composition class. Everything that we've done in like four-part writing, voice leading, species counterpoint. When they get into composing that sort of goes out the window. It's very hard for students to make a connection between the language that they want to write, and the theoretical training that we've done. Some cases, students do think about voice leading, and they do think about all those things.

The effects of modeling on composition processes. Speaking about this issue, David recalled his early years:

> When I was young, as a young composer, I did so much listening. Through listening, I was pulling in all musical elements. For example, I'm really into Bartok, and just wanted to write music in his language by reading, listening, analyzing, and copying a lot of Bartok's music, I made Bartok's language to my own language. By studying Bartok's string quartets, his driving rhythms and crunchy harmonies became a part of my language that I still have. By studying French music, spare textures, beautiful concentration on melodies, and much extended harmonies became a part of my language too.

He noted that he brought many musical elements into himself by listening, studying, and modeling other composers' music. Indeed, for him, it appears to be an ongoing process:

> I still do a lot of listening to keep my ear out to know what's going on currently in the composition world, but I do much less as I get older. When I was a novice composer, I did more listening since I didn't have enough references but now since I'm in the mid-career, at this point I don't necessarily model on another work. I try to do my own thing as best I can.

He added that he listens to more music when he is not composing. David shared his experience with exact modeling/imitating. He said that in the ninth grade, he was crazy about Chopin, so he tried to create an exact model by imitating a Chopin waltz for piano. He took his favorite Chopin waltz, changed the key, and wrote exactly the same number of bars, plus mirroring where the repeats are and where the themes are.

> When Chopin goes from E flat major to B flat major, so I'm going to do exactly the same modulation but I'm starting in A flat, and I'm going to go to E flat. When Chopin goes from here to here, 16 bars and repeats, I'm going to have 16 bars, and I'm going to repeat.

Thinking back, he recalled telling his teacher, "Here's what Chopin did, I'm going to do exactly the same thing." David explained that "the only thing that was going to be different was my tunes would be worse, my voice leading would be suspect, and everything would be bad compared to Chopin, but I tried to do an exact model." David's love of reading scores has stayed with him from those early years. However, he stressed that "I probably absorbed some of it by reading them, but I don't ever try to copy a particular thing from the score consciously. I don't say 'Oh, I love that sound. I want to employ that.'"

The effects of modeling on novice/expert composers' composition process. David began by noting that "Especially for novice students who don't have enough

repertoire, suggesting them to go and listen to a piece by a certain composer could be an effective way to use aural models." He indicated that his suggested listening-lists are mostly based on the students' interests by saying that "if you love Liszt, then the next thing you do is listen to his sonatas." He added:

> My teaching approach in terms of modeling is not specific, more general. I try to brainstorm together with my student by sharing something like "now you know Stravinsky did this, or Christopher Rouse did this, so what are the different ways that you could do this?"

Other pedagogical approaches

In this portion of the interview, I inquired about the use of other pedagogical approaches besides modeling and their effects on his students' composition learning. David replied simply: "A lot of feedbacks." I then queried, "How do you give feedback to your students?" David began by saying, "During the students' music performances I write notes in their scores, then return the scores and make more observations compositionally." He continued as follows:

> They get a lot of feedback at the moment not only from me but also from the performers. Students also get feedbacks from each other. Every student hears everybody's piece, they learn from each other that way, too. Like someone makes a certain mistake, the next person, you'll see them correcting their parts before their piece is read.

The interview then moved on to discuss the assessment of the other pedagogical approaches he uses. David said that "they are not being graded on the product, they're being graded on the process." To a great extent, this means that his students are being graded on "have they absorbed the feedback, and have they been diligent about making changes?" He also considers whether he or she is "being the supportive colleague to your friends, interacting with musicians who are playing or performing your work in a

constructive way, because interacting well with performers is one of the important qualities of a composer."

The next topic of discussion was on "Corigliano's approach, the idea of graphing your piece." David believes that "it is important to look at one's entire work on a single piece of paper as a graph of time versus energy." He also stated that "you try to conceive of the whole thing like a blueprint."

He said he takes a narrative approach to teaching composition because "it's difficult to just work with themes, and key relationships, and all those things. That's really hard for beginning composers to think of that, I have found. So, having a narrative structure is really helpful." When students have their own first drafts, they can create successive drafts of the piece as the musicians come in and read. In this way, the students are able to edit/change their pieces right up until the final reading day. Describing this composition process, David noted that "A lot of that then kind of morphs from conceptual ideas and compositional craft into the nuts and bolts of notation, parts-creation, score-creation, all that kind of stuff." At the end of the semester, the two-or three-minute piece that every student has created is performed and recorded.

11. Interview with composition teacher – M

Background

M is a female composer, guitarist, and music educator. She studied classical and Jazz guitar privately for many years. She studied at one of the colleges in Boston and is currently teaching a very wide range of students, from young kids to adults. M learned most of what she did not know about composition through her interactions with her

mentor, someone whom she describes as being both her mentor and her producer. Another big influence on her as a composer was her jazz guitar teacher. She mentioned that they did a lot of writing together and learned a lot by "just understanding chord structure and, like, how all that works when you're like building a song or writing, like, melodies, and all that kind of stuff." In that regard and when talking about how much she learned by watching her mentor play—with a band—songs she had heard him play acoustically, M made it clear that her background in learning was based much more on performance situations than on classroom experiences.

She believes that the formal style of instruction at Berkeley was "too much by the book." Based upon that and other experiences, M has decided that "too often, result of classroom training is a lack of individual creativity and too much conformity." She said, "The thing that I noticed is, like, some of my friends that went to school for that, they come back, and all their writing sounds the same. I'm, like, that kind of scares me a little bit, because I'm, like, 'Oh no! They don' sound like themselves anymore!'"

Identification and characterization of different modeling strategies

Identification. When asked to speak about the use of modeling in music education, M replied that she does modeling "to demonstrate a new musical concept or technique to students."

Specific modeling strategies used in the composition class. When asked "How do you use modeling strategies in your composition class?" M replied, "I use a wide variety of modeling strategies because I teach a very wide range of students, from three-years-old to adults." During her composition class, she and/or her students write things

out on sheet music, ideas to be explored and developed, but they also work right at the piano.

M provides the model, in the form of instruction about a particular key and the notes it contains, and then her students create melodies within that key or play chords with one hand and a melody with the other one. She noted that when she gives young people "a set of notes that they can work with," they sometimes jump back and forth between the low and the high ones. In such cases, she attempts to show them how to arrange the modeled notes in a less disorganized and random manner. She mentioned that often, she would model a good melody by singing it, for her goal is to get the kids "to think of it [the melody they have created] as a voice, like singing."

M further described the ways in which she uses aural modeling strategies. She noted that especially for advanced composition students who are stuck in their comfort zones, listening to different genres of music can broader their spectrum. M provided an example of how she used a wide variety of recordings with a talented young student, with whom she began working when the girl was in middle school, as a way to expand her range as a composer:

> We'd come in and, like, "Hey, today we're going to write something of this genre and kind of like branch out and see, like, what you can create," because one day it'll be, like, a very jazzy song or one day it'll be very poppy and just kind of challenging yourself in that sense too. So, you're not always staying in one box.

M made the interesting point in the course of our discussion about her use of aural modeling about how the students' own past music could be a model. "I often take the students' own past music as a model, since we [music teachers] usually think of working from someone else's model."

She continued as follows:

> Like sometimes my one student that I've had for a long time, she has in her Google Drive, she has all of her songs from the past, like six or seven years, and sometimes we'll go back and revisit how she used to write too, and kind of look over that and just see how she's grown and changed from, say, when she was like ten to 16 or whatever year old. Because sometimes I think it's good even to analyze, like, your own old compositions.

Another benefit of this approach addressed by M is that reviewing a student's past creations allows her, along with the student, to evaluate his or her progress in composition.

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. When this topic was broached, M began by speaking about what she values most about composition itself:

> When it comes to teaching composition, I think the creativity aspect is so important because that's kind of what makes you sound unique and separates you from other people's writing. I think sometimes people don't understand the music-theory background of how things are. But sometimes, like, that's kind of beautiful how that works out too, like when it doesn't quite make sense theory-wise, but it still sounds amazing. So, I guess the creativity side is the most important to me.

Turning to the instrumental aspects of this topic, M said:

> There could be more guidelines in instrumental teaching. Like "if you're going to play this note correctly, you should follow these guidelines." However, in composition teaching, there is really no correct way to do it. I mean, like, you can branch out and, like, change the key in the middle of the song.

Composition process

The roots of M's composition process lie deep in her early years when she received private instruction, especially from one teacher who gave her lessons in "classical voice and piano and guitar" from when she was five until adulthood. She believes that her early training on the guitar was especially important in making her aware of her options as a composer, as the following remarks make clear:

> That especially happened with my guitar teacher in writing because . . . just like showing me different directions, like even the chords could go in, and he's, like, "Oh, you could take this really major-sounding route" or I could get, like, really sad and take like the relative-minor kind of route to it. I guess just understanding like a lot of music-theory stuff too. So, a lot of my studying was mostly instrumental. Like a lot of melody-writing, I guess mostly from just writing and writing, and trying again and trying again.
>
> But I guess a lot of melody-building, too, is so much based on my jazz background and studying jazz guitar and kind of understanding all the different melody possibilities just because of all the different scales and modes and all this crazy theory stuff too. But even if I bring in just a verse and just, like, "let's play," go into this chord progression and see how it fits or if that's where I want the melody to go. So, it's a lot of hands-on, and just playing together and see where it could go.

Although she has been trained as a classical pianist, M is well acquainted with sheet music because most of her composing and performing happens more on the jazzy, singer/songwriter side of things: "A lot of my background in learning was a lot of, like, hands-on stuff. Like, I'd always be like thrown into performance situations, I guess more so than in a classroom setting sometimes."

M often makes use of "lead sheets" that just sketch out some possible chord-patterns while leaving a lot of room for improvisation. M clearly lives as a musician in the border region where composing and performing overlap. She speaks about how much she has learned, for instance, from one-on-one sessions with her mentor Brett Alexander, and also by hearing what his compositions sound like when performed by a band. "I guess in a sense, like, I always went to see him perform a lot, which was really inspiring for me, just seeing the songs that I'd heard him play acoustically for me, in a full band setting, and how it all came together in that sense."

Clearly, the interactions with and observations of her mentor are cherished by M, especially at certain serendipitous moments such as when a song she shares at the last

minute ends up being placed on one of her recordings, produced by Brett with a full orchestration including strings.

The effects of modeling on the composition process. When this topic arose in the course of the interview, M enthused about how great musicians and groups give her different influences in terms of songwriting style and instrumentation:

> When it comes to songwriting, John Mayer is one of my biggest influences. When I worked with him a little bit, like a few years ago, it was very cool. I also am influenced by Anais Mitchell, who is a really good singer/songwriter. Then when it comes to instrumentation, there's just so many different bands that I love. There's just so many different types of writing.

Modeling makes its presence felt within M's composition process in myriad ways. M uses her cellphone "to notate what all the different notes are" when she rides the subway. Those notes go on top of lyrics she has already written, and then when she gets home, she consults her phone, "which looks, like, crazy when you look at it, because it will be, like, something, like, over it." As the last step in her composition process, M determines the proper chord-structure. Although not what we usually think of as modeling, in this case, the notes are indeed modeled on the lyrics and the chords are modeled around the individual notes.

The effects of modeling on novice/expert composers' composition processes. An expert is not always an older person, as one of M's anecdotes made clear to me. She expressed her astonishment at how quickly a student she works with, who is currently a cast member of the Broadway musical *School of Rock*, can pick things up, including the Japanese language which "he just learned . . . in like two seconds" after he had become interested in Japanese music. This is how she described how almost impossible it was to teach him something. One can understand M's implicit position here, of thinking that in

such a case, her offered explanation, the model, is useless and, yet, still not agree with it entirely. It's possible that her "half explaining" was, in fact, crucial in leading that student to make all the mental connections that he proceeded to make.

Usually, one has to probably use one student as the example of a novice and another as the example of an expert; however, in M's case, a single student can play both roles because M has worked with her from when she was ten years old all the way to her present stage as a high-school student. What makes this example all the more interesting is the fact that M has taught the girl on both piano and guitar. M says that this student actually began on the guitar and did not really like that very much. Composition can occur in strange ways, however; one day, the girl played for M on the guitar "this joke kind of song she made up," and M found the melody really interesting. Thus, began their long teamwork, so to speak, based on modeling many different pop songs, experimenting, as we heard earlier, with many genres from jazz to pop. Thus, M's history of modeling with this one student has, over the years, gone from M directly modeling various note-patterns on the piano for the student to create melodies out of two almost being that student's song-imitating partner on guitar-based compositions.

Other pedagogical approaches

If one had to choose a single word to describe the nature of M's pedagogy, it would have to be *flexibility*. Working as she does across such a broad range of genres, from classical to jazz to pop and with an equally broad range in terms of her students' age, flexibility must be a requirement for her pedagogy. Quite noteworthy is the way she adapts her pedagogy to her students' needs, as when she was happy to just half-explain something to the student who immediately provided the other half of it; she even

switched from piano to guitar and from classical to pop when that was the direction her longtime student was moving in. It is clear that flexibility shows up in M's pedagogy just because it is her own chief personal value. We heard her lament about how formal composition lessons tend to produce standardized pieces, and she also thinks the piano itself is relatively rigid as compared to the devices one can use to create a wide variety of effects on the guitar.

M was, of course, unable to talk about all her students. If she is still working with younger ones at the piano, it can be assumed that she uses the basic melody-modeling techniques she described using with her longtime student back when she was just ten. With older students, she is continually taking as models all the songs that she and they are excited by, either when they are the creations of other composers or when the student is experimenting by building on the models of her own earlier sketches.

12. Interview with composition teacher – Alex

Background

Alex is a male composer, pianist, and music educator. He studied Music Composition at one of the colleges in London and received a master's degree in Music and Music Education from a university in New York. Now, in his late 30s, Alex has been taking composition lessons for ten years. He is currently teaching composition at a university in New York for six years.

When asked about his composition learning process, Alex replied, "I started taking formal piano lessons when I was about five years old. After learning piano for a year, I started making my own music and writing down lyrics." He added that "when I

turned 11 years old, I started taking formal composition lessons, and I continued studying composition during my middle and high-school years." Then, he decided to go to college and major in Music Composition. While there, he had formal one-on-one lessons with his professor.

Identification and characterization of different modeling strategies

Identification. When asked to identify the modeling strategy, Alex noted that for him, modeling is like a safety net: "At moments when I am incredibly stuck, which happens more than I care to admit, I often listen to others' music or read scores, and it helps me."

Specific modeling strategies used in the composition class. Alex began addressing this issue by describing notated modeling as he encountered it during his undergraduate years:

> The most common way is to dumb down the theory to the most basic level and dig into the raw harmonic material on a piano and see what is going on. Also, my teacher always referenced books or certain ideas, either to just find a straight answer or to support his analogies. I once remember emailing him about orchestration, and he replied with a full response along with 21 attached pdf books on orchestration.

Alex then shared a specific example of his professor's use of notated modeling.

> My composition teacher often asked me to analyze different pieces. We followed up applying the theoretical elements we had discovered, experimenting with various ideas based on both pastiche composition and standard devised ideas. We dug deep into every detail and every thin line between every note and managed to get common ground on what I'm trying to get across through my music. While analyzing different pieces, I discovered and experimented with various ideas based on both pastiche composition and standard devised ideas.
>
> Once I proceeded to research scores by myself and do a mass analysis of Beethoven's sonatas through to Rachmaninov's piano works, with a solid through-look into Liszt along the way. I learned so many things by analyzing the pieces from early and late classical to the early-20th-century pieces.

Alex then made it clear that he deems "aural modeling" to also be a helpful pedagogy:

> My teacher often asked me to stand and listen to the music I had written. One of the best techniques my teacher ever taught me, which I still use today, is to stand and listen to the music you have written and see, when you feel like it's necessary to move from your position, if it takes you where it is you wish to go, or you feel as if it doesn't click with the force you're trying to show towards moving to that position. We used this a lot while looking at my concerto.

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. Although he never directly addressed this issue, Alex had a lot to say about how his piano teacher used physical modeling:

> My piano teacher was known to use analogies and physical motion that are related to certain techniques, such as a hand position of bouncing a basketball to help curve your fingers like a pianist. He would sometimes orally describe how he felt was best to convey a certain dynamic or expressive idea, based on either performance or compositional perspective.

He went on to say the following:

> The use of conducting motions in orchestral works helps me understand how to physically convey my music to the very orchestra that will play it. Doing so helps composers question how much they understand in their music, if it's understandable by others, and if it's even the message they wish to get across.

Composition process

Alex spoke about his composition process in the following manner:

> I first consider what my goal is, to ensure it doesn't drift off from its origin. I then let my improvising get in the way. I then transfer my ideas onto Sibelius software, where I can see the shape of the music and where I can make adjustments or major changes. For any orchestral works, I stick to Midi playback and begin with the harmonic material before layering the melodic material.

The effects of modeling on composition. When I asked Alex about the effects of modeling on his composition process, he said the following:

> Modeling affects me positively when I compose a new piece. It's a healthy and stable form of refreshment over a certain technique, or in a composer's case, a mentality. It's definitely been a positive experience which has brought me to have a mental box of techniques to choose from, depending on the situation.

The effects of modeling on novice/expert composers' composition processes and products. When asked how modeling similarly or differently affects novice and expert composers, Alex replied that "When I was a novice composer, I did a lot of imitation. I didn't have my musical colors, so I was nonstop imitating others and was trying to find out what is really inside me. However, since now I have my tastes, I do less modeling."

Other pedagogical approaches

When asked to describe other pedagogical approaches he uses, Alex answered that "my teacher also occasionally draws a graph while listening over the score to see where the intensity lies at that moment and how it fluctuates." He then said, "I find this exercise incredibly useful, because I can not only listen to the music but can see the shape of the music."

13. Interview with composition teacher – Ken

Background

Ken is a male composer and music educator. He studied composition at one of the colleges in London and continued studying composition at a conservatory in New York. He is currently teaching a digital composition course at a university in New York, and he has been giving composition lessons at the university for five years.

Ken began playing the piano when he was four years old, and he composed his first piece when he was 15. He received his first formal composition lesson when he was in high school, and he continued to study composition while pursuing his degrees in music composition.

Identification and characterization of different modeling strategies

Identification. When asked to identify the modeling strategy, Ken noted that modeling helps students to be explorative and creative by showing them the many possibilities that exist.

Specific modeling strategies used in the composition class. When asked about the various modeling strategies used in the composition classes he took, Ken answered that "my former composition teacher often used both notated and aural modeling at the same time." Ken shared his belief in the teacher's effective use of a combination of notated and aural modeling by saying that "Once, my composition teacher gave me an idea on what to look out for regarding orchestration by giving me specific scores and listening examples, and it was really helpful." He added that "I think my favorite modeling strategy is to use both aural and notated at the same time, because it is so much clearer to listen to a piece with the score, to understand what is going on in the music."

With respect to notated modeling, Ken said that "My teacher would sometimes provide a very detailed analysis of the pieces he shared in class. For example, he would go over the harmony one chord at a time, with a fully notated score, and show us the logic behind the composer's decision to use the specific harmony." Ken added, however, that "Notated modeling on its own is not very effective for me. Often, I find it hard to understand the score by just looking at it. I prefer listening to it."

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. Ken had the following to say on this topic:

> I think it is very different because learning an instrument is physically challenging, so the demonstration can help very directly. In composition, the demonstrations can only serve as a reference, an example, an inspiration. Learning an instrument did not enable too much creative thinking, because most of my technical and interpretational decisions were heavily influenced by my teacher's demonstration. Composition is different because the creative process is very prominent, and the teacher's examples are only there to encourage something I create on my own.

Composition process

When asked to describe his composition process, Ken responded as follows:

> I usually start with brainstorming a theme. It could be a piece of visual artwork, a poem, an article, anything. I would start from that idea and try to come up with a plan that would effectively express the idea. The musical parameters, such as tonality, structure, harmony, tempo, and more are usually exploited to further expand that idea.

The effects of modeling on the composition process. When it comes to the effects of modeling on his composition process, Ken answered, "Good and bad. Modeling has enabled me to look past the surface level of notes and sounds. It has led me to consider the concepts behind the music. However, this assumes that musical meaning has to exist in the background, under the layer of music at the 'surface level.'"

He added that during his composition process, he makes the most use of aural modeling "because performance and recordings are quite accessible online but scores, especially recent ones, are harder to find. Also, the outcome of compositions is ultimately in the performance. It is more inspiring to listen to music than to read a score."

The effects of modeling on novice/expert composers' composition processes and products. Ken spoke about how modeling affected him differently when he was a novice composer:

> At the beginner level, it is often useful to use modeling to expose the student to more creative possibilities and to encourage them to be explorative. In a sense, my composition style has developed because of modeling. When I first started, I used only to write music that sounded "nice," and now I use a more logical approach to music, and I have learned to incorporate techniques that do not necessarily sound "nice."

He added that "I have found modeling to be the most helpful teaching strategy because, personally, I think modeling affected me the most, because I am still trying to find new pieces to listen to every day and I still get suggested pieces to listen to/study from my teacher."

Other pedagogical approaches

When asked to describe other pedagogical approaches, Ken answered that "my teacher focuses on giving me feedback." However, he is not always a fan of that approach:

> While feedback could be useful, sometimes feedback can lead to disagreement. For example, my teacher once asked me to repeat my theme A exactly, in an ABA-structured piece, where I originally had an elaborated version of theme A instead. I would argue if the feedback was actually useful.

He then warned about the degree of using a "strategic method":

> When I was 15, as part of the graded theory exams, I was told to do an eight-bar composition exercise. Since it was an exam, my teacher back then had a very strategic method to do it. It follows the same chord eight-bar chord progression every time, regardless of what material was given in the question. This affected me when I first started composition, as I found myself very limited to following a similar chord-progression, and very systematically writing the melody according to the chord.

Ken sees an equal-but-opposite danger in the "no guidance" approach:

> My high-school music teacher never gave any restrictions in our compositions (no specified genre/style, themes, structure, anything) and let us write whatever we wanted. He would walk around the computer lab and check on us occasionally and answer any questions that we had. But I don't think it worked because there was so little guidance, and no one knew exactly what we were supposed to write.

Towards the end of the interview, Ken noted that while he understands the importance of assessment, what bothers him is the way compositions are marked when submitted as coursework:

> The marks are very important to the students. It affects the student's view of good and bad compositions. It is problematic to rate music in numbers, and not very constructive. It implies that a first-class composition is perfect, and little can be added to make it better. Sometimes, lower-marked students don't even write badly, they might just be more conservative. I think these grades do not necessarily help the students develop their compositions. In fact, either a good or a bad grade brings negative effects to the student.

14. Interview with composition teacher – Dominic

Background

Dominic is a male composer and music educator. He studied composition at one of the conservatories in London and received his master's degree in Music Composition at a conservatory in New York. He is currently teaching music composition at a university in New York and has been giving composition lessons for seven years. Dominic started composing music when he was nine years old but really got into it only at the age of 15, when he received a request to write a piece of choral music.

Identification and characterization of different modeling strategies

Identification. When asked to identify the modeling strategies he has encountered in his music-composition lessons, Dominic began by noting that modeling happens not only between a teacher and student but also between students:

> My first non-conventional lessons came at my college through a set of assignments based on solo instrument writing, piano writing, vocal writing, chamber-ensemble writing. We had weekly group sessions alternating with smaller group lessons where a tutor would look at our work. Most of the group

> sessions involved examining other pieces of work as sources of inspiration – a sort of springboard.

He then expanded on the benefits that modeling can bring to music composition by speaking about the influences of his favorite composers on him: "Mozart's church-service masses are so dynamic and fun, it can't help but put you in a good mood. Bach also, because you're always captivated, engaged, and having a sense of thrill with his strong flow and urgency. Fauré is the king of romantic melody and chording; it's never too much, but always moves me."

Specific modeling strategies used in the composition class. When asked to further describe a memory he has of his composition teacher utilizing modeling, Dominic replied that his teacher often used a "combination of aural [electronic music in audio files) and notated modeling." He then added the following:

> It helps in the compositional process, when it comes to presentation and understanding what level of exploration and creativity is expected of us. My teacher often asked students to examine pieces in lectures. For example, we listened to "Elegy for JFK" (Stravinsky 1964), to see how word-painting is used by different composers.

Dominic added that in addition to using great composers' pieces as models, his teacher also does some direct modeling. When asked whether his teacher used an aural modeling strategy in the class, he replied, "My teacher demonstrated change-ringing patterns, and had us pick out notes and form vocal melodies from them. He demonstrated change-ringing patterns as a way to unlock rhythmic, harmonic, and melodic differences from a mathematical point of view – something I use a lot."

On being asked which forms of modeling were used most frequently in the composition lessons, he answered, "a combination of aural and notated modeling – it's the easiest way to see and hear the music directly. To demonstrate musical concepts, my

teacher used notated and aural models such as electronic music in audio files, and similar."

When asked to describe how and what kinds of notated models are used in composition class, he answered that his teachers often use "Number charts, scores, annotated scores, secondary literature/comments regarding the music." He went on to say that "the experience of analyzing music is really helpful for me to learn orchestration, and instruments' techniques and ranges. While orchestrating a piece for the ensemble, I learned each instrument's different techniques and ranges."

When I asked which modeling, strategy works best for him, he replied, "Participation within the class, individual discussions, academic research – all have a huge impact and make you want to join in, but also learn more for next time." He then added that "solely individual research, with no group participation," doesn't work for him. He also warned about the danger of taking a "strict guidance" approach to modeling, by sharing one of the least successful composition lessons he had: "In my last year at KCL, where I brought what I thought was an exciting piece, the teacher said I wasn't doing what was asked for in the module – it made me question 'Can I do it?'"

He said that his composition teacher often encouraged him to observe rehearsals or to participate in composition workshops, and he enthused that "I learned so many things by having discussions with other composers who have different backgrounds."

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. Dominic learned to play two instruments: cello and piano. He mentioned that during the instrument lessons, his teachers mainly used physical modeling and taught him more directly the different ways to obtain certain techniques, as

opposed to asking him to find the ways by himself. He added that instrument lessons tended to be less flexible than composition lessons and asserted that "since instrument lessons are more strictly syllabus-based, aural and notated modeling, such as listening to audio recordings or looking at different scores, is used less."

Composition process

Dominic noted that he takes "first what is the pitch/harmonic basis [highest of the 'four parameters']," then identifies "what rhythmic structure will be there – then decide the instrumentation that fits this."

The effects of modeling on the composition process. Dominic believes that modeling affects him positively when he is composing a new piece: "It helps a great deal when you think of it as a source of inspiration, and then launch off with your own take on it, adding in individualistic ideas, or expanding on the previous composer's technique."

The effects of modeling on novice/expert composers' composition processes and products. In this regard, Dominic said, "When I was a novice composer, I was more imitative and pastiche. Which means that teachers need to carefully use modeling for novice composers, since they tend to be more imitative compared to experts."

Other pedagogical approaches

One of the ways Dominic learned about the importance of "flexible teaching" was through the experience of his least successful composition lesson. When he brought in what he thought was an exciting piece, his teacher was mad at him because he did not do what was asked for in the given syllabus. In contrast, one of the best and simplest ways of modeling is, as Dominic believes, simply singing along when composing vocal music.

15. Interview with composition teacher – Chris

Background

Chris is a male Grammy-nominated composer for film, TV original series, theater, and dance, and his works having been performed by various ensembles. He is also a singer, songwriter, and multi-instrumental musician who has performed at Carnegie Hall and on recordings. He taught courses in Bass, Film Scoring, Songwriting, Guitar, and Music Theory. Currently, he is teaching Music Composition at a university in Boston. He loves sharing with and learning from students of all kinds and ages.

When asked about his composition learning process, Chris began by saying that he started playing multiple instruments when he was around five years old and, soon thereafter, began playing with his friends. Even before taking any formal music lessons, he began to make music by listening to great music. When not composing, he still loves getting the occasional sideman gig.

Identification and characterization of different modeling strategies

Identification. Chris spoke on this issue by stating that "If I'm under a gun, then sometimes I need the modeling to help me."

Specific modeling strategies used in the composition class. When the question "Could you describe for me specific modeling strategies used in your composition class?" was posed, Chris replied that he uses models not only as a way to help his students acquire various composition skills but also to expand their musical understanding: "If a student is getting too narrow, then I'll put them on a diet of a bunch of other stuff. Like,

‘Look, you’ve gotta branch out.’” He then shared another specific example of sharing multiple models with a student:

> Because you’re always the one writing pentatonic melodies, you’re only using three chords, your lyrics are always from the same point of view, you have to do . . . So, it’s also kind of the opposite, where I say “Enough of this. Whatever you’ve been listening to, you need to stop listening to it because you’ve done, you need to expand a little bit.” I had one private songwriting student that, by asking him to learn other songs, he started using more chords, and through those other chords then he discovered other melodies. It was, like, he learned “Help” by the Beatles. And because of that, he wrote like three songs that had different chords than he would have otherwise used.

In terms of using multiple models, Chris shared a few more examples: “If somebody’s only listened to Bruce Springsteen, then I would tell them, ‘Look, we’ve gotta go listen to some women. We’ve gotta listen to some world music.’ Just anything that’s not in the same 4/4 and three chords.” Furthermore, for students who keep using limited chord-progressions, he says, “’I think you need to go more Bernard Hermann in this. You need to check out some smaller, repeated little bits of music, a bit more atonal.’ Get them to expand what kinds of chords they’re hearing. That’s a good chunk of stuff.”

When asked if there is any other purpose of using modeling than the one he has described—of getting the student to broaden his or her musical horizons, Chris replied by speaking about “a younger student, [who] brings something that they think is so incredible and they don’t realize that it’s been done six or seven times before that. So, we need to go back further to where this came from.” In the case of such students, Chris’s goal is to make them “go all the way back through and try to put the students in that mindset and let them write a song in that style.” Moreover, Chris believes in the benefit of modeling “to learn notation; how does it look on paper? Literally copy other people’s scores, such as the whole Bach thing, that could be helpful.”

The interview then moved on to discuss the relationship between originality and modeling. Chris began by saying that "If you're gonna write something new that rips off somebody, chances are you're not gonna get it [an original composition]. You're not that good yet. So, it's this weird thing of what you're aiming for." He elaborated thus: "I'm not Stravinsky, so I will miss Stravinsky and will not copy him directly. I will try to copy him, I will fail, and the ways that I will miss are gonna sound like me. I'm not that good, and I'm not gonna copy just a whole bunch of junk, but it could be organized in my recipes." He continued as follows:

> This is one of my favorite things to say . . . You know how you have artists as songwriters, or performers, that will do cover songs, that is they have original songs that they've written, and they do cover songs. Well, your cover song is really interesting, you do maybe things that are different. When you take away the original, what you're left with is the part of you that is the part of the artist that's original. So, it's this idea of you trying to copy somebody else, and the part in which you failed is the part that you're actually original.

Chris realizes that such an approach to modeling is dangerous and, generally, a hit-or-miss, as his final comment on this matter indicates: "If students only wrote the thing that was highly derivative, that ripped off other people, and if you're always modeling after other folks, then how do you develop your own voice?"

Similarities/differences in using modeling strategies when it comes to teaching composition/instruments. When asked to address the differences in using modeling when it comes to teaching composition and instrument, Chris began by saying that "as compared to teaching music composition, teaching instruments require a direct form of modeling. Teachers often expect their students to exactly imitate their hand motions or sounds." He continued, "however, during composition lessons, teachers use modeling to help start a song or finish a song or to help to solve problems

Composition process

Chris noted that his composition process varies depending upon variables such as timeline or the type of music he is writing.

The effects of modeling on the composition process. When asked how he uses modeling during his composition process, Chris replied that "In this case, when there's not much time, meaning you've got two weeks to write forty-five minutes of music," he tends to rely on models:

> If I've only got two weeks to do it, there is no way to do it without modeling. So my fastest film scores, we've got three weeks. You depend on temporary tracks, you depend on other references, you depend on all kinds of stuff, in which case I've gotta infer from that model "What it is that I can do that helps the film, that helps glue it together, that doesn't rip off the model but brings from the model what the director wants?"
>
> I've gotta listen to that, look at how it responds to the picture, and write something that models it, but is not it. So, it's this weird thing. And somehow it works with the rest of the film. So, it can't just be this one thing that sounds like a copy. It actually has to work for the whole film. And so that's another really interesting case of modeling, of just taking something and writing something that's similar, but make it work better.

The question was posed, "After choosing a model, what do you get from the model?" Chris replied: "Some of its gestural. Some of it's the way that it looks on the page. Some of it's the place where it feels like it breaks the rules. Just try and understand it in terms of the way all the rhythms work together or as a whole tapestry of sound, especially with some of his more complex stuff. A lot of times it's a tempo thing, or maybe one instrument. So, a lot of times, there'll be . . . or some kind of just idea or mood." He continued as follows:

> There are so many different ways that modeling can happen, because model scores are always around me. For example, on my iPad I've always got just tons of PDFs of stuff that I'm always checking out. Learning a piece, to conduct it, also helps the composer's brain and organization of "How many bars of this?

> Okay, in the A section, the development's these many bars." When I'm working on a piece, that's another thing. I've got my places marked where I just remember to do that, or at some point it's listening to the pieces; sometimes it's just studying the score because you needed the way that it looks, and just hearing it from the page.

The next segment of the interview concerned the relationship between originality and modeling. Chris began by saying "You've gotta be fluent. So, the modeling helps the fluency. In other words, I couldn't do what I do, I wouldn't be as fluent were it not for modeling at all points. In terms of execution, modeling definitely helps me but in terms of creativity, at some point, you gotta chill it out." When asked to elaborate, he said the following:

> Well, sometimes, for some kinds of things, to help finish a song, or help start a song or finish a song, I think that's probably what it is, yeah. It's almost like, sometimes for songwriting, and for film scoring, or even for concert music too, it's like you kinda need them sometimes to help you start, and sometimes to help a problem or two, or finish. But most of the work really has to be kind of without a model. To make something really new, it's almost like, to be honest about all of the work that's really important, it's the whole meat of the whole thing, the aim should be without models. But the models help you along the way if you need it.

Since Chris has composed music for films and Broadway plays, he made an interesting point about the intersection of modeling and the copyright issue. He said that "You're lucky if your song was so good that it was a hit song, and you happen to rip off somebody. And then the only problem is, then, you've gotta deal with the ramifications of ripping off somebody." He went on as follows:

> It's okay to have a certain amount of your early work be highly derivative, as long as it doesn't make money. Once it starts making money, then you've gotta make sure that you either hide your influences as best you can specifically pop music, even film music, or even concert music. People would, if you copy too closely, it's more frowned upon. But you can get in trouble with songwriting in particular where you're just ripping off something too close. And, yet, I encourage my students to do it. Just watch out once you start making money, that's when everything changes!

> Students, model like crazy, copy it like crazy! But as soon as you put it on YouTube, and you start getting 1,000,000 hits, then that's when that's a problem. Write as much as you want, but if you wanna actually start making money, you're gonna have to do something more original. So yeah, copy like crazy, but y'know.

The effects of modeling on novice/expert composers' composition processes and products. Chris spoke on this issue by saying that "I often encourage my students to model other people and keep on modeling." Then, he added the following:

> For novice students, modeling could be a good starting place of songwriting. Usually, students have a couple of songs that they really like. Starting from the music they like as a model, teachers can focus on either a lyric idea or a music idea, or even a meter or a tempo or a story element, or just the style of the student's chosen song.

Chris often uses models to guide his advanced students. Moreover, he noted how he uses models by sharing the type of feedback he will often give to a student: "Okay, it sounds like you're trying to do this. Why don't you go study this song, or this song, or this song, or study this artist?" He then added that when choosing aural models, he considers the particular student and his or her composed music:

> I'll use some examples of my own stuff, saying "Oh, it sounds like you're starting to learn how to. . . You've got this pentatonic-melody thing going on, and yet you're using chords from outside the normal key." Well, then we'll go on to talk about a song like "In My Life" or something like that, in which the melody is pentatonic, and then the chords go from a major-second chord to a minor-fourth chord. And we'll break that song down a little bit more in order to understand what the student's doing on their song. There's some pretty specific [stuff], and that mostly depends on the student and what they're into, but usually . . .

Other pedagogical approaches

The next segment of the interview concerned Chris's reactions to and use of modeling when he was a novice composer. He said the following:

> When I was a teenager, early teenager, and I was just learning to write songs, I didn't wanna hear anybody else's songs. I really wanted to only hear my own music in my head. So, I would demand that my parents didn't play the radio in the car. I did that for like two or three years. No radio. I just wanted silence.

When asked to elaborate on why he wanted that complete silence, Chris answered by noting the following:

> The way you kind of insulted another songwriter was to say, "Oh, that sounds like that." And I was determined that I was never gonna be one. . . I just. . . I knew way too many people that all their songs sounded like one artist. And I was so determined never to have that happen. So, I did this weird thing where I listened to a lot of music, but then I went for a couple of years where I listened to no other music [but his own].
>
> I think that's why the diet thing, the anti-models, the no models, is so helpful sometimes. Because you kinda find out what's really there. So, sometimes on films, sometimes in dance pieces, sometimes in certain kinds of collaboration, I may choose to just kind of take a diet where I won't listen to as much music.
>
> Even in my songwriting class, I'll realize cause I like to do some of the assignments with the students as well, and I'll realize, "Oh, wait, I've been listening to too much Radiohead. I need to stop." And I'll just kind of . . . And it's not that I necessarily go. . . or I've just been listening to too much other stuff. It's like I kind of need space. So, I do, I'm a big fan of silence.

Chris summed up his anti-modeling periods in the following manner:

> I think it's one of those things where there are chunks of time where you need to be more in touch with modeling, as a teacher or as a composer. And then there's other times where, for me, I go on diets sometimes. Where I just, I completely, not listen to as much music. There'll be times where I'll be in a deeper period of study and do more modeling. And then something happens, and I need to chill out on that, and I'll actually realize I need to experience more life. So, I think for me, there's a point where I kind of go, "Okay, enough with models. I've gotta get to work." Sometimes, if it's other kinds of work, I need the models through the work. But a lot of times, there's some kinds of work I do where all the model stuff has already happened, and then it's like, "Put it all away, and now write without the models."

Chris went on to broaden our conception of the models that could possibly affect his music by saying that "my music is not only influenced by other sounds, but also by my life-experience."

Some issues appeared to emerge as a common element that all 15 composition teachers shared. They all started music by learning instruments and then started

composing music. All the composition teachers noted that modeling others' music was crucial to their own musical development. Composition teachers use modeling strategies to present students with a variety of musical ideas rather than expecting them to imitate. The use and the goal of modeling when it comes to teaching composition and instruments are different. Composition teachers said that teaching instruments requires more direct/physical modeling compared to teaching music composition. They all shared that composition pedagogy is mainly focused on reviewing students' compositions through consultation and feedback. However, when asked to identify the effects of modeling on creativity, the 15 composers shared certain perceptions; however, different opinions also emerged among them.

Chapter V

DISCUSSION

The portraits in the previous chapter revealed the music-related experiences of each composer. The findings suggest that composition teachers used modeling to help their students, and it showed positive effects on their creativity. To look at the data as a whole, the related literature and conceptual frameworks will also be addressed in the context. The collected data was organized and examined by using a cross-case analysis. This chapter will include the collected interview data that are synthesized and grouped with the help of the three research questions that are listed below.

Research Questions

1. How is modeling used in-composition lessons?
    - Identification of modeling
    - What types of modeling are used in composition lessons?
    - What are the goals and effectiveness of modeling strategies on Novice and Advanced composers?
    - Suggested Optimal Ways of Using Modeling Strategies
2. How different and/or similar are the modeling strategies that are used during Composition and Instrumental Lessons?
3. What are composers' composition processes and their perceptions of modeling in relation to creativity?

4. Besides modeling, what types of pedagogical approaches are used to teach composition?

Research Question 1

How is modeling used in composition lessons?

Identification of modeling strategies used by the 15 composers

Each of the participants was asked to discuss their definition about modeling in composition lessons. The 15 composition teachers showed remarkable correspondence in identifying the modeling used in composition lessons by repeatedly using the following terms: (a) indirect, (b) thought-process, (c) possible options. They considered modeling as a way to present students with a variety of musical ideas, as seen in the literature (Hickey, 2012). Hickey (2012) said that modeling is a method of sharing musical ideas through listening, performing, improvising, or composing. One composition teacher I interviewed, Carl, identified composition modeling as an "indirect way to show my thought process," which is consistent with Yannis's idea that stated it as "the process of giving my students different options." Similar to Carl, Peter also said that "in composition, modeling is not direct." He then identified modeling as the process of helping students "to assimilate and then to distill." Den identified modeling as the process of "recombining elements like puzzle-making." With regard to this issue, Davison (2010) said that "it may be important to recognize the disparity among modeling definitions when deciphering research results" (p. 20). The composition teachers showed a remarkable correspondence of defining modeling. According to Bandura's (1997) social learning theory, personal (cognitive) factors involve individuals' knowledge,

expectations, and attitudes. Environmental factors include the influence of others, and behavioral factors are related to individuals' skills and their level of self-efficacy. In the context of the process of music composition, teacher modeling may be deemed an environmental factor.

Goals of using modeling

Each of the participants was asked to discuss their goals of using modeling in composition lessons.

"Another point at the intersection of development of voice and identity and the teaching of composition has to do with the use of models as a pedagogical strategy" (Hickey, 2003, p. 108). Among the 15 composers, six said that modeling played the role of a "'creative facilitator' by showing students different directions." Seven composers said modeling was a "safety-net" that could help students when they are incredibly stuck, and two composers shared both the ideas.

Jane described the goal of modeling as expanding and pushing the students' boundaries from "sharing other people's interesting work." Similar to Jane, William also said that modeling is how he pushes his students' boundaries by "introducing musical concepts through demonstration." Furthermore, Ken also considered modeling as the process that could "help students to be explorative and creative by showing them the many possibilities that exist." David also considered that modeling could help in "revealing yourself through the process of copying a model as precisely as possible." Carl said, "At the beginning, imitate, fine, and then find little ways of forcing them out to grow beyond that. Then, you just build technique."

Yannis and Carl made a similar point that their ultimate expectation of using modeling is for their students "to compose their own creative music by breaking the model," as seen in the literature (Randles & Sullivan, 2013). Randles and Sullivan (2013) said that offering several high-quality solutions could help students to engage their imagination.

Rick said, "I expect my students to take the composer's style and make it his/her own," which ties with the literature (Randles & Sullivan, 2013), which stated that students can have their own ideas by adding to, subtracting from, and working to transform the models given by their teachers.

Peter stated that modeling in composition lessons plays the role of a "a safety-net," because the process of modeling, such as listening to others' music and/or reading scores, helps the students when they are incredibly stuck and Chris referred to its relevance by stating that "If I'm under a gun, I need the modeling to help me." The 15 composers shared common perceptions on describing their goals of using modeling in composition lessons. Regarding this issue Bandura notes, "most human behavior is learned observationally through modeling; by observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action" (1977, p. 22), thus emphasizing the role of observation of which modeling is one type of learning in a social context.

Kinds of modeling strategies used in the 15 composers' composition lessons

During composition lessons, modeling was used for two different purposes, which are "modeling for exercise" and "modeling for actual composing." Den said that when it comes to "modeling for exercise," the purpose of using modeling is to help students build

some skills by limiting the musical elements. In this way, modeling could make composition "more manageable." The 15 composers agreed on the positive effects of modeling when it is used for exercise. Dominic mentioned that this type of modeling in composition is similar to modeling that is used in instrument lessons. However, in the case of the effects of modeling when it comes to helping actual creative composing, the opinion was varied.

The features of learning through modeling can include playing music with family members and sharing records with peers. Jane said that models are not limited to music. "It could be poems, pictures of scenes from a calendar, mountains, and waves of the ocean." In this study, however, I mainly investigated the understanding of modeling between composition teachers and students during composition lessons. When asked about the types of modeling strategies used in their composition lessons, the 15 composers shared many commonalities in the application of these modeling strategies. They mainly shared three different types of modeling which are aural modeling, notated modeling, and a combination of aural and notated modeling.

Aural modeling. With respect to each of their strategies for using an aural model, Rick replied that he often tells his students to find the score and see what it looks like on the score when you hear a sound that you like. He added that the journey of discovering "how the composer makes that sound" still fascinated him. Additionally, Rick also said that one of the ways of using aural modeling is sharing his composition process with his students by using his own music as an aural model. He said that "after playing recordings of his music (aural modeling)," he usually spoke about his composition process in terms of how he arrived at a particular piece. He added that since everyone's preferred

composition process is different, he never pushed his students to follow his process. When I inquired about the use of aural modeling, Jane referred to "guided listening," or "listening to recordings and following a listening map. A diagram of how the piece goes, or a pictorial graph of how the pieces go." She added to the importance of listening to multiple aural models by saying that "the experience of exposing them to all different kinds of sounds and having the opportunity to manipulate them will let them build a sonic palette or aural palette." This idea was reflected in Bandura's (1997) social learning theory which stated that one of the most important ways through which people learn is by modeling others. Min Jie made a point similar to Jane's by saying that she often gave repertoires to her students, and these aural models let the students "understand what is the true ear to that sound world, to the best teachers in that sound world." David also said that "suggesting listening-lists is a kind of modeling that I used the most." He added that "when a student has a problem, I try to call upon my own knowledge of the repertoire in the moment to find a solution to a particular problem." He shared how he approached modeling as a teaching pedagogy by saying that by sharing the repertoire, "I try to get inside what the student is trying to do, and then suggest solutions that others have used." He added that "exploring great composers' scores on their own will let them solve problems when they confront them because what those composers did is amazing," which is supported by Kaschub and Smith (2009) who reported that "identifying student listening preferences is the first step in guiding young composers to expand their expressive palettes" (p. 242).

M shared her way of using aural modeling strategies. She noted that "for composition students who are stuck in their comfort zones, listening to different genres of

music can broader their spectrum," which supported by Kaschub and Smith (2009) who reported that "lack of expressive gesture is often attribute to a factor that "the music that students choose to listen to represents a particular set of expressive gesture." They continued "While students may listen to music that is full of expressive gestures, listening dominated by one type of music is likely to present a narrow range of the musical gestures found across the world of music" (p. 242). M then broadened the type of aural models. She said that music teachers tend to use someone else's music as a model but she often takes the students' own past music as a model because she believes that they can learn so much by listening to and analyzing their own composition. Alex made a similar point. He said that listening to your own composition is one of the most helpful ways to improve composition, which ties in with the literature (Mandura, 1996) which stated that teachers whose approaches rely solely on reading notated exercise may wish to reevaluate their methods. A previous study (Hewitt, 2001) suggests that music educators should consider the incorporation of aural imitation task exposure to exemplary models into their teaching methodologies.

The composers considered teacher's direct demonstration on instruments as a part of aural modeling strategy, as seen in the Hickey's (2003) study. Dominic said that "my teacher demonstrated change-ringing patterns and had us pick out notes and form vocal melodies from them. He demonstrated change-ringing patterns as a way to unlock rhythmic, harmonic, and melodic differences from a mathematical point of view—something I use a lot." Hickey (2003) said "after the teacher has modeled how musical problems can be framed and solved while composing, students need opportunities to put what they observed into action" (p. 236). Kaschub and Smith (2009) also a similar point

that novice composers benefit from engaging in processes that are teacher led so that they can develop models for their own work however, advanced composers may require less teacher modeling than younger students (p. 250). Based on students' level composition teachers used different aural modeling.

Notated Modeling. The composers described how and what types of notated models are used in composition class; most of the composers pointed to reading scores and/or music analysis as a frequently used method of notated modeling, which ties with the literature (Hickey, 2003). "Composition activities may include tasks in which students imitate or compose within certain structural or stylistic models" (p. 108). However, Dominic broadened the kinds of notated models by saying that "number charts, scores, annotated scores, secondary literature/comments regarding the music" are the notated models that are used during composition lessons, which is supported by Kaschub and Smith (2009) who reported that "the use of texts, pictures, films, and even other pieces of music may help them (students) shape the expressive qualities of their work" (p. 243).

When asked to describe the ways in which notated modeling is used in his/her composition lessons, all the composers related notated modeling to "music analysis." Yannis also mentioned "music analysis" as a part of his notated strategy. He said that "one of the best ways of obtaining great composers' techniques is by analyzing their music because in that way, one can obtain other composers' knack when it comes to such aspects as phrasings and dynamics." He added that sharing various musical examples is one of the best ways to teach the technical aspects of composition, which is supported by Kaschub and Smith (2009) who reported that "referring students to the scores created by

other composers can set them on a pathway where they can discover their own solution" (p. 250). Chan made a similar point. He said that "notated models aided me in seeing how I could notate what I heard." He then further described the benefits of using notated modeling by saying that notated models not only allowed him to learn the technical aspects of music but also allowed him "to learn different styles of music." Min Jie agreed to Chan's point by saying that "I do modeling to help undergraduates who are at the beginning level of learning to effectively translate what's in their head, to improve their comprehensive notation skills." Peter made a similar point by saying that he is a great believer of note-for-note direct modeling by adding that "the act of copying every note forces you to see how they tall related to each other . . . students can learn so much about how the notes are related to each other." Dominic also said that "the experience of analyzing music is really helpful for me to learn orchestration, and instruments' techniques and ranges. While orchestrating a piece for the ensemble, I learned each instrument's different techniques and ranges."

With respect to notated modeling, Ken believed that "notated modeling on its own is not very effective." However, he added that he preferred listening to it because, often, he finds it hard to understand the score by just looking at it.

Combination of Aural and Notated Modeling. Most of the composers mentioned the "combination of aural [electronic music in audio files] and notated modeling" as the most effective modeling strategy. Dominic added that "it's the easiest way to see and hear the music directly."

William believes that students receive a more positive effect if he/she has a score accompanying them when he/is listening to an aural model. He said that the process of

listening along to the score also helps notation skills. He added that "listening with a score is my preference because that really gives them an example, audibly as well as visually, of how people are constructing things." He shared his favorite ways to use composition of aural and notated modeling by saying that whenever he finds something he really likes, he circles it, and then he burns it into his memory forever. Chris also believes in the benefit of combination of aural and notated modeling by saying that learn how it looks on paper while copying other people's score is one of the best ways to learn notation.

Ken also said that his favorite modeling strategy is to use "both aural and notated at the same time because it is so much clearer to listen to a piece with the score, to understand what is going on in the music." Majority of composition teachers found the combination of aural and noted modeling beneficial.

Perceptions of the effectiveness of modeling strategies on novice and advanced composers

When asked how modeling affects novice and advanced composers, all 15 composers concluded that different levels can impact the effects of modeling. Jane said that "the effect of modeling could be varied depending on the musical experiences of students, such as can they play an instrument, what do they know about music and their composition experience," which ties with the literature (Hickey, 2003). Composition teachers should ask whether the implicit expectations and constraints that come with models are appropriate for the level of students (p. 108).

First, the composers pointed to the different goals of using modeling for novice and advanced composers. Chan said that for novice composers, modeling other great

works is a crucial part of the composition learning process because it opens up many valuable perspectives on the various aspects of music, which is contrary to the belief that imitating the ideas of others may not allow the students' voice to emerge or may not be the appropriate means by which to allow students to discover their own voices and identities (Hickey, 2003, p. 108).

Like Kaschub and Smith (2009), I found that for advance composers, modeling is used as a refresher of what he/she already knows and of what else he/she could know or have left out. Kaschub and Smith (2009) reported that "the major challenge for advanced composers is not to rest on the skill set that they already possess, but to continue to seek new and imaginative ways of structuring and presenting sounds" (p. 245). Then, the composers emphasized the importance of "selecting the kind of model that would work best for that particular student." Peter said that "the degrees and ways of using modeling do indeed depend upon the student's track record, or lack of it, as a composer, plus his or her amount of innate talent."

For novice composers, all the composers believed that beginning with imitating the music is a good teaching approach; however, at the same time, they also emphasized the importance of expanding from that imitation. Yannis said, "By using models such as the great works of great composers, teachers can teach students about forms and techniques. Ultimately, however, it is the student himself or herself who must decide whether, and if so, how, the forms and techniques work to make a piece an artistic success." Regarding this issue Hickey (2003) said that "music-writing exercises that require students to follow the rules of common practice might work well in theory class or in order to teach about these rules but they will not likely result in very creative

musical compositions" (p. 42). Yannis added that he always encouraged his students to use their own ideas as a starting point because it is important to transform others' ideas into your own.

Peter said, "For novice composers who came in as a blank slate, starting from imitating other composers could be the only option that could help them since these students don't have any ideas of their own yet, unlike talented students who would come in with well-shaped ideas and desires," which is supported by Kaschub and Smith (2009) who reported that "novice composers are sometimes hesitant to begin projects. They tend to worry about whether or not their products will be successful. Teachers can assuage these fears by providing models and scaffolding for initial projects to ensure success" (p. 241) Rick said that "for really young students, why not start with imitating, and see how they respond and develop?" Chris stated that for novice composers, modeling is a great strategy to learn different aspects of music such as musical ideas or styles. Min Jie strongly believed that modeling/imitation is a necessary process for the novice composers to learn. She said that even if novice composers who do not have their voice yet end up simply copying the given models, this experience is only going to enrich their vocabulary. She added that "I don't think imitating, copying is going to suffocate someone's potential. It's the exact opposite," which ties in with a famous Stravinsky quote "Good composers imitate; best composers steal." Ken also said that for novice students, modeling could expose "the student to more creative possibilities and to encourage them to be explorative," which is contrary to the belief that "to exercise voice within a model may be more limiting than to compose from one's own web, unless one

already has developed gestures and strategies and can use them fluently within the specific context" (Hickey, 2003, p. 109).

Highlighting a negative aspect of this, Dominic said that "novice composers tend to be more imitative and pastiche. Therefore, teachers need to carefully use the modeling strategy for beginner students compared to using the strategy to advanced composers," as supported by Hickey (2003). Composition teachers are concerned with having students conform to the model before they have had time to explore and develop identity and voice as composers (p. 109). Regarding this issue Subotnick (1995) suggested the experience with playing with the sounds could help student to have their own identity as a composer and can look at the models to develop expertise.

All the composers agreed on the positive effects of modeling on novice composers' composition development; however, they emphasized "the importance of transforming others' ideas into your own," as supported by Hickey (2003). Yannis said that novice composers often make the mistake of exactly imitating the given models, simply because they do not yet know how to expand things from there, which supports Hickey's (2003) claim that "when students have a sense of themselves as composers, then models as pedagogical tools may be more useful than in earlier stage of development" (p. 109). Like Yannis, Rick said that students who do not have the ability, talent, and experience to write good music are more likely to follow the teacher's model. Jane said when you model it, novice composers assume that this is what they have to do. In other words, novice composers' music could be greatly influenced by others' music.

Even for advanced composers, they believed that modeling provided some positive effects, modeling, in general, was administered much less for advanced

composers. William compared the different goals for novice and advanced composers. He said that for novice composers, the goal of modeling was to improve their techniques; however, for advanced composers, the goal is more likely to get inspired by other music rather than trying to learn techniques, which is supported by Kaschub and Smith (2009) who reported that "advanced composers often seek to discover new expressive gesture" (p. 242). Yannis said that advanced composers tend to know better about how to take ideas/models that influence him/her and make them their own in a more effective way as they have more experience.

Den said that he tends to do more modeling for novice students because to write good music, students need to have lots of great music in their head already. However, advanced students who already have great music/models in their head do not require a lot of modeling. David said that as he gets older, he does less modeling which reinforces Kaschub and Smith (2009) who pointed that "novice composers are not ready for most unstructured composition activities. More advanced students may need only deadlines" (p. 197). Den added that when he was a novice composer, he did more modeling because he did not have enough references. He added that now that he was in the middle of career, he did not necessarily model other works; instead, he was trying to do his own thing as best as he can. Alex also said that when he was a novice composer, he did a lot of imitation/modeling because he did not have his musical colors. However, since he now has a particular taste, he does less modeling.

Suggested optimal ways of using modeling strategies

When it comes to discussing the optimal ways of getting aid by modeling for creative composing, composers suggested ways of avoiding any possible negative effect

of modeling such as imitation. Baker (1980) said that students' outcomes can be affected by the appropriateness or inappropriateness of the model because their concept of "correct" was affected by the presented model, which were reflected in the literature. Sang's (1987) results revealed that a large portion of the variables in students' outcomes can be accounted for by the teacher's modeling. Although the 15 teachers had common perceptions when describing the various ways to use modeling strategies to help students, different opinions emerged among them.

Appropriate timing of modeling. It is crucial when asked to describe the appropriate timing of the modeling that they believed would provide positive effects on students' composing, the composers came up with similar suggestions. With regard to this issue, William said that "finding the perfect moment for modeling is crucial" because timing plays a crucial role when it comes to modeling. He then added that "I try not to listen to anything until I get stuck, and then I'll listen to some stuff for inspiration."

All the composers agreed on the fact that they mainly use modeling strategy on the stage when students have finished constructing their ideas. The reason for giving models "based on what a student has written" is because he wants students to start with their own original ideas and then be given models "to show different directions," as stated by Rick. Yannis made a similar argument as Rick by saying that "most of the time, 95 percent of the time, teacher would use student's own submissions as the starting-point for his modeling," which is supported by Kaschub and Smith (2009) who reported that the ideas must come from students rather than from the teacher (p. 177). William agreed to Rick and Yannis. He said that "I start giving modeling whenever they start getting to the point where they can construct full ideas." When his students finish constructing

some musical ideas, he then gives them examples of how to finish their ideas and/or how to bring everything together. He provides them with a couple of models (examples) as a form of feedback. Jane made a similar point. She said that "models are really helpful at the end of the lesson after they've done it, to show them how a composer did it." She emphasized that "real composition is based upon feeling." Therefore, it is important not to start with modeling. She said, "I really think saving the professional composition models for the end works better than it does to play them at first," because "if you start them with the professional models, they'll give up before they start."

With regard to the issue of the involvement of modeling during their own composition process, all the composers had the same idea that "modeling helps me to move on whenever I run out of ideas." Yannis mentioned that modeling is like a map that opens up his composition process when he loses direction. He added that "I imitate a lot of stuff . . . I would use it (the model's form) as a starting-point." Regarding the issue of the appropriate timing of modeling, opinions were varied however, composition teachers shared the common point that teacher should use student's own ideas as the starting-point for their modeling.

Appropriate amount of modeling. When asked to describe the appropriate amount of modeling that they believed would have positive effects on the students' compositions, the composers came up with similar suggestions.

Randles and Sullivan (2013) said that teachers can help students begin their work by improvising "various accompaniment patterns, styles, and melodies and ask students for their opinions about which example best fits his or her ideas about how the piece should go. When this approach is used, students generally respond to one idea more

favorably than to others, thus propelling their work forward" (p. 53). Jane emphasized the importance of using "multiple models" instead of "a single model" to avoid imitating a single chosen model, which ties in with the literature (Randles and Sullivan, 2013). She said composers benefit from being given multiple models. "If you don't, the chosen single model tend to stifle the composer's own voice." William emphasized a similar idea. He said that he always gives a choice of multiple models to his students because they can learn "different ways to compose" through the models. He added that "you need to be listening to many, various artists and composers and not just one specific thing, where you just beat it down your brain until you get used to it." David followed a similar idea and said that it would help "avoid copying a particular thing from a model." Talking about the benefits of using multiple models, Chris said that they can help "broaden his or her musical horizons." All the composition teachers agreed that teacher should use multiple models instead of a single model.

Appropriate types of modeling. Last, when asked to describe the types of modeling that they believed would have positive effects on the students' compositions, the composers came up with different suggestions. First, all the composers agreed on "the importance of choosing appropriate notated/aural models that fit the students' abilities." In terms of knowing how to choose the right modeling strategy for students, Jane pointed to three important aspects which are "the degree of musical knowledge, composition experience, and the age of students."

William's suggestion was consistent with Jane's. He emphasized that the types of modeling should vary depending on the proficiency level of the students, which reinforces the literature (Kaschub & Smith, 2009). He said that for novice composers, it

is important to choose models that are as simple as possible, such as the simplest example of a quiet ending and the simplest examples of slow endings, fast endings, exciting endings. Rick agreed to William's point by giving an example. He said that depending on the students' score-reading abilities, the effects of notated modeling should be varied. He added that students who have high score-reading abilities tend to respond very strongly to the notated modeling. Min Jie also said that she decides on the type of modeling based on the students' different needs. For instance, her choice of aural and notated models is varied based on students' understanding of certain instruments and/or genres of music, which is supported by Kaschub and Smith (2009) who reported that "each situation and group of students is different. Teachers can quickly recognize the most appropriate structure level for their students.

Then, William brought an interesting point to the discussion regarding the length of modeling by sharing his own composition learning experience. He began by saying that "the length and quality of the models are important." He added that when teachers share aural models, they "should be specific as to what he or she is showing." He said that one of his composition teachers gave him "sections of each piece," "8 to 12-bar excerpts" instead of asking him to listen to the entire piece, and he found it really helpful because he did not need to waste a lot of time by listening to an entire movement to learn "how to use a certain compositional technique."

Some composers show their preference with regard to the types of modeling. Carl said that "if I had listened and found recordings and notated them, that would have been a more productive way." Ken said that during his composition process, he makes the most use of aural modeling, "because performance and recordings are quite accessible online

but scores, especially recent ones, are harder to find. Also, the outcome of compositions is ultimately in the performance. It is more inspiring to listen to music than to read a score." Regarding this issue composition teachers came up with different suggestions however they made a common point that teachers should choose appropriate notated/aural models that fit the students' abilities.

Research Question 2

How different and/or similar are the modeling strategies that are used during Composition and Instrumental Lessons?

Characteristics of modeling strategies used in the composition lessons

All 15 composers had several overlapping perceptions when identifying characteristics of modeling strategies used in the composition lessons. They showed remarkable correspondence in describing composition modeling by mentioning the following terms: (a) creative, (b) freedom, (c) indirect, (d) possible options, (e) invisible techniques, (f) flexible, and (g) versatile.

When the 15 composers used modeling during the composition lessons, they stated that since "composing is a creative process," there is "more freedom" in composition lessons. "To avoid having them exactly copy the teacher's given examples," "indirect sorts of modeling that often are used during composition classes." Ken viewed composition as a "creative process." He described modeling strategies that are used in composition lessons as "the teacher's examples are only there to encourage something students create on their own." M help a similar stance by saying that when it comes to

teaching composition, “the creative aspect” is imperative because that is what makes a composer sound unique.

Rick viewed modeling in composition as “indirect sort of modeling.” Den described how he used modeling strategies in his composition lessons by saying, “I tend to give more freedom to composition students, not many occasions to do direct modeling.” Min Jie had a view similar to Den ’s when describing composition modeling. She stated that “it has to do with a lot more invisible and a lot more versatile style of modeling.” Chan said that the models used during the composition lessons can be “creative tools for students for problem-solving.” He then broadened the types of models by saying that it is not only great music that should be chosen for models. Instead, “both successful and unsuccessful composition should be given to the student.” He believed that especially when students are out of ideas or stuck on compositional problem, the given models would “provide a base of referral for students” by helping them with “a variety of creative solutions.

They also shared the similar concern with regard to the use of modeling when teaching composition. They stated that deciding the appropriate degree and kind of modeling is not easy. Jane said that “it (modeling) has to do with the age of students and their level of experience.”

It seemed that the 15 teachers showed similar views when it comes to describing the characteristics of modeling strategies used during the composition lessons.

Characteristics of modeling strategies used in the instrumental lessons

The 15 teachers shared certain perceptions when describing the characteristics of modeling strategies used during the instrumental lessons. They showed remarkable

correspondence in describing composition modeling by mentioning the following terms: (a) direct form, (b) less freedom, (c) more guidelines, (d) physical, (e) nonverbal, (f) visual, and (g) less creative. The interview data revealed that the followings are types of modeling strategies that are frequently used in instrumental lessons: (a) performance modeling, and (b) visual modeling. Performance modeling can be divided into four types which include the teacher imitating student's performance, teacher playing for student, teacher playing with student, and teacher performance and student imitation cycle. Visual modeling mainly indicates showing hand and finger motions. Delzell (1989) supports the use of modeling in the instrumental lessons. He said that modeling and imitation can help develop musical discrimination skills in beginner instrumental music students.

Performance modeling. Through the interviews, it was revealed that the use of performance modeling was evident in instrumental lessons. Chan and Alex viewed that instrumental modeling is mainly "physical." Carl also said that "teaching instruments mainly requires direct/physical modeling" which were reflected in the literature (Parkes & Wexler, 2012). Peter said that "during instrumental lessons, performance modeling, such as exact melodic repletion is often used" which reinforces the idea established in the literature (Duke & Chapman, 2011).

Visual modeling. When the 15 composers used modeling in their instrumental lessons, Rick identified modeling strategy that was used during the instrumental lessons as a "direct form of modeling such as showing motions" (Grimland, 2005). Chan said that during the instrument lessons, teachers mainly "demonstrate a particular technique through body motions" (Duke & Chapman, 2001; Duke & Simmons, 2006). All 15

teachers showed similar views when it came to describe the characteristics of modeling strategies used during the instrumental lessons.

Comparing modeling strategies used in the composition and instrumental courses

The 15 composers had similar perceptions when identifying similarities and differences of modeling strategies used during the composition and instrumental lessons. They all agreed that modeling is one of the most widely used teaching pedagogies for both composition and instrumental teaching; however, the characteristics of modeling used in each of the courses are different, which is supported by Haston (2007) who reported that modeling is used in numerous education settings and modeling is a technique that can help students learn effectively in many situations. With regard to this idea, Carl made a crucial point that "the use of modeling when it comes to teaching composition and instruments are different" because "the goal of using modeling" for each of the courses "are different." Yannis identified the goal of using modeling strategies during the composition lessons as a process of "model an approach." He added that since composing is a creative and generative process, composition teachers use modeling strategies "to give students a glimpse" or "to show them teacher's process." He then compared the different objectives of using modeling strategies during composition lessons and instrumental lessons by saying that "during composition lessons, teachers don't expect their students to exactly imitate their ideas. They want to hear their students making their own sounds that have been elicited by the teacher's modeling."

Furthermore, Min Jie found the reason for the difference in the different goals of composition and instrumental modeling. She said that the goal of using modeling in composition lessons is to help them "expand their voice, to cultivate their own creative

power and talent" by showing "all these possible options." All the composition teachers agreed that the characteristics of modeling used in composition and instrument courses are different,

More involvement of performance modeling when using modeling strategies in instrumental courses: Instrumental modeling is more visual than composition modeling. Min Jie said that "unlike instrumental skills, the composition skills and techniques are invisible, it is very difficult to show" and added that there is "no best way" go about working on a composition. Therefore "instrumental modeling is the more visible form, but composition modeling has to do with a lot more invisible and a lot more versatile styles of modeling." She also shared her difficulties as a composition teacher by saying that teaching composition is very delicate work because "composition skills are mysterious and invisible," unlike teaching visible instrumental techniques that you can teach by demonstrating the motion. She added that I have to show my students that "my awareness is like this and it's flexible and it's versatile."

M's idea was consistent with Min Jie 's point, saying that in composition, "there is really no correct way to do it."

Further involvement of verbal instructions when using modeling strategies in composition lessons. David said, "Instrumental modeling is mostly physical, such as demonstrating a good posture to hold a bow. However, modeling in a composition is more conversational, like giving opinions or examples of successful compositions." He viewed instrumental modeling strategies as a form of nonverbal instruction, which supports Hanston's (2010) claim that "modeling is a nonverbal teaching strategy whereby students receive instruction in the form of concept demonstrations by a teacher."

However, he viewed composition modeling as a form of both verbal and nonverbal instruction, which is supported by Rosenthal (1984) who claimed that modeling is effectively presented when it includes both verbal and non-verbal instructions.

More involvement of direct imitation when using modeling strategies for instrumental courses. Ken said that modeling in composition and instrumental lessons are different for the following reason:

> Learning an instrument is physically challenging, so the demonstration can help very directly. In composition, the demonstrations can only serve as a reference, an example, an inspiration. Learning an instrument did not enable too much creative thinking, because most of my technical and interpretational decisions were heavily influenced by my teacher's demonstration. Composition is different because the creative process is very prominent, and the teacher's examples are only there to encourage something I create on my own.

Ken was of the view that "Learning an instrument did not enable too much creative thinking," and Dominic shared this view. Dominic said, "Instrument lessons are more strictly syllabus-based" and that physical modeling strategies are mainly used to teach different ways of obtaining certain techniques as opposed to asking him to find the ways by himself.

Rick noted that the modeling strategy that is used to teach the technical aspects of composition is similar to the one used to teach the playing of certain notes on instruments during instrumental lesson

Yannis then differentiated the characteristics of modeling strategies used during instrumental lessons by saying that "there is less freedom and more guidelines" in such modeling strategies and that it is a "very direct form of modeling." He added that one of the most commonly used modeling strategies in the instrumental lessons is "to ask the

student to just look at the teacher's hand-motion or body-position and to expect them to copy those exactly." Chan shared a similar viewpoint. He said that "instrumental modeling is always physical in the sense that it involves looking at the fingers/arms/posture," such as physically "demonstrating a particular technique." Furthermore, William also said that in instrument lessons, most teachers play everything for the students and expect their students to "emulate them almost as if you're playing by rote." He compared the different goals of teaching instruments and composition by saying that "in composition, you're supposed to create your own voice, whereas on instruments . . . your goal is to become more like that person."

Jane's idea was consistent with Yannis and William's point that "the approach to modeling strategies in composition and in instrument instruction should be different." She warned of the common mistakes of composition teachers. She said "teachers who have a performance mindset tend to make a mistake when they teach music composition because they want everybody to succeed and want everybody to be perfect, but composition isn't like that. When it comes to teaching composition, teachers should give students the structure." She added that "teachers must accept the different talents of students" because those who have experience in playing instruments tend to be much less creative in what they produce because they want it to sound "right." The problem is that "their definition of 'right' is often idiomatic rather than creative." All the composition teachers agreed that modeling in a composition is more conversational, compared to modeling in instrumental lessons.

Research Question 3

What are the composers' composition processes and their perceptions of modeling with relation to creativity?

The composition process across the 15 composers

Through the interviews that were conducted for this study, the composers shared their composition process. Younker and Smith (1996) described composing music as "an experience in which students interact with musical elements just as they do when they play an instrument, sing, or listen perceptively and creatively" (p. 25). Following Folkestad's (1996) study of musical compositions, we understand that there were two fundamental styles of composition which are "horizontal" and "vertical." Folkestad said that the "horizontal" style of composition is where melody, harmony, and structure are composed in one activity, from beginning to end, and the smaller scale editing procedures are deployed afterwards. However, the "vertical" style of composition is where the composer first completes small chunks before moving on to the next section.

The composers indicated that their composition processes included lots of "back and forth" and the process was always in "various order." This is consistent with Seddon and O'Neil's (2003) idea that composers moved in both linear and recursive fashions during their composition processes. Rick said that "whatever I've sketched out, I've put into the score, I print it up. Then I'll go back, and I'll plan it, and I'll work on it, and I'll think about it." With regard to this issue, Min Jie also noted that "composing doesn't mean you write the beginning first and write the ending last. It could be any order in your piece," which is supported by Kaschub and Smith (2009) who reported that "composition

is a creative process, not a race. Interaction with materials and the subsequent growth of the creator make possible processes that are rarely predictable or linear" (p. 225). The composers also indicated that their composition process does not always follow the same order. This was consistent with the literature (Davidson & Welsh, 1988) which stated that expert composers were able to hold the focus of attention on the task at hand but could also look forwards and backwards into the music at the same time. There was significant variety when it came to the process of composition depending on the timeline, genre/type of music, experience, instrumentation, and so much more. Chris said that his composition process varies depending on variables such as the timeline or the type of music he is writing, which is supported by Kaschub and Smith (2009) who pointed that students' compositions stem from an equally broad representation of personal composition processes" (p. 225). Chris added that when he wrote music for unfamiliar instruments, he spent more time during the pre-composition stage, studying instruments, reading scores, and listening to recordings. Yannis said that "when work is commissioned, I spend extra time brainstorming commissioners' interests and ways to combine their expectation to my musicality." Rick said, "When I was an inexperienced composer, I believed that there is a right sound. So, I spent lots of time trying to piece my theory knowledge to make right sound." This idea is consistent with the literature (Younker & Smith, 1996).

To answer this research question, the 15 composers' composition process are classified according to three different stages: pre-composition, composition, and post-composition.

Pre-composition stage. This stage involves plenty of modeling. The following is the three points made by summarizing the composers' replies to the question that required them to describe their pre-composition stage.

1. Studying other composers' music
2. Brainstorming to get inspired
3. Creating an overall formal structure of the entire piece

1) Studying other composers' music. When asked to describe their pre-composition stage, the composers replied that "this stage involves studying other composers' music by listening to recordings and/or reading scores." In other words, they mainly spend their time "researching" and "brainstorming" before beginning to compose. For instance, composers spend ample time familiarizing themselves with the particular instrument that they will be composing for. Compared to beginners, experienced composers tend to spend less time studying others' music; however, for unfamiliar instrumentation and/or genre of music, advanced composers also spent a considerable amount of time studying other compositions.

Den said that "when I wrote music for brass instruments, I spent lots of time listening to brass quartet recordings and analyzing scores because the more I well understand how the instrument works, I have a better chance to compose a good music." Ken said that listening to recordings and reading scores helped him understand possible performance issues such as giving sufficient time for musicians to breathe between passages. According to Wallas (1926), the period of getting familiar with the musical materials they are working with and assessing the initial problem is called preparation.

2) Brainstorming to get inspired. Along with conducting research, composers spend time brainstorming for possible inspiration. When I asked about the reason for spending so much time getting inspired, Alex replied that "spontaneous generation does not produce living music." Jane added that "starting from a feeling is so important because it will lead to create more expressive pieces," which is supported by Kaschub and Smith (2009) who reported that "teachers should encourage students to create music that expresses feelings that are important and valuable to the students" (p. 197). Den 's idea was similar to Jane's point. He said that the most important was "first, finding these kinds of polarities of feeling and then the harmonies and the melodies."

All the composers stressed the point that "music should be initially inspired." Dominic said the process needed to start "from inspirations and emotions rather than start following the musical structure." He added that he almost never began with just notes or scales; rather, an intention, idea, emotion, and especially certain emotions were required to begin. Carl also said that "music has got to follow the emotion and then you have to devise a musical structure that is going to support your emotional structure."

Since inspiration does not come immediately during the initial stage, the composers employ various ways to get inspired. They listen to a lot of music by others, attend good concerts, look at various scores and learn what they have done. Their methods of inspiration were as varied as their musical compositions. Some are inspired by watching movies, observing paintings, reading books and articles, and talking to other creative people. Yannis said that "during this incubation period, I listen lots of music and look at scores to get inspiration." He added that "A lot for me is like that. It's like a long incubation and research. Listening to other stuff. I imitate a lot of stuff, too. Sometimes I

like a piece of music, and I would use the skeleton of the form; I would use it as a starting point. Sometimes I would use rhythmic things that I like." Dominic said that he is fond of writing down ideas and listening to music during this process. He added that during this process, he tries to find some musical thread to grab hold of. "It could be an entire melody, a chord progression, a rhythm, a timbre, or an interval." David's idea was similar to Dominic's. David spends a certain amount of time thinking about the shape of music together without improvisation. For William, instrumentation inspires him sometimes. He said that "initially coming up with the instrumentation and thinking about the characteristics of instruments helped me to get inspired."

Besides this, the composers are also inspired by non-music materials. Ken said that "I usually start with brainstorming a theme. Inspiration could be a piece of visual artwork, a poem, an article, anything. I would start from that idea and try to come up with a plan that would effectively express the idea." Rick said, "Once, I watched several movies that I love then I wrote down my impression on the movies focusing on the aspects that interest me personally." Chan expressed that life experiences could be a good inspiration. He added that he often tries to get inspiration from reflecting on experiences and/or messages that he would like to convey. For Jane, "visual stimulation such as paintings and photographs" help generate inspiration.

Additionally, for some composers, improvisation or freely playing on their primary instrument is one of the greatest ways to get inspired. Chan said that "I take some time to just play around on the piano. During this time, I experiment with different chords, melodies, and rhythms to get inspired." He then suggested that one could "record yourself improvising, because you might use some of them later. Especially for

composers who have difficulty of notating music, audio recording can be a great option." Alex said that he lets his improvising get in the way. He then transfers his ideas onto the Sibelius software, where he can see the shape of the music and make adjustments or major changes. William said that after coming up with the instrumentation, he begins to improvise on either the piano or the trumpet while writing down the melody.

The composers' preferred ways to get inspired lay deep in their musical background and life experiences. Those who were comfortable with improvisation tend to get musical inspiration by freely playing on the instrument. For instance, M who has a background in jazz said that it is much easier for her to get inspiration from playing around on the piano because for jazz musicians, there is no clear distinction between composing and performing. Additionally, composers who are into arts and movies tend to get inspired by such material.

During the pre-composition stage, the composers create the overall structure of the entire piece. To select the most intriguing ideas, they spend time composing multiple short melodies to explore different ideas. When their musical materials become more substantial, they create the overall formal structure of the entire piece. Chris said that "having the overall structure is important because it gives a sense of where a piece will go." David said that he draws a graph to build and develop musical materials. He mentioned Corigliano's approach, "the idea of graphing your piece." He said that the approach of looking at the entire work as a graph will let composers conceive the whole thing like a blueprint. Alex also found the idea of graphing your piece incredibly useful, because the graph helps him see the shape of music. Carl creates a basic map before beginning to compose by stating that he cannot write a drama without knowing how the story is going to end. For instance,

when he wrote a song and opera, he decided the musical structure and genre based on the given texts. He added that when he has a very clear idea, like a map, for composing, he can write more interesting things because he already knows where his music is going.

Middle stage: Composition. Once the composers have developed enough pre-compositional work, they focus on composing. During the composition stage, they developed their musical materials and inspirations into full sections. Unlike the pre-composition stage, in this stage, the composers tend to focus on composing alone. Yannis said that "sometimes, that writing part, a lot of the times when I get to that point, I sort of know what I want to do." He added that "I often spend less time on actual composing than pre-composition stage because I already thought about it so much that I know the direction to compose." This idea was reflected in the literature (Colley et al., 1992), that while novice composers approached the task on a bar-by-bar basis and considered less of an overview, advanced composers approached the task by considering whole strategic factors.

Some composers use their preliminary instrument to tinker with possible ideas, while other composers sketch directly from the head onto the paper and/or on a software notation program.

Peter prefers to start composing on the piano. He said that the "instrument-based approach" puts him directly into the feel and sound of the music compared to composing either on paper or using a composing software program. Rick said that his initial activity is "to go to the piano and start improvising" until he hears something that he really likes. He then starts improvising from there and sees what his subconscious comes up with since there is no filter between his hands and brain at this point. M said that since her

composition studying was mostly instrumental, a lot of her composition process is also instrument-based. She explores the different possibilities of scales and modes by playing on the guitar. For instance, when M who has a background in jazz composes music, she makes use of "lead sheets" that just sketch out some possible chord-patterns while leaving a lot of room for improvisation, and her approach is very instrumental. For jazz musicians, it seems like their composition process is right where composing and performing meet and overlap.

Some composers prefer to compose music directly on paper or using a software notation program. From the 15 composers, three of them (Alex, Den, William) write by hand and the rest plug things directly into a computer by using a software. Dominic said, "I use syllabus because it allows me to hear the music that I write immediately and it's tremendously helpful for me." Ken added that "playback is useful because it makes easy to check rhythms, pitches, and tempi."

Alex said, "Mostly, I wrote by hand, particularly for my more experimental work which requires extended notation." Den said that he does not "like listening to audio playback because it's often a low-grade imitation of what I really want from the music." Rick added that "notation programs do not always achieve an accurate sound. Therefore, composers need to use it carefully," which is supported by Kaschub and Smith (2009) who reported that "computers are incredible tools for achieving fast results, but students need to explore a range of thinking tools to learn which ones best fit their individual processes" (p. 250). William also expressed his concern of composing music by solely relying on technology by saying that "whatever you put in, the computer will play. That doesn't mean a human being can play it." On this issue, Carl said that "technology gave

bit influenced on 21th composers' composition process. Any 21st-century composer has got to learn how to work with the computer and the technology and to manipulate sounds into sample sounds because, in this period, the creative process has to be interacting with the technology." This is consistent with the idea derived from the literature that technology will likely serve a significant role in making creativity more accessible to students of music education in the future (Randles & Sullivan, 2013). Carl added, "In this century, the technology has circumvented the composers. Most composers go straight to the computer and make music." Regarding this issues Kaschub and Smith (2009) emphasized that "composers should consider how tools positively or negatively shape the process of composition" (p. 250). Regarding this issue composition teachers believe that technology based composing programs are incredible tools for achieving fast results, however, it could hinder the development of the ability to imagine a sound. Therefore, technology should not completely replace the need to work in acoustic sound.

Starting with chords, melodies, rhythms? The answers received for this question were quite varied. When composers start putting things down on the paper, they begin in different orders. Some start with writing chords and others with writing melodies and/or rhythms. Chan said that after "fiddling around at the piano, often come up with the main melody. Then I choose the instrumentation first because this sets the parameters of the piece." Carl said, "I usually start with a chord progression when composing with a guitar. I have few chord progressions that work well for different genre of music." Then, he twiddles around until he finds extensions or new ideas that he has never tried. Once Carl has a chord progression, he tries "different melodies over the top of it using different scales and modes." Similar to Carl, Yannis, Den, and Alex also said that they mostly

begin with the harmonic material before layering the melodic material. Den said "I often start with chords. I try different chords from the familiar chords to the less familiar ones until I find a chord progression that I like. Then, I start weaving a melody line through the chosen chord progression, but I have to admit that it's not always a good way to start. The chosen chord progression does not always yield an interesting melody. To compose a strong melody, starting with exploring on the instrument until you find a strong melody could be a better way." Yannis said that when he gets to the writing point, he usually began with a harmony he can also start from a melody if that comes to him first.

Rick said that a whole, harmony and melody, can occur to him sometimes, and that some other times, the harmonic structure occurs to him. Then, he'll go through the chords and start from there. Chan said that he mostly composes in the manner of developing the melodic passage for about a phrase then fills in the appropriate harmony. He then added that even when he generates new melodies, he always seeks to link back to the main motif. William said, "When I use software, I often start with a beat then I add chords into a loop." Dominic noted that he first figures out "the pitch/harmonic basis [highest of the 'four parameters']" and then identifies "what rhythmic structure will be there—then decide the instrumentation that fits this." He said that "to determine how many measures I need to fill in each section, I often decided on a tempo of the particular section."

During this time, composers repeat numerous times to rethink what they have composed thus far. Rick said that "the process of assessment is so crucial for any pieces." While composing, composers often encounter a spot from where they cannot seem to progress any further. When that happens, composers have different methods to

proceed. Ken stated, “I back up a few measures prior to the trouble spot and rewrite the measures.” This idea was also expressed in the literature (Younker & Smith, 1996) which that advanced composers had the ability to consider moments of the task from the “perspective of the structured whole” (p. 274). Furthermore, the composers similarly expressed that “modeling helps me to move on whenever I run out of ideas.” Yannis mentioned that modeling is like a map that opens up his composition process when he has lost his direction. For Carl, “the concept of conflict in the composing process is so crucial because structure in music is created by working out conflict.” He added that he latches onto something accidental and/or odd and projects it as the main thing.

The final stage: Post-composition. When asked to describe the final stage of composing, Jane said, “I add all of the details such as dynamics and phrasing.” Chan added that after he has finished the entire piece, he listens to the playback several times, checking its dynamics and harmonies and making amendments if they are not smooth enough, in which is consistent with conclusions derived from the literature (Folkestad, 1996). In this literature, Folkestad (1996) used the term “horizontal” to describe the style of composition wherein the melody, harmony and structure are composed from beginning to end and then small-scale editing is done afterwards. To use the term established by Folkestad (1996), all the 15 composers followed the “horizontal” style of composition.

Rick said that the final stage of his composition process includes “notation and score-presentation.” Yannis said, “My final stage involves checking the score one last time to make sure they are legible.” William said, “After completing the draft, I pay more attention to the details. It’s time to look at all the details such as phrasings and dynamics.” M stated, “I spend most of time focusing on dynamic marking and

articulations." Alex stated, "After the draft is complete, I step away from the piece and make revisions. During this time, I often make minor changes to help the flow of the music."

Last, all the composers agreed that no piece is complete until they have rehearsed their piece with performers. Chan said that "during the rehearsal, I often make a lot of adjustments." Ken added that "during the rehearsal, I can discover which passage doesn't sit well in a performer's hands." Min Jie emphasized the importance of communicating with performers to convey your intentions with the music as clear as possible. She added that "I always try to communicate a lot with performers even before the rehearsal. I usually send the score to the performers to get their advice and to make sure that my score looks good enough for the performers who will play my music." After the rehearsal, the composers often make a few adjustments if they need. Then, they finally consider the composition completed.

Perceptions of the relation between the modeling and creativity across the 15 composers

When asked to identify the effects of modeling on creativity, the 15 composers shared certain perceptions; however, different opinions also emerged among them.

Den clarified that "modeling for exercise" and "modeling for actual composing" in composition lessons are different. He said that when it comes to "modeling for exercise," the purpose of using modeling is to help students build some skill by limiting the musical elements. In this case, modeling can make composition "more manageable." However, in the case of "modeling for actual composing," the models are used "to show different examples of how this person developed motives and what they did to get more

out of their material." When we discussed the effects of modeling for actual composing while focusing on the creative aspects, Den said that the key to the successful use of modeling is "to help the students see the implications of their own ideas, by reading their intentions." He added that it will also "help them see the logic, not where you think it should go, but what their own idea implies."

It seemed that some composers had mixed feelings on the involvement of modeling during the composition process when it comes to creativity. One composer, Ken, held a neutral position. On the effects of modeling on his composition process, Ken answered, "Good and bad. Modeling has enabled me to look past the surface level of notes and sounds. It has led me to consider the concepts behind the music. However, this assumes that musical meaning has to exist in the background, under the layer of music at the 'surface level.'" Chris made a similar point. He said that such an approach to modeling is either dangerous or hit-or-miss, as his final comment on this matter indicates: "If students only wrote the thing that was highly derivative, that ripped off other people, and if you're always modeling after other folks, then how do you develop your own voice?"

Possible positive effects of modeling on students' creativity. Although the three composers, William, Den, and Chris, showed concerns about the possible negative effects of models on creativity, most of the composers shared the positive effects of using models during their composition processes. Carl and Peter considered that modeling has a positive influence on the students' creativity. Haston (2007) reported that Edwin Gordon, Daniel Kohut, and Shinichi Suzuki all affirmed the efficiency of modeling and imitation, when used appropriately.

David believe that since “imitation is actually one of the most fundamental ways we learn,” some amount of modeling should not be an issue. He added that “I feel like the creative process starts to really take form with them when they have concrete things to work on, and they have concrete ideas that they can begin to manipulate,” Kaschub and Smith (2009) who reported that “composers often turn to intensive listening (aural modeling) in search of new products and new ways of presenting feeling within their own works” (p. 242)

Carl said that “models could make the work more manageable by playing the role for a positive constraint.” Peter expressed a similar idea and pointed to the importance of having a strict model by sharing how Stravinsky put it: “Don’t tell me; give me parameters, give me restrictions! I cannot write if I just take a piece of paper and try to write on it, I can’t write.” Moreover, Jane said that “total freedom is never good” and supported her assertion by sharing the results of one of her studies: “The more structure you provide, the less creativity you will get. But no structure is less creative than some structure.” However, she made the interesting point that “giving structure could help students to learn composition techniques by making composition more manageable. However, if a teacher is looking for expressive compositions, restrictions could be an obstacle.”

To add to this, Peter said that all great composers are “my teachers.” Carl said that he is always helped by models, before and during the composing of new music. He strongly believed that “imitating a model is fine” because “it takes long time to sound like yourself.” He added that “it’s perfectly fine for students at the beginning to imitate and model, because the act of composition, it’s like an exercise for a while. It’s okay for

students to imitate others and sound like them for a long time because they aren't themselves yet. I think that it's okay for them because at least students can learn basic principles by just copying it down." Furthermore, he also stated, "Most people don't have the natural creativity, nobody is coming up with the new stuff out of a band." Therefore, "you should listen to the music (model) that you like and imitate it until you become yourself."

One of the most commonly addressed positive effects of modeling is that the chosen models help them come up with creative ideas by showing possible options. Rick stated that "to invent something creative, you need to have a point of reference." David also considers the models as a reference that helps him be creative. Then, he added that "I do much less (modeling) as I get older. When I was a novice composer, I did more listening since I didn't have enough references but now since I'm in the mid-career, at this point I don't necessarily model on another work." Yannis also supported Rick's point by sharing a famous Stravinsky quote: "A good composer does not imitate, he steals."

Furthermore, the composers Dominic and Alex stated that modeling especially affects them positively when composing a new piece. Dominic said that "it helps a great deal when you think of it as a source of inspiration, and then launch off with your own take on it, adding in individualistic ideas, or expanding on the previous composer's technique." Alex said that "Modeling affects me positively when I compose a new piece. It's a healthy and stable form of refreshment over a certain technique, or in a composer's case, a mentality. It's definitely been a positive experience which has brought me to have a mental box of techniques to choose from, depending on the situation."

Chris described the learning process by saying, “I will try to copy him, I will fail, and the ways that I will miss are gonna sound like me. I’m not that good, and I’m not gonna copy just a whole bunch of junk, but it could be organized in my recipes.” He then added that “it’s this idea of you trying to copy somebody else, and the part in which you failed is the part that you’re actually original.” Although some composition teachers showed concerns about the possible negative effects of models on creativity, most of them shared the positive effects of using models during their composition processes.

Possible negative effects of modeling on students’ creativity. Chris shared the possible negative effects of modeling on the composers’ originality and creativity. He mentioned that he personally used modeling during his composition process only “when there is not much time.” He said that when there is a short timeline, “there is no way to do it (compose music) without modeling.” He refers to the chosen model and writes music that works better with his project. He added that when he used a model, he took “some of it’s (model’s) gesture. . . a lot of times, it’s a tempo thing, or maybe one instrument . . . or some kind of just an idea or mood.” However, he expressed concerns regarding the effects of modeling on originality by saying that “modeling helps the fluency . . . in terms of execution, modeling definitely helps me; but, in terms of creativity . . . you gotta chill it out.” He made a crucial point by saying that “to make something really new . . . the aim should be without models.”

William and Den shared similar views on the involvement of models during the composition process. William stated that when he is working on a piece, “I will try my best not to listen to a lot because I generally tend to sway towards whatever I’m listening

to." Den said that since he does not want to copy others' style so much while working on his piece, he consciously tried to avoid listening to pieces (models) that are similar to his.

William then warned of a possible negative experience of a teacher's overuse of modeling as a restriction. Some teachers use modeling as a restriction, for instance, by asking their students to emulate a certain composer's pitch order. He added that this will leave students with almost "no creative control" because if a student emulates someone else, all the pitches will be designed for you. He added that "whenever you're following a set list of instructions on how to write something, it gives you a lot less room to be creative with what you're doing."

William respects the pedagogic usefulness of modeling; nonetheless, he is cautious when employing it. "If you're doing it in small doses, it's a great tool; but if you start relying on it to come up with everything, then you're going to fail yourself as a creative person. It's a lack of creativity when you start imitating."

However, Den was not much concerned about the possible drawbacks to modeling by saying that "it (modeling) was like showing different possibilities. Then it would change, it would morph, and then they would revise," which is supported by Kaschub and Smith (2009) who reported that experimenting with the sounds, combining them, arranging them, and trying out new ways of creating sounds with the sources all increases the available sounds a student can use and may promote creative thinking (p. 177). Opinions varied when it comes to the possible negative effects of modeling on students' creativity.

Research Question 4

Besides modeling, what types of pedagogical approaches are used to teach composition?

Identification and characterization of other pedagogic approaches that are widely used in composition lessons

While the 15 composition teachers shared certain pedagogic approaches that are used in composition lessons, some different approaches also emerged among them. The composition teachers shared similar views on the characteristics of the pedagogic approaches that are used in composition lessons. They all mentioned that composition pedagogy is not about teaching students how to compose but reviewing the students' compositions through consultation and feedback.

To further understand the contexts of the usage of pedagogic approaches, I asked to describe the class procedure briefly. It turned out that all 15 composers followed similar steps during their composition lessons. They began their lessons by (a) listening to the Midi playback of the student's composition, (b) discussing the student's composition overall and engaging in dialogue with students, and (c) giving feedback through questions. After listening to the student's compositions, the teachers often helped the students by asking questions. Chan said that "these questions not only prompted me to think about possible ways I could improve my compositions but also enabled me to imagine the sounds and interactions of instruments that cannot be heard just by seeing the musical notation," as supported by the literature (Hickey, 2003). Feedback can be

delivered verbally or nonverbally in the form of answers, descriptions, suggestions, and questions (p. 236).

Guidance and Feedback. 12 out of 15 composers indicated to guidance and feedback as the teaching method that he/she has used the most. This is a narrative approach that includes a teacher's verbal description and dialogue with students and teachers. Regarding the role guidance and feedback, Campbell (1998) suggests that while students are musical without expert guidance, they become more musical as a result of it (p. 196).

1) Guidance (How to begin, flexible). In this study, guidance refers to a pedagogical approach wherein teachers provide verbal guidelines before the students' composition process begins as a sort of restriction. Hickey (2003) said that "guiding composition while respecting the emerging identity and voice of young composers requires active attention to works in progress" (p. 109). Rick noted that they needed the "guidelines not only to make their work more manageable but also because giving some restrictions ends up helping them to do more creative works." This was evident in Randles and Sullivan's (2013) study wherein it was stated that the "student composer would need assistance in learning how to maintain a narrative progression over the course of a composition or how to establish and maintain the coherence of one or more musical processes" (p. 54). William expressed a similar thought. He said, "When I found a clue about a student's creative idea, I stuck to it and tried to him to develop the idea by giving guidance," which supports Hickey's (2003) claim that guiding composition requires "the mental and musical agility to recognize the emergence of gestures" (p. 109). Den said that for his to get students' ideas and emotions, he uses dialogue as a form of guidance.

Randles and Sullivan (2013) said that they "ask a question" as a form of guidance, which supports Hickey's (2003) claim that "the ability to ask questions or redirect actions in order to motivate students while maintaining the integrity of their work" (p. 109). Kaschub and Smith (2009) also pointed that "asking questions allows the teacher to explore the composer's intentions and provides students the freedom they need to develop who they are as young composers" (p. 225).

M addressed a crucial point by sharing her manner of using guidance during her composition lessons. She said that after giving guidance to a student, and if the student got the concept, it becomes time to stop providing guidance even if you, the composition teacher, planned to give full guidance, which supports Hickey's (2003) claim that guiding composition requires the ability to "redirect actions in order to motivate students while maintaining the integrity of their work" (p. 109).

Chris referred to the danger in the "no guidance" approach by sharing his negative composition learning experience with a teacher who never gave any restrictions/guideline in compositions. He said that since there was so little guidance, it was hard for him to begin composing, which is supported by Kaschub and Smith (2009) who reported that "young composers work best when they feel safe, and their safety often lies in knowing that an expert is nearby to help them should they run into problems" (p. 226).

M pointed to a lack of flexibility as a reason for "the way formal courses tend to produce standardized pieces." Dominic had a similar idea. By referring to his least successful composition learning experience with a teacher who "was mad at him because he didn't do what was asked for in the given syllabus," he emphasized the importance of

"flexible teaching." Composition teachers agreed that guidance make students' work more manageable, however, it should be flexible.

2) Feedback (Continuation, how to end). In this study, feedback is a pedagogical approach wherein the teachers provide verbal guidelines during and/or after the student's composition process. Randles and Sullivan (2013) said that "a teacher's feedback could function in helping the students conclude a piece of music." Jane said that quality feedback could guide students to a conclusion of their creative compositional efforts, which were reflected in the literature (Randles & Sullivan ,2013).

Chan said that he used feedback in every composition lesson. He spoke of the "importance of giving constructive feedback by adding that such ample feedback could help students' composition rather than the broad compliments, as seen in Hickey's (2003) literature. "When providing feedback, teachers and students can articulate what they heard, provide suggestions for correcting inaccurate use of specific elements and expressive details, and provide possible solutions for musical problems that have been identified (p. 236). Regarding this issue, Younker (2000) said that giving constructive feedback is an important role for the teacher in teaching music composition. He added that to best help the students improve their musical products, a fair amount of reflection must take place by focusing on "what has been done, what needs to be done, and what can be done."

Reese (2003) said that to give helpful feedback, teachers have to place their efforts on giving "perceptive, imaginative assistance." David said that changing notes and/or writing down suggestions on students' written scores is the form of the feedback that he used the most.

Chan and Min Jie broadened the range of feedback. Chan said that feedback is not only limited from teachers to students: “In group settings, other peers also can give feedback on one’s composition,” as supported by the literature (Hickey, 2003). Composition students may learn new gestures from one another and then accept, reject, or adapt these gestures for their own work (p. 108). Min Jie added that students not only get feedback from other students but also the performers. She then added that getting constant feedback from musicians by working with them is the most rewarding experience a composer can have, which is supported by Kaschub and Smith (2009) who reported that “composers benefit from opportunities to work with friends, musical peers, compositional peers, and performance-skilled peers. Each of these interactions builds their knowledge in different ways” (p. 225). Composition teachers agreed that feedback is not only limited to teachers.

Assessment. Assessment has been broadly defined to encompass a wide range of methods for evaluating a learner’s performance, including formal testing and examinations, practical and oral assessment, classroom-based assessment undertaken by teachers and informal observations (Gipps, 1999, p. 356). Airasian and Russel (2007) defined assessment as the process of gathering, recording, interpreting, using and communicating information about all aspects of a learner’s development to facilitate decision-making. Jane defined assessment as a formative assessment conducted by teachers during the learning process to get the students moving forward and making progress. Burnard and Murphy (2013) elucidates that “assessment can happen on a day to day basis to help the teacher decide what the young musician needs to do next and what kind of tasks to set” (p. 148). They also stated that “assessment is integral to music

curricula, to music teaching and learning and to music making of all kinds the world over. Undertaken effectively, assessment can bring a shared vision of teaching, learning and creativity in the school, generate high expectations for learners and teachers alike and enable all to move forward consistently towards higher goals and fulfilment in music learning" (p. 147).

Jane differentiated the purposes of the different types of assessments by saying that formative assessment occurs during the learning process to help students move forward and progress accordingly. Evaluation is a summative assessment that happens when students submit a completed piece to the teacher, and grading is the process of rating students at the very end.

All the composers used assessment as their pedagogic approach and shared the viewpoint that students should not be graded on the product but on the process. Jane said that real learning takes place when the teacher assesses the students based on their progress and not their first attempts. From the literature, Dewey (1938) said that real learning takes place when the student is engaged in the process of discovering what is important through testing, evaluating, retesting, and reflecting. Rick and David also made similar points. Rick said, "It is unfair to evaluate students based simply on the results since everyone has different starting points. I grade based on the students' work ethics." David also said that the students are graded on whether they absorbed the feedback and their diligence in making changes. He believed that assessing the quality of work is unfair since the students come to class with different musical talents. The results of the interview data revealed that in composition lessons, formative assessment was mainly used to enable students to progress over time. Burnard and Murphy (2013) defined

formative assessment as a type of continuous assessment that "feeds forward" to future learning. Composition teachers agreed that teachers should assess their student based on student's progress and not their first attempt.

Instrument-based Approach. Four composers (Rick, Chan, Carl, Peter) warned of the detrimental effects of writing music by solely relying on a computer, which is supported by Kaschub and Smith (2009) who reported that "technology cannot completely replace the need to work in acoustic sound. Because the technology makes so many things easier to do, it is easy to neglect the development of the ability to think in sound" (p. 178). Rick said that students could end up writing something not playable since a computer can play any range. For this reason, he often encouraged their students to work with instrumentalists or to go to the instrument that he/she can play and start improvising and composing on it. Peter suggested an instrument-based approach as well by saying that "sometimes, the shape of the piece can be beautiful, but often what tends to be missing is a real sense of identification with the instruments." He emphasized that to compose in a manner that is truly idiomatic for a particular instrument or collection of instruments, the process of exploring and playing those instruments is crucial, which is supported by Kaschub and Smith (2009) who reported that it is important to include composition activities that do not require computer technology. "This allows young composers to develop broader understandings of the processes of composition" (p. 197).

All four composers who supported the instrument-based approach made comparable points on the benefits of playing multiple instruments as a composer. Chan noted that playing multiple instruments is very beneficial for composers. He said that the instrumental knowledge he obtained by learning different instruments helped his creative

thinking process and the final product by making him further aware of the kinds of music that are best suited to a particular instrument. Carl added to Chan's point by saying that constantly performing and growing as a musician is an essential part of being a composer. Composition teachers agreed that students can benefit from working with peers. The experience of sharing their works with peers could help them return to their composition with new ideas and motivation.

Non-Musical Materials. Rick mentioned that using non-musical materials such as sharing a picture or a poem with students is a good way to stimulate their creativity. This is consistent with Randles and Sullivan's (2013) idea that "stories and good compositions need satisfactory flow, contrast, and suspense. By understanding this, teachers can develop comments that are helpful to students as they work through the creative process." David was the only one who referred to Corigliano's approach, "the idea of graphing your piece." He added that the approach of look at the entire work as a graph will help composers conceive the whole thing like a blueprint. Alex also found the idea of graphing your piece incredibly useful because this exercise helps him see the shape of his music. Composition teachers said that combining non-musical materials to composition lessons could stimulate students' creativity.

Chapter VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This objective of this study was two-fold: to describe the types and degrees of modeling being used by teachers in composition lessons and to assess their impact on students' creative processes and products. Investigating modeling strategies used in composition lessons can hopefully provide a basic guideline on how to use modeling strategies in composition lessons for both inexperienced and experienced composition teachers. This chapter includes a summary of this study, the conclusions to the four research questions, and recommendations for future research.

Methodology and Procedure

Qualitative analysis was used for this study. Portraits of composers (N = 15; 12 males and 3 females) were created to present the interview data for this study. Prior to this study, two small-scale pilot studies were conducted to gain a solid basis for this current study. In the first study, to investigate the influence of a model on the composition of melodies, two graduate-level composition students were selected. The two students composed melodies with and without a model while seeking to investigate whether modeling leads to imitation. The second study foreshadows the current research design. I employed in-depth, one-on-one interviews with ten graduate-level, music composition majors. The interview questions were designed to enquire about their overall impressions of the use of modeling as a teaching strategy. The material in each interview

ranged from the participants' overall experiences in composition class to each student's musical background; however, the interview chiefly focused on their impressions of the impact of modeling on improvisation experiences. The experience of conducting interviews for the second pilot study allowed me to not only improve her interview skills, such as verbal and nonverbal communication and time management, but also allowed her to test the interview questions. I revised some of the interview questions after conducting the second pilot study so that they could better extract data from the participants.

For the current study, 15 composition teachers were selected. These teachers have been teaching composition in one-on-one settings for undergraduate and/or graduate-level students for five years or more. In addition to the experience of teaching at the college, all the composition teachers have additional teaching experience from early childhood to graduate level, in a variety of settings. One-on-one interviews were conducted with me, and each interview lasted approximately 60 to 90 minutes. The interview questions were tailored to obtain a comprehensive understanding of the modeling strategies that were used by composition teachers and the effects of those strategies on the students' compositions. Participants shared their experiences of taking and giving composition lessons and talked about the use of modeling strategies as an instructional technique. Additionally, they also shared their own musical backgrounds, their composition process, reference to creative thinking, and so much more.

Data Collection and Findings

After conducting interviews with the 15 composition teachers, the recorded interview data were transcribed. I emailed the transcripts and the translations to each

participant for member checks. I combined the data and searched for any emergent and/or universal themes from the interview transcripts. A list of common words and phrases were compiled and divided to form each of the research questions.

When used effectively, modeling helped students easily learn the requisite concepts or techniques by imitating the teacher. When used inappropriately, however, modeling can act as an obstacle that hinders the students from creatively working through process of composing. In other words, the inappropriate use of an otherwise effective teaching tool for introducing new musical concepts or performance skills could prevent students from becoming creative and independent learners and thinkers. It could limit their chances to learn through discovery, to arrive at their own interpretations of the great works of the past, and to create their own pieces. It draws some of its inspiration from Amabile et al.'s (1996) suggestion that organizational impediments related to freedom and to resources can be obstacles to creativity.

Conclusions

Interviews with the 15 composers developed a portrait of the aspects of composition teaching involving modeling strategies. The research questions posed in this study were crafted to investigate the impacts of modeling strategies. Conclusions for the research questions were generated from the interview data. The collected interview data combined with related literature helped answer the research questions.

Answering the research questions

Question 1: How is modeling used in composition lessons? The question "How is modeling used in composition lessons?" was answered by the 15 composers. During

the interviews, the composers identified and described the modeling strategies that were used in the composition lessons. All the composers agreed that modeling strategies were the most commonly used. Furthermore, when identifying modeling strategies in their own words, the composers showered remarkable correspondence in describing composition modeling. To identify composition modeling, the composers repeatedly used the following terms: (a) indirect, (b) thought process, (c) possibility. If I put together the composers' definitions, it seems that composition modeling is an indirect way to illustrate his/her thought process by giving possible options to students. Bandura (1977) emphasized the role of observation and said that modeling is one type of learning in a social context. He stated that "most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions, this coded information serves as a guide for action" (p. 22).

According to Bandura's social learning theory, personal (cognitive) factors involve individuals' knowledge, expectations, and attitudes. Environmental factors include the influence of others, and behavioral factors are related to individuals' skills and their level of self-efficacy. In the context of the process of music composition, teacher modeling may be deemed an environmental factor.

The question "What types of modeling are used and how they were employed" was answered by the 15 composers. When describing the types of modeling strategies, they answered that "direct modeling," which involves the teacher's demonstration, and "indirect modeling," which includes "aural modeling, notated modeling, and combination of aural and notated modeling." Aural modeling includes "listening to recordings." Suggesting listening lists is a type of modeling that composers used the most. Composers

said that aural models can help improve the students' compositions by broadening their musical spectrum which supports Kaschub and Smith's (2009) claim that "the more sounds the students have experienced repeatedly, the more sounds they have to use in their creations" (p. 263). Specifically, the experiences of listening to different genres of music can help students move out from their comfort zone, which is supported by Kaschub and Smith's (2009) who reported that composing ensembles should offer "a wide range of traditional styles, computer-based styles, and pop music ensemble styles" (p. 265). Composers also said that when students confront problems, the composers help them by suggesting repertoires that could help them move on, which is supported by Kaschub and Smith (2009) that students often can proceed on their own with appropriate modeling. Types of aural models was not only limited to great composers' music but also included the students' own past music. Composers said that the experience of listening to their own music is one of the best ways to improve composition because it gives the students the chance to look back at their own music and composition process.

All the composers related notated modeling to "music analysis" and referred to "scores" as the most commonly used notated model. The composers said that as a part of notated strategy, "music analysis" is "one of the best ways of obtaining great composers' techniques." By analyzing great composers' scores, the students can also obtain these composers' composition techniques. Furthermore, as notated models aid students to improve their notation skills, "the act of copying every note" helps students to learn "how the notes are related to each other," which supports Kaschub and Smith's (2009) claim that "by creating, notating, and playing their own pieces, they become much more aware of the notational aspects of other people's music" (p. 264).

However, notated modeling could be not the best option, especially for the beginners who have difficulty in reading and understanding music by reading scores, which supported by Kaschub and Smith's (2009) who reported that "they (students) follow other composer's notational instructions much more closely when they understand the meaning and importance of what has been written" (p. 264).

The "combination of aural and notated modeling" was considered as the most effective modeling strategy. Composers said that when he/she has a score accompanying the recording, it helps them learn how great composers construct their music. The combination of aural and notated modeling gives students an example "audibly as well as visually."

In sum, composers used modeling strategies "to show students different directions" while expecting the "students to take the composer's style and make it his/her own." Modeling played two different roles: being the "safety net" that could help students when they are incredibly stuck and being the "creative facilitator" that could "push students' boundaries." Bandura (1986) stated that "Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do" (p. 22). He then added that "most human behavior is learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions, this coded information serves as a guide for action" (p. 22).

Additionally, I enquired about the composers' perceptions of modeling strategies as used on novice and advanced composers. They said that the modeling effects are different depending on the composers' levels. They said that novice students are more

likely to follow and imitate the given model. However, composers said that starting with imitating other music is fine in the case of novice composers. Imitating other great work is a crucial part of the composition learning process because modeling can open up valuable perspectives on the different aspects of music. The composers considered that choosing an appropriate type of model and degree of using modeling depending on the student are crucial elements of the teacher's role, which is supported by Kaschub and Smith (2009) who reported that the task guidelines must carefully account for students' previous experiences and skills. "Novice composers are routinely intermediate to advanced listeners. They are capable of self-defining compositional products, but they may need a substantial degree of guidance in formulating compositional projects that allow them to make best use of their newly emerging technical skills" (p. 238). It is really important to select the kind of model that would work for the particular student because "unlike advanced composers who already have their own voices," novice composers' music tend to be greatly influenced by models. All the composers emphasized that after learning valuable perspectives through imitating other great music, transforming others' ideas into your own should be the next crucial step.

Unlike novice composers who use models to also learn composition techniques, advanced students mainly use models to get inspired by other music. Composers said that as they have more experience, they do less modeling because they already have enough musical references in their heads.

In sum, in composition lessons, modeling was mainly used for two different purposes which include "modeling for exercise" and "modeling for actual composing." In the case of using "modeling for exercise," all the composers agreed that modeling works

as a positive influence on the students by helping them learn musical concepts through imitation. However, in the case of using modeling for actual composing related to creativity, the opinions were varied. Kaschub and Smith (2009) pointed that even if for the composition projects that require significant teacher input as particular skills, teachers have to leave "ample space for students to make creative choices." They added that "Demonstrating an understanding of common tone modulation, for example, can be achieved in pieces constructed for any pitched instruments, in any meter, and in many styles" (p. 238). Beyond imitation, students have to learn how to create their own music by breaking the model. Therefore, composition teachers should use modeling by finding a good balance between "teacher-imposed constraints with student-defined freedoms" (p. 238).

Question 2: How different and/or similar are the modeling strategies that are used during composition and instrumental lessons? The differences and similarities of the various modeling strategies used was addressed by the 15 composers. They repeatedly used the following terms: (a) creative, (b) freedom, (c) indirect, (d) possible options, (e) invisible techniques, (f) flexible, and (g) versatile.

All the composers answered that there is more freedom in composition lessons since composing is a creative process. During composition lessons, indirect modeling was used to encourage students to create their own compositions. Musical models were not limited to great music. To provide a variety of creative solutions when students run out of ideas or are stuck on composition problems, composers use successful as well as unsuccessful compositions. However, it seems that the composition teachers struggle to find the appropriate degree and type of modeling.

All the composers had the same idea when identifying characteristics of modeling strategies used during instrumental lessons. When describing these characteristics, they repeatedly used the following terms: (a) direct form, (b) less freedom, (c) more guidelines, (d) physical, (e) visible, (f) more technical, and (g) less creative. It appeared that a "direct form of modeling such as showing motions (physical modeling)" is often used in instrumental lessons, and there is "less freedom, more guidelines." It was also evident that instrumental modeling is mainly "physical" and that they include a lot of creative thinking, which is supported by Kaschub and Smith (2009) who reported that the purpose of instrumental classes is to master the technical and express quality of specific instrument (p. 264).

This highlights the common perceptions that the composers had when comparing modeling strategies used during composition to the ones used in instrumental lessons. They all agreed that "modeling is essential for both composition and instrumental teaching." However, the characteristics of modeling used in both situations are different because of the difference in the objectives of using modeling for the lessons. It seemed that the goal of using modeling in composition lessons is to help students create their own music by giving them inspiration from various possible options through modeling. Therefore, when teachers do modeling, "they don't expect their students to exact imitate their models," and it is a "indirect form of modeling." However, the goal of using modeling in instrumental lessons is expecting the students to copy the teacher's hand-motion or body-position to make it sound "right." Therefore, "there is less freedom and more guidelines" in modeling strategies used during the instrumental lessons and is a "very direct form of modeling."

Composition teachers partially used this direct form of modeling when teaching "technical aspects of composition."

It was evident that "the approach to modeling strategies in composition and in instrument instruction should be different." This highlights that composition teachers should not have a performance mindset because there is not just one "right" sound when it comes to composition.

Question 3: What are composers' composition processes and their perceptions of modeling in relation to creativity? When describing their composition process, the composers agreed that the "composition process is in a various order." Furthermore, the composition process is affected by different variables such as timeline, genre/type of music, instrumentation, and so on. They also perceived the composition process as a three-stage setup, which includes pre-composition, composition, and the post-composition stages.

The pre-composition stage involves plenty of modeling. Each of the composer's studies other composers' music, brainstorm to find inspiration, and create an overall structure of the entire piece. All 15 composers stressed the importance of "starting from feelings." However, since inspiration does not come immediately, the composers use models to get inspired, which supported by Kaschub and Smith (2009) who reported that "guided listening and compositional études are often pre-compositional experiences that serve to enhance student learning within a particular compositional activity" (p. 237). Furthermore, they are not only inspired by others' music but also by non-music materials. The ways in which they get inspired are as varied as their musical composition, and the composers' preferred ways to get inspired lay deep in their musical background and life

experiences. For instance, composers who have a background in jazz get inspired by playing around on the piano.

Once the composers have developed enough pre-compositional work, they move on to the Middle/Composition stage. In this stage, composers develop their musical materials and inspirations into full sections. Diverse opinions emerged from the interviews about their approaches to composition. Some composers use their preliminary instruments to tinker with possible ideas, while other composers sketch directly from the head onto paper and/or on a software notation program. The composers in this study considered that technology significantly influenced the composers' composition process and their music. When composers start putting things down on the paper, they begin in different orders. Some start with writing chords and others with writing melodies and/or rhythms. The composition stage also involves modeling to some extent. Sometimes, the composers might encounter a block in their compositions beyond which they cannot seem to move any further. In such instances, the composers are aided by modeling. They said that modeling helps them move on whenever they run out of ideas and/or lost direction.

When asked to describe the final stage of composing, the composers said that they spend time making minor changes to the dynamics and phrasing to help the flow of the music. The composers in this study agreed that no piece is complete until rehearsals are done with performers. They then emphasized the importance of communicating with the performers to convey the composers' intentions as clear as possible.

Diverse opinions also emerged from the interviews about their perceptions of modeling related to creativity. First, the composers clarified that "modeling for exercise" and "modeling for actual composing" in composition lessons have different purposes. to

the purpose of "modeling for exercise" is to help students build some skill by limiting the musical elements. In this case, modeling helps make the composition "more manageable." However, it seemed that composers have mixed feelings on the involvement of modeling when asked about its effects for actual composing while focusing on the creative aspects. 12 out of 15 composers shared the positive effects of modeling. They believed that modeling can positively influence the students' creativity "by playing the role for a positive constraint." They agreed that "total freedom is never good" and that "most people don't have the natural creativity, nobody is coming up with the new stuff out of a band." Therefore, "you should listen to the music (model) that you like and imitate it until you become yourself." Models help students come up with creative ideas by giving them possible options. "To invent something creative, you need to have appoint of reference," and they considered "models as a reference that helps students to be creative." They added that "modeling is a stable form of refreshment."

On the other hands, three composers, William, Den, and Chris, expressed concerns regarding the possible negative effects of models on creativity. They all respect the pedagogic usefulness of modeling but are cautious of it. The three composers said that modeling helps the fluency in terms of creativity; it could restrict the room for creativity because they tended to sway towards the models. Therefore, they believed that "to make something really new . . . the aim should be without models." Then, they warned of the possible detrimental effects by referring to a negative experience of a teacher's overuse of modeling as a restriction by saying that "whenever you're following a set list of instructions on how to write something, it gives you a lot less room to be creative with what you're doing."

Last, the composers suggested the optimal ways of using modeling strategies while avoiding any possible negative effects such as imitation. They revealed that choosing the appropriate timing, amount, and types of modeling play a crucial role. In terms of appropriate timing, they indicated that composers use modeling when students the finished constructing their ideas and/or when the students are blocked because they have run out of ideas. In terms of the appropriate amount of modeling, composers emphasized the importance of using "multiple models" instead of "a single model" to avoid imitating a single chosen model. As Kaschub and Smith (2009) says when it comes to the appropriate types of modeling, even if some of the composers showed their preference regarding types of modeling, they all agreed on the importance of choosing appropriate notated/aural models that fit the students' musical knowledge, composition experience, and the age of the students.

Question 4: Besides modeling, what types of pedagogical approaches are used to teach composition? The different kinds of pedagogic approaches that are used in composition lessons were addressed in the interviews with 15 composers. Based on their statements, it was apparent that "composition pedagogical is not about teaching students how to compose, but instead review students' composition through consultation and feedback." 12 out of 15 composers referred to guidance and feedback as the teaching method that he/she has used the most. Both guidance and feedback are narrative approaches that include a teacher's verbal description and dialogue with students and teachers.

Like Hickey (2003), it appeared that the composers used guidance the most as their pedagogic approach because it allowed them to understand a student's creative idea

and help her/him develop the idea into a full piece by giving them suitable guidance. The composers also stressed the importance of the appropriate degree of guidance. Lack of guidance could render the students helpless. On the other hand, excessive guidance could lead to producing standardized pieces, as supported by the literature (Hickey, 2003).

When it comes to feedback, about giving verbal guidelines during and/or after students' composition process, composers stressed "the importance of giving constructive feedback" that help students' composition rather than providing broad compliments, as seen in the Hickey's (2003) literature. "The focus of feedback is on what has been done, what needs to be done, and what can be done" (p. 236). As Kaschub and Smith (2009) pointed students not only benefit from teachers' feedback but also from appropriate peer feedback (p. 267).

The composition teachers considered assessment and evaluation as their pedagogic approach, which is supported by Kaschub and Smith (2009) who reported that "as composition skills continue to develop, assessment plays a critical role in providing students with objective and reliable information about their growth as composers" (p. 238). The composition teachers reported that "grading should be based on students' progress" rather than on the results since every student has a different starting point. Kaschub and Smith (2009) who reported that "assessment can take many forms, but the ability of each composer to determine and use criteria for assessment is an important part of his or her individual growth and development" (p. 239).

Four teachers support the instrument-based approach by noting that solely relying on playback could result in the students writing something that is not playable. One teacher mentioned Corigliano's approach, "the idea of graphing your piece," and said that

the approach of looking at the entire work as a graph will let composers conceive the whole thing like a blueprint.

The findings of this study can also provide beneficial information to both inexperienced and experienced composition teachers as a basic guideline on how to use modeling strategies in composition lessons.

Limitation of the Research

It is important that the findings of this study be examined within the context of its limitations. The qualitative approach in this study opened up opportunities for in-depth conversations with the participants. However, the number of participants in this study is not big enough sample to represent a whole population of composers. A qualitative study including a larger participant sample could gather more detailed data through interviews. This will provide a deeper and more accurate picture of composition instructors' use of modeling during their composition lessons. Participants were sampled purposively to include only experienced composition teachers and as a result, generalizations to other members of the population must be made with caution.

Another possible limitation involved the fact that the majority of participants have a background in western classical music. Thus, the study might not have represented a broad population of composition teachers who have different backgrounds. Replication with a broader sample is thus needed to obtain findings that can be generalized.

In addition to conducting interviews, the researchers could gather more data through surveys and/or questionnaires. A combination of these different methods may well provide a deeper illustration of this current topic. However, each of these limitations

presents promising avenues for future research. The results of this study contribute to the body of existing information regarding the effect of modeling strategies in composition lessons.

Recommendations for Practice

Investigating the modeling strategies used in composition lessons and understanding the effects of these strategies on students' creativity was a crucial component of this study. Composition should be taught by teachers who actively pursue composition themselves. Additionally, teachers should enhance their pedagogical skills to best serve the needs of their students. These recommendations for practice are one step in that direction. However, it takes continuous effort to develop pedagogical skills.

1. Referring students to the notated models and/or suggesting aural models created by other composers can set students on a pathway where they can discover their own solutions. Teachers should offer models of skills from other composers rather than provide answers immediately. Teachers can offer models when their students are out of ideas or stuck on a compositional problem. Teachers can offer models before composing, during the composition process, and/or after the students' compositions have been created.
2. Teachers should offer aural models to their students to foster students' creativity. The development of composition thinking, skills, and creativity are best grown through broad exposure to aural models. Teachers should find the most appropriate aural models based on each student's level and situation and provide

them to their students. Listening to a wide range of aural models can increase students' aural palettes and it may promote students' creative thinking.

3. Encourage peer modeling. Students can benefit from working with peers. These opportunities can expose students to multiple perspectives and can give positively affect students' musical development. The experience of sharing their works with peers could help them return to their composition with new ideas and motivation.
4. Vary the amount of teacher modeling. Students at different levels benefit from appropriate teacher's modeling however, advanced composers may require less teacher modeling than novice composers. Therefore, teachers should find the most appropriate amount of teacher modeling based on each student's level and situation.
5. Give a sense of ownership of their work. Teachers must encourage students to have a sense of ownership of their work. To help students have their own "voice" as a composer, teachers should give attention to express communication by connecting their students with personal experiences. Whenever possible, the ideas must come from the students rather than from the teacher.
6. Composition learning could be more effective when it's done simultaneously with instrumental learning. Students' composition learning is often useful in instrumental learning and vice versa. For example, students who compose for the instrument that they are learning tend to learn the technical aspects of the instrument more quickly.

7. Encourage diversity of composition process. As composers described composition is not linear and does not have a single approach. Therefore, teachers should allow a wide range of composition process.
8. Technology--based composing programs replace the need to work in acoustic sound. Teachers should consider how composition tools positively and negatively shape the processes of composition. Technology--based composing programs are incredible tools for achieving fast results, --; however, it could hinder the development of the ability to imagine a sound. Therefore, technology should not completely replace the need to work in acoustic sound.

Recommendations for Further Research

Investigating modeling strategies used in composition lessons and understanding the effects of these strategies on students' creativity was a crucial component of this study. Some recommendations for future studies are as follows:

1. Researchers can look further into how early instrumental learning experiences affect students' compositions. The interview with composer Jane revealed that students who have experience in taking instrumental lessons tend to be less creative in what they composed because they want it to sound "right." However, the definition of right is often idiomatic rather than creative.
2. Future research could investigate how the use of modeling strategies could be affected by the different goals of the composition lessons. Future studies can compare the use of modeling strategies when it comes to teaching the "technical aspects of composition" versus teaching "creative composition."

3. Further investigation needs to be conducted to understand how composers use models within the three steps of their composition process
4. Future research could investigate how these differences, such as gender (male/female), musical background (jazz/traditional/cross-cultural composition), affect their use of modeling. For example, a study can be conducted that compares composers who have background in jazz with those who have a background in western classical music and its relation to their use of modeling strategies.
5. Researchers can investigate how the use of technological advancements such as smartphones, laptops, and composition software impacts composers' composition process. The use of smartphones enables composers to save melodies in their head without notating music on a music paper by using the "voice memo" application in the phones. The interview with composer Carl revealed that the use of technology has a huge impact on 21st-century composers' composition process. For instance, composition software makes it possible to for even those who do not know how to read scores be able to make music.
6. Researchers can investigate how the use of internet impacts composition instructors' composition teaching with relation to modeling. For instance, YouTube enables composers to access a massive database for notated and aural models. In this study, it was revealed that YouTube was often used as a form of modeling. For example, the interview with Carl revealed that compared to the past when there was no YouTube, it is significantly much easier to assess all different recordings.

7. Researchers can implement a similar interview questions with composition teachers who have different levels of teaching experiences. The composition teachers in this study have a minimum of ten years of teaching experience. The different levels of experience might give additional insight into the variation in the usage of modeling strategies. A study comparing composers who have more than ten years of teaching experience to composers who have less than three years of teaching experience is suggested.
8. Researchers can look further into investigating how decision-making in using modeling strategies is based on the different levels of expertise of the students. The result of this study revealed that composition teachers' decision of using modeling strategy was affected by the students' varying levels.
9. This study's interview data mainly included how composition teachers use modeling strategies in a university one-on-one composition lessons. Future research could investigate implication for classroom setting. For example, the researcher could compare how modeling strategies are used differently and/or similarity used in one on one lesson to classroom instruction.

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