



Listening to the Music: Compositional Processes of High School Composers

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The purpose of the study was to investigate the compositional processes of adolescents to clarify effective strategies for implementing composition activities in high school music programs. The study charted the progress of four high school music students as they completed two separate composition tasks. Data collection techniques consisted of semi-structured interviews, observation, and document analysis. Analysis consisted of studying the field note and interview texts, making marginal notes, sorting, and coding. A model was constructed that reflected the common processes of composition used by the four student participants. Important features of the model are the role played by listening, the necessity of individual thinking time, and the improvisatory character of the final products. Findings from the study suggest that although there may be common elements in student compositional processes, the nature of the compositional process is idiosyncratic.

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Listening to the Music: Compositional Processes of High School Composers

Numerous writers have theorized that the ability to compose music is present in all people (Brinkman, 1995; Czikszenmihalyi, 1996; Gardner, 1993; Reimer, 1997; Swanwick & Tillman, 1986). Furthermore, Creston (1971) argues that creative activities belong squarely and firmly within the boundaries of school music programs: “Musical composition is not just for the chosen few but for every normal person ... it should be as much a part of academic studies as literary composition” (p. 36). Recent curricular initiatives in Australia (Curriculum Corporation, 1994), Great Britain (Department for Education, 1995), and the United States (Consortium of National Arts Education Associations, 1994) have stressed the importance of fostering creativity, and, specifically, composition, in music classrooms. Support for creative endeavors in the classroom has come from publications devoted to the topic—for example, *Composition in the Classroom* (Wiggins, 1990) and *Children Composing* (Lund University, 1998).

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Research into compositional processes has been plentiful. Wallas's (1926) four stages of compositional process—*preparation, incubation, illumination, and verification*—have been quoted often in the literature (Hargreaves, 1986; Kratus, 1989; Sloboda, 1985), and Webster (1990) has used Wallas's four stages in the construction of his model of creativity. Sloboda (1985) mentions two stages—inspiration and execution—and contends that both of these involve conscious and unconscious operations.

Emmerson (1989) constructed two models of the compositional process based on his experience with electroacoustic music. His simple model involves three steps: (1) *action*—create/combine sounds, (2) *test*—listen and determine whether they sound right together, and (3) *accept*—store, or *reject*—modify as new *action*. He further developed his model to include three new steps: *new action, action repertoire, and reinforcement*. These supplementary stages allow composers to use either rule-oriented (conscious, learned) or intuitive (unconscious) bases for decisions made as a result of the test phase.

Researchers in several studies have posited stages in the compositional process based on an investigation of groups of composers. Bennett (1976) interviewed eight professional composers on their processes of musical creation. He identified the following stages: *germinal idea, first sketch, first draft, elaboration and refinement, completion of final draft, and score copying*. Fulmer (1995) discussed 12 contemporary composers' reported approaches to composition. In their discussion of Fulmer's paper, Radocy and Boyle (1997) wrote: "Fulmer's review reveals that different composers use different strategies and some composers use more than one strategy. ... While composers may give somewhat similar accounts of the ways in which they approach a composition, Fulmer maintains that each composer's cognitive processes and aesthetic experiences are unique [p. 10]" (pp. 257–258). Finally, Hung (1998) synthesized the compositional processes of 16 composers (who are also composition teachers) in Taiwan. His participants reported several successful avenues to composition: listen, analyze, compose; listen, play, compose; receive stimulation, introspect, breakthrough; and sense/observe, imagine, express/create. Hung concluded that mastery of composition relies on persistent effort and an accumulation of experience and added that there is no standard compositional procedure.

Researchers who have investigated compositional processes of adolescents (Brinkman, 1995; Bunting, 1987; Burnard, 1995; Folkestad, 1998; Folkestad, Hargreaves, & Lindstrom, 1998; Kaschub, 1997; Ladanyi, 1995; Moore, 1986; Smith, 1998; Stauffer, 1999; Tsisserev, 1998; Younker & Smith, 1996) have noted the idiosyncratic nature of individual composing processes coupled with some pervasive overarching stages—the emergence of musical ideas, crafting, and revision—and the intrinsic meaning and possibilities for success that composing activities have for today's adolescents.

Given the belief in the value of creative activities for all, and the amount of attention that has been accorded the topic over the past

two decades, one would expect that the teaching of composition would be by now firmly enshrined in public school music programs and that students at all levels would have opportunities to compose. However, the reality of the situation, in American and Canadian schools at least, is far from this ideal. Creative activity may occasionally play a part in elementary school music programs, but is most often absent at the middle and high school levels. The results of a recent survey of music educators in public secondary schools, sponsored by MENC: The National Association for Music Education (MENC & Educational Research Service, 2000), confirm this view. Although the response rate was low (31% of the initial sample of teacher surveys were usable), the results provide a snapshot of current curricular practices in United States school music programs. The report states: "Bands and choruses were the most reported music courses being taught in the schools—reported by 81% and 72% of the teachers respectively" (p. 10). Music technology and non-electronic music composition were reportedly taught by a much smaller number of teachers—7% and 2%, respectively.

In probing the reasons for such sparse compositional activity at the high school level, three potential causes were illuminated. First, despite the claims of Creston, there remains an illusiveness about composing that causes many persons, and especially teachers, to avoid stepping into what they deem as uncharted waters. Sloboda (1985) writes that "composition is the least studied and least well understood of all musical processes" (p. 103). Second, there is the issue of appropriate methods, strategies, and techniques for introducing composition into the classroom. Brinkman (1995) argues that, for teachers to emphasize creative activities in their classrooms, they need to be provided with effective strategies for structuring that learning. Third, there is the overwhelming number of high school music programs that are dominated by performance courses (Roberts, 1995). With the exception of jazz ensembles where students are trained for and expected to improvise, school performance groups do not traditionally incorporate composition activities into their courses.

This study's purpose was to address two of the foregoing issues by conducting an investigation of the compositional processes of adolescents to clarify effective strategies for implementing composition activities in high school music programs. It was also an attempt to demystify the art of composition, uncovering processes and steps that could be helpful to teachers as they design, plan, and carry out the teaching of composition at the high school level. Building on previous research, this study charted the progress of four high school music students as they completed two separate composition tasks.

METHOD

The Site

The study was situated within the context of a school, but not as part of a structured music course (Folkestad, 1998). Music teachers

from secondary schools in Victoria, British Columbia, Canada where there had been a history of compositional activity were approached and informed of the nature of the study. Finding schools where music composition was offered either in a group setting or as an independent study and where teachers were forthcoming with names of possible student composers limited the choice. Four high school students, two girls and two boys, recommended for inclusion in the study by their respective school instrumental music teachers, were the participants. One school was a junior secondary (Grades 8–10) in which concert band, jazz band, strings, and concert choir are offered in addition to an electronic music course in which students used MIDI workstations. Two participants, a Grade 10 girl and boy, attended this school. The second school, from a separate district, was a high school (Grades 10–12) offering concert band, jazz band, stage band, concert choir, jazz choir, percussion ensemble, and a composition course when there is sufficient enrollment. Two participants attended this high school, a Grade 11 girl and a Grade 12 boy.

The Musical Training of the Participants

The participants had varying backgrounds in music. All four were enrolled in their school music programs, but the similarity ended there. Andrew [pseudonyms are used for student and teacher names] was an 18-year-old Grade 12 student and Jenn was a 17-year-old in Grade 11. Andrew and Jenn were considerably more advanced in both their practical and theoretical musical skills and they were older. Both studied their main instruments privately and had taken and were currently preparing for Toronto Conservatory of Music practical exams.¹ Both had taken theory exams and were adept at writing standard notation. Both, by way of their extensive jazz training, had a good understanding of chord structure and function. In contrast, Matt and Lynne were novices, which was in part due to their more limited experience and training as students in a junior secondary school. Matt was involved with his garage band, and Lynne was an avid music listener, but neither studied an instrument privately. Although they were in Grade 10 instrumental music programs and Matt was enrolled in the school electronic music course, Matt and Lynne had received minimum grounding in theoretical concepts and little instruction/practice in standard notation.

Nature of the Two Tasks

The first task replicated that of an earlier study (Kennedy, 1999) in that students were directed to set a short poem for voice and acoustic instrument(s). In selecting a poem, it was logical to use Canadian material. Second, it was important to select a poem that would be understood by students at this age level (15–18). The images, intent, and language needed to be age-appropriate. Third, it was crucial to find a poem of an appropriate length—one that would

offer sufficient scope for a setting, but that would not be so long as to appear daunting and tend to discourage the students from completing the task. Fourth, to stimulate students' creative potential, it was decided to use a poem that was written in free verse as opposed to one with a predictable rhyming scheme. After careful consideration, the first and last stanzas of Miriam Waddington's "Advice to the Young" (*Collected Poems*, Miriam Waddington, 1986) were selected (see Figure 1 for the poem's complete text). These two stanzas can stand alone and provide a cohesive unit. This first task had some constraints, yet it gave students "breathing room" in their choice of accompanying instrument(s). It is also a popular assignment for high school composition courses (Burnard, 1995; Kaschub, 1997).

The second task was open-ended, following on from Tsisserev (1998), who, after introducing the students to one of his own compositions and then analyzing a pop song with them, asked his participants simply to "engage in the composition of a work" of which the "style, construction, arrangement, content, instrumentation, form, and length were entirely up to each one of them as a composer" (p. 119). For the second task, students used their own or school-owned electronic workstations² and were directed to create a piece of their own choosing. The number of tracks, sound patches, the overall form, and length were to be determined by each student. No poem or other stimulus was given.

Research Design and Procedures

The present study followed a qualitative collective case-study design (Stake, 1994) using a naturalistic approach (Denzin & Lincoln, 1994). Data collection techniques consisted of semi-structured interviews, observation, and document analysis. Specific procedures included individual interviews with each student during the first meeting time.

Students were introduced to the first task, given several cassette tapes to record their working sessions ("audio journals"), and directed to work on the assignment for the next 2 weeks. The second and third meetings offered both students and the researcher the opportunity to take up further interview topics, discuss progress, examine composition drafts/sketches, listen to excerpts from the audio journals, and hear the final products. The process was replicated for the second composition task. Students worked individually and without interruption from their teachers on their pieces. They were encouraged to ask questions of the researcher if desired; however, adult intervention was nonintrusive and informal. For the most part, composition work was carried on out of school time.

Notated scores were prepared for the acoustic pieces. As notation of the electronic pieces would have been a monumental task and beyond the scope and purposes of the present study, taped versions were used for analysis. At the conclusion of the data collection process, a CD was made with recorded versions of all the pieces.

Advice to the Young

1.
keep bees and
grow asparagus
watch the tides
and listen to the
wind instead of
the politicians
make up your own
stories and believe
them if you want to
live the good life.

2.
All rituals
are instincts
never fully
trust them
study to im-
prove biology
with reason.

3.
Digging trenches
for asparagus
is good for the
muscles and
waiting for the
plants to settle
teaches patience
to those who are
usually in too
much of a hurry.

4.
There is morality
in bee-keeping
it teaches how
not to be afraid
of the bee swarm
it teaches how
not to be afraid of
finding new places
and building them
all over again.

—Miriam Waddington

Figure 1. Miriam Waddington's "Advice to the Young" (*Collected Poems*, 1986), used as a textual basis for one of the composition exercises in this study.

Data consisted of transcripts of the interviews with the four students and their teachers, descriptive field notes of interview/observation sessions, and material culture—audio journals, one composition draft, notated scores of the acoustic pieces, and the CD with all recorded versions.

Analysis/Interpretation

Analysis consisted of studying the field-note and interview texts, making marginal notes, sorting, and coding. Concurrent with this process was the examination of the audio journals, composition draft, and final composition scores/tapes. Triangulation was effected through the cross-referencing of interview statements/field-note descriptions and evidence from the material culture.

COMPOSITIONAL PROCESSES

Matters of Time

Issues surrounding time—time use, thinking time, and favorite working times—proved to be important factors in the compositional processes of the four participants. All four students had a tendency to procrastinate and wait until the last minute to work on their acoustic pieces. Lynne was the most disciplined of the four. She shared that “[she] actually spent time on this piece (the poem setting), probably about six hours” in contrast to the 16-measure melody she wrote for her teacher, Mr. Fagan, which “[she] forgot about and composed in a rush.” The others routinely worked on their pieces the night before they had been asked to complete them. As Matt told me: “The piece happened very quickly, all in one evening.”

The second matter of time was the tendency for the students to work quickly and complete their pieces without much revision. This strategy has been noted elsewhere by Hickey (1997) and Kennedy (1999). Reflecting on his poem setting, Andrew commented: “If I spend too much time on it, I’ll start to overdo it and I end up going back to what I originally had, so I don’t spend too much time on it.” Andrew followed this “quick-compose” strategy for both of his compositions; however, Jenn and Matt took considerably longer with the electronic piece. Jenn was unfamiliar with the MIDI workstation, and she spent the better part of the first week exploring its possibilities. Matt spent all available class time on his electronic piece and made some revisions after hearing feedback from his classmates.

A third matter of time students called “thinking time.” All four mentioned this strategy in their conversations. When asked to estimate the amount of time spent in this pursuit, students were hard pressed to answer. Instead they offered explanations of what they had been pondering during these interludes. Reading over the poem, looking for word stress and high points in the lyrics, and thinking of

appropriate musical styles were three that were mentioned repeatedly. "Thinking time" is hard to document; however, several writers have referred to it in their descriptions of the processes of composition. Wallas (1926) listed preparation as one of his four stages of composition. Preparation must surely include thought processes. In his study of the compositional processes of 16 composer teachers, Hung (1998) reported one successful avenue to be "receive stimulation, introspect, breakthrough." Hung's mention of introspect is a direct connection to thinking. Younker and Smith (1996), in their model of compositional processes, identified imagined sounds, imagined products, and other music knowledge and experience as being the unobservable compositional processes. Imagining involves thinking and thus, here is another direct link to the processes used by these young composers.

A fourth matter of time concerns the students' preference for quiet when composing. Nighttime was mentioned as the preferred time to work on projects. Jenn explained:

At night usually, when I'm just going over the events of the day and just kinda relaxing, then my mind is a little more at ease and then things tend to flow a whole lot easier, and I get ideas just like that.

Jenn's mention of flow is reminiscent of the work of Csikszentmihalyi (1996), who penned an entire volume on this topic.³ Andrew also professed a liking for the quiet of the night: "Most ideas come at two in the morning. I'll just be sitting and you'll hear it in your head and wake up and write it down." Lynn concurred and expressed a fondness for the evening, "when no one else is in the house." This preference of composers for quiet has been mentioned earlier by Bennett (1976) and Smith (1998).

Common Elements

Comparing the compositional strategies and procedures of the four composers, several similarities were discovered. First was the importance of listening. All four had stereo equipment at home, and three mentioned owning large CD collections. In addition to listening for pleasure in the privacy of their own rooms, these young people acknowledged the influence of listening on their composing. For them listening acted both as a stimulus and an inspiration. Jenn explained:

So I can't say that my influence comes from one particular style or another. I use tons of different tapes and tons of different styles. Like one day I'll start writing out the chord structure that's totally basic and countryish or whatever and then the next day, I'll start to write out some jazz chords and play them.

Andrew was quite explicit in making a connection between his listening and his composing. In reflecting on his poem setting, the bossa nova for guitar and voice, he remarked: "I was studying a lot this week because it was exams, but I listened to lots of music.

Probably this (piece) is jazz because I was listening to jazz as I was doing homework." Music preferences thus influenced, inspired, and propelled these young people into composing their own melodies in the style of favored artists. Swanwick (1988) called this phase of musical development "idiomatic," a phase where young people emulate public performers and frequently compose "pieces that strongly resemble existing influential models" (p. 79).

These young composers had no difficulty generating ideas. Although Jenn had expressed some concern initially about ideas coming under pressure—she wasn't sure she could "compose on demand"—she and the other three participants had plenty of musical material with which to work. As Jenn claimed: "The ideas usually come pretty quick. It's just putting them all together." Lynne talked about being "bitten by the creativity bug." She "think[s] up tunes and sing[s] them aloud, but it never really goes past that."

The majority of the work that was done to complete the two assignments falls into the categories of exploration or improvisation, although the musical sophistication of Jenn and Andrew allowed their explorations to be at a more advanced level. Some comments from the students serve to drive this point home. Andrew's earlier comment concerning time is also relevant here. He expressed the belief that if he spent too much time and effort in an attempt to refine a piece, he would "overdo" it and tend to return to his original idea. Therefore, Andrew's main strategy was to retain his first ideas and not spend too much time on crafting and revision. That being said, Andrew did produce a cohesive and pleasing chord structure for his bossa nova, but confessed that he didn't spend much time on it. He explained how it happened:

I always get the key I want to be in first. I knew I wanted to "boss it," 'cause the tune was a little bit joking, so I started off with [*plays chord*] and then I wanted something that was, not really suspense, but like it was holding on, like you want to hear the rest of it [*plays second chord*], then back to the first one [*plays chord*], and that sounds like it will lead to a fourth chord [*plays*], and then to a weird chord up here [*plays*].

All this exploring happened in one session. Matt and Lynne produced saxophone melodies that sounded improvised, and actually were. Of the four students, Jenn was the only one who spoke of development. In a revealing moment, Jenn tracked her progress as a composer:

I haven't seriously composed anything in the last few years also, but a lot more seriously than before. I tend to develop my ideas a lot more now. Like I get an idea, and then I just carry it on rather than just going off. I put some structure to it and make some sense to it.

In response to a query about how she learned to do that, Jenn remarked: "Well, I wasn't really instructed or anything. Just from listening to a lot of music, a lot of modern [popular idiom] stuff." Interestingly, the importance of listening surfaces again. First, listen-

ing was named as a stimulus and an inspiration for composition by the participants, and second, listening emerged as an aural tutor of form, theory, and harmony.

Students spent more time on the electronic pieces than on the acoustic poem setting. Jenn was unfamiliar with the medium and therefore spent a considerable amount of time exploring the possibilities of her workstation; Lynne experimented with various timbres; Matt worked on his electronic piece during his computer music classes; and Andrew, although he finished his piece within a 24-hour period, spent several hours on the assignment. However, this extra time expenditure didn't result in more development. Matt made some minor revisions to his piece, but the other three simply let their pieces evolve without much thought to development and revision.

In several other studies in which researchers have investigated the compositional processes of high school composers (Brinkman, 1995; Smith, 1998; Stauffer, 1999; Younker & Smith, 1996) participants have had access to computers, MIDI workstations, and music writing programs. Thus, producing a notated score proved to be a fairly simple task. In contrast, the four participants in the present study were not similarly equipped, nor, in the case of Matt and Lynne, were they highly skilled at standard notation. Therefore, it became intriguing to see how the student composers would present their pieces. In their conversations, the subject of "writing things down" occurred repeatedly. These young people heard "songs in their heads," as Campbell (1998) and Stauffer (1999) have observed, but felt little need for written notation. Matt explained:

I don't know. I could sing it (the song he heard in his head) into a tape recorder, but I'm too lazy for that. I can't picture myself actually doing that. If I were a professional musician and I'm doing that for a living, I could see doing it. It's just something I deal with. I don't give much thought to putting things down.

Lynne mentioned that she "think[s] up tunes and [she sings] them aloud, but it never really goes past that."

As a consequence of their avoidance of written notation, the memories of these young composers were well-developed. Matt told me that his band had at least four songs in its repertoire that the group could easily play without music. Andrew told me how he and his fiddler friend Brian had a wide repertoire of songs that they could play from memory on demand. As it transpired, all four students sang or played their pieces into a tape recorder and left the task of transcription to others. This dislike of notation has been noted elsewhere (Kennedy, 1999).

Constructing a Model of Composition

In constructing a model of composition that would show clearly the processes and strategies employed by the four composers in the study, earlier work done in this area was considered. Stauffer (1999) prepared a diagram of the "getting started" phase of the exploration

stage in composition based on her longitudinal study of children and adolescents as composers. In her diagram, the processes used by participant composers to arrive at an opening gesture are shown. Three modes of operation are represented: (1) write an opening gesture, listen, go on; (2) write an opening gesture, listen, revise, listen, go on; and (3) write an opening gesture, scrap, write an opening gesture, listen, and either take up the revise loop or go on. Stauffer's diagram closely resembles Emmerson's (1989) model of the compositional process mentioned earlier.

Stauffer and Emmerson based their models on close observation of composers at work on electronic workstations. Thus individual actions of composers could be seen first hand. In the present study, composers were encouraged to work individually and alone without the researcher present. Therefore, self-reports by the participants and their audio journals were used to construct the model.

Yunker and Smith (1996) constructed a model of the compositional processes of an adult expert, adult novice, high school expert, and high school novice based on observation, think-alouds, musical experiments "captured via a sequencing software program on a Macintosh computer" (p. 29), and manuscript sketches, drafts, and final melodies. They were interested in discovering "possible developmental patterns that may emerge based on the collected data and from the composers' backgrounds" (p. 26). Their model clearly designated input actions (tactile, visual, and aural), output actions (descriptive, visual, and aural), and a problem area (grey circle) of compositional processes into which they placed imagined sounds, imagined products, and other music knowledge and experience. Comparison of the processes of the four subject groups "revealed a gradual progression from the high school novice's approach using an atomistic 'note-to-note' progression without any overall perspective of the composition, to that of the adult expert, who approached the task in a gestalt-like, whole-part-whole manner" (p. 33).

Aspects of Stauffer's, Emmerson's, and Yunker and Smith's models were useful in constructing a model of composition to represent the processes used in the present study (see Figure 2).

Listening was named by both Stauffer and Emmerson as being essential in the composition process. Likewise, for the participants in the present study, listening was of paramount importance. First, listening was used to set the stage for composition [Stage 1]. Here, the composer's individual soundscape acted as a preparation for composition. Second, listening both stimulated and inspired the beginning of the composing act itself [Stage 3]. Put more explicitly, listening acted as both a contextual element and as a jump-start or catalyst for the composing process proper. "Thinking time" [Stage 2] happened between these two listening stages. During this period, participants were engaged in roughing out ideas for the piece(s) in their heads. Their "imagined sounds and products" and their "other music knowledge and experience" informed their thinking. This phase of the model corresponds with Yunker and Smith's problem area circle.

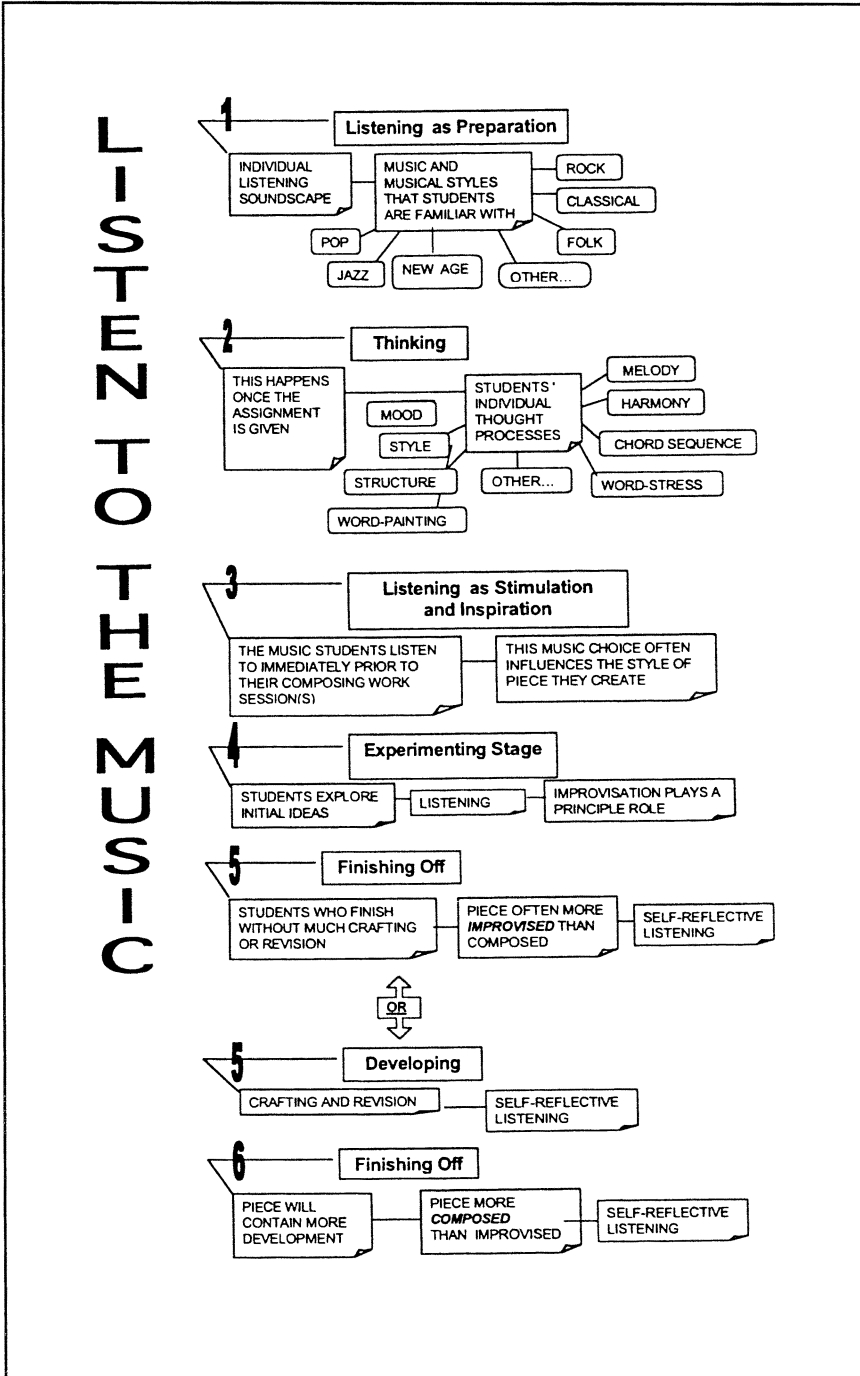


Figure 2. Model of student compositional processes.

Following the second listening, which literally propelled these young composers into action, the experimenting (exploratory) [Stage 4] phase began. This stage relates to Emerson's "test" phase and Stauffer's "listen." Here, during the composing process proper, listening emerged again as students literally heard and reflected on their explorations. For some of them, this phase was clearly improvisatory while for others, there was an attempt at generating a clear, reproducible sequence of chords. After this phase, two patterns emerged. Participants either proceeded to "finish off" [Stage 5] their compositions hurriedly with little thought to development, or they worked at developing their ideas [Stage 5] and then proceeded to "finish off" [Stage 6]. Whichever path they chose, listening continued to be a vital component of the process as they selected one musical gesture over another.

In the model, there is room for teacher input at Stage 1, where teachers expose their students to a wide variety of musical genres and styles, and at Stage 2, where they offer searching questions to guide students' thinking time. However, as students in the study were propelled into composing by their solitary music listening experiences, Stage 3 is best left in the control of the student. Allowing individual choice and uninterrupted listening can be a powerful catalyst for composing. Similarly, Stage 4's experimenting is conducted without teacher interference. Stages 5 and 6 present huge opportunities for teacher input, because students need assistance in crafting and revising their compositions. "Process listening sessions" can be most helpful here where teacher, self-, and peer evaluation can occur.

The model of student compositional processes shown in Figure 2 depicts the stages of composition used by the four participants in the present study. Applying this model to a classroom setting, the stages in the composition process might be more fluid. To clarify, there could be multiple entry points into the composing process itself, instead of the more linear process used by the four students. For example, the composition task might be assigned prior to Stage 1, allowing the student to do some preparatory listening, followed by some thinking, followed by further listening that would act as the stimulation or inspiration for the composition project. Alternatively, the student might already have been experimenting [Stage 4] on an instrument before the assignment was given; this experimenting could then be used as musical material for the piece. Or perhaps a student could be simply thinking [Stage 2] about sounds, combinations of sounds, and an eventual piece when the music teacher assigns a composition project. These thoughts could then be incorporated into the ensuing piece.

Implications for the Classroom

The most interesting facet of the composition model is the central position taken by listening. At a time when performance programs dominate the high school music scene, these young composers

named listening as a valuable ingredient in preparing them for composing. To be sure, it was music of their own choosing that they were listening to for the most part. However, music teachers interested in nurturing and assisting the creative development of their students would do well to heed the words of these young composers and make more use of listening activities in their high school music classes. Students bring individual soundscapes with them to the classroom. Teachers need to validate these and allow students to use them as springboards for composition. Additionally, it is important to remember the tendency for novice composers to be quickly satisfied with a piece of work after a basic exploratory phase. For these novice composers, teachers need to encourage deeper listening and further development of musical ideas.

Where teachers can encourage student development in compositional skills is through the provision of a variety of diverse listening experiences to expand their soundscape palettes and act as an auditory tutor of form. Second, incidental and unobtrusive instruction in the principles of form when the occasion arises can also provide students with the tools for shaping, molding, and developing their ideas. Third, teachers can be the focal point in assisting students with crafting and revision. Incorporating process listening sessions during and at the completion of composition projects can add an evaluation component that is rich and multifaceted. Teacher feedback, when coupled with student self-assessment and peer assessment, can be an effective method with which to nudge students toward revision and also task completion. Fourth, considering students' stated preference for solitary work and quiet time when composing, and their fondness for nighttime, teachers would do well to arrange opportunities for individuals to work on their compositions either in practice rooms or in school MIDI labs beyond regular school hours. Finally, teachers can facilitate the creative process by allowing students to tape their compositions in the privacy of their own homes or in school practice rooms. Notation can always be taught; however, creative ideas need to be captured and preserved when they appear.

NOTES

1. The Royal Conservatory of Music, based in Toronto, Canada, has developed a multi-grade syllabus with exams from Grades 1–10 followed by the Associate Diploma level.
2. The four students did not have access to the same equipment and software. The students at the junior secondary school and the Grade 11 girl used Roland JV-30 machines with Macintosh Classics and Performer 3.3 or 2.41 software. The Grade 12 student had his own computer, a Roland U-20 synthesizer, and Cubase software. I accept such discrepancies as part and parcel of the "real world" and report them as such; this perspective is integral to naturalistic research.

3. Csikszentmihalyi (1996) terms the optimal experience *flow*, "the feeling when things were going well as an almost automatic, effortless, yet highly focused state of consciousness" (p. 110).

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