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"That Thing You Do!" Compositional Processes of a Rock Band

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Abstract

Understanding how students make music in non-school settings can inform teaching practice in schools, making teaching more relevant to students' musical perspectives. This research study examined the musical processes of a three-member rock band, their roles within the group, and considered how they constructed musical meaning. The most salient findings that emerged from this study lie at the intersection of musical growth, musical enculturation, and musical meaning. Collaborative composing was facilitated by shared musical tastes and grounded in friendship and commitment to music making. Engagement and investment in the music prompted meaningful musical experiences for group members. Ownership, agency, relevance, and personal expression fuse at the core of the value they place on this musical and social experience. Implications for the instrumental music classroom are also shared.

Passion is the inexplicable force that drives the human spirit ever forward towards its capture. For a number of years I have witnessed the relentless pursuit of musical passion in teenaged students. In my tenure as a high school music teacher, I have seen student rock bands spend hours of their free time passionately rehearsing the music they love. My office was next to an empty practice room in which various rock bands would rehearse. I would often go in and watch what they were doing and listen to their music. Some of the members were my students in concert band; others were not. Some groups were better than others, but one element consistent in all the groups that I observed was an unquenchable passion for creating music.

When my children started creating their own rock bands and rehearsing in our home, I was given a more personal, birds-eye view of the process. Over the years, I have engaged in many conversations with my sons and their friends regarding the stylistic and technical aspects of their music. This was, and continues to be, a wonderful doorway into discussion about these qualities in other types of music as well. Through these conversations, I have noticed that because of these young people's intense musical involvement in student-led bands, they are able to transfer and build upon that knowledge base when discussing other genres of music.

As a classically trained pianist and beginning band teacher, I am very interested in the processes of these young musicians' aural musical learning. My personal musical experience is rooted in learning through traditional notation. As a visual and kinesthetic learner, I rely on these modes in my own learning. I am also aware that these preferences were predominant in my teaching style. If there are students in my classes who learn music more aurally than visually, the more I can learn about how they come to understand and make music, then the more effective a teacher I can become. Therefore, I decided to study the musical processes of one student-led band to see what I could learn about:

- How group members learned to play and compose music,
- The role each group member played in the process, and
- What implications, if any, could be gleaned from this process to inform music teaching practice.

To gain insight into these important issues, I studied the work of a three-member student-led rock band. One student was a senior at a local high school, and also my son, and the other two members were college freshmen at local institutions. At the time of the study, they had just formed this group and started rehearsing in preparation for an upcoming "gig." I was drawn to study this particular group because of their unmistakable passion for music.

Literature Review

I examined literature that would inform my understanding of the work of these young men in a rock band rehearsal setting. The most informative literature concerned social characteristics of rock bands, the nature of aural musicianship, musical enculturation, and collaborative composing.

Social Characteristics of Rock Bands

Typically, rock bands are formed among friends of approximately the same age with similar tastes in music. The quality of the friendship is essential to the growth and cohesion of the band. Green (2002) found that "good relationships were important, not only for intrinsic reasons but because the ability to get along together is essential to the very survival of the band" (p. 112). Of the fourteen musicians she interviewed, eleven expressed importance of the value of the "personal qualities" of the band members. These qualities were what one would expect in friendship: "cooperation, reliability, commitment, tolerance, shared tastes, along with a shared passion for music" (p. 12). Passion for music was an inherent quality not only recognized among band members, but also highly valued for music making.

Campbell (1995) and Lilliestam (1996) also found friendship to be a nucleus for band formation. Lilliestam expands on this, sharing the perspective of a Swedish music teacher who suggested that rock music is learned among friends on a "horizontal" level meaning without the traditional conductor or teacher role (Saar, 1993, as cited in Lilliestam, 1996). He suggests musical development occurs as members who are friends "learn to learn together" (Saar, 1993, as cited in Lilliestam). This corporate learning takes place within a social context where students continually generate musical passages as a result of both verbally and nonverbally shared ideas. From a social constructivist perspective, social interaction is a main component of knowledge construction. Vygotsky (1978) suggested that people learn by interacting with each other on the interpsychological level where a more knowledgeable other informs those less knowledgeable and, as a result of this interaction, group members are able to internalize this information on the intrapsychological level and function independently. Rogoff (1990) expounded on this by developing the concept of "guided participation" which she describes as the collaboration and shared understanding that occur when more knowledgeable and less knowledgeable individuals work together to solve problems in culturally valued activities enabling transfer of this knowledge to new situations (p. 191). At the heart of guided participation is intersubjectivity, which is "shared understanding based on a common focus of attention and some shared presuppositions that form the ground for communication" (p. 71).

The social milieu of rock musicians promotes what Green (2002) calls 'peer-directed learning' and 'group learning.' "Peer-directed learning involves the explicit teaching of one or more persons by a peer; group learning occurs as a result of peer interaction but in the absence of any teaching" (p. 76). This type of learning can occur in a formal rehearsal session or during informal encounters. Popular musicians also learn by watching or listening

to other musicians and gleaning ideas to infuse into their own music making. Green continues:

No musician or other creative artist can be totally isolated from what Becker terms an 'art world' (1963) involving not only other musicians but listeners; all composers are deeply encultured in the styles in which their own music is situated and particularly those who are at the forefront of rapidly changing substyles are likely to be regularly exchanging opinions with peers (p. 77).

Group work in rock bands can happen as a whole group scenario, but can also occur in small groups or dyads. MacDonald and Miell (2000) studied children working in dyads, collaborating on musical compositions and found that, in music making among friends, communication is efficient not only in dialogue, but also in risk taking and level of engagement in the activity. Trusting supportive relationships not only facilitate exchange of ideas, but also allow musicians to reach greater depths musically (McMillan, 1999). Collaborative composing is facilitated by shared musical tastes and grounded in friendship and commitment to music making. These musical interactions are embedded in the social milieu of the group.

Aural Musicianship

The rehearsal and performance methods of rock musicians are facilitated primarily through aural transmission. Instead of using notation, band members rely on their keen listening skills gleaned from consistent listening study through the plethora of everyday tools available to them, including CDs, mp3 files downloaded from the internet, music video shows and radio broadcasts (Campbell, 1995, p. 12). Trading CDs is a frequently used mode of teaching one another about new music. Green (2002) describes this process as musical enculturation: "the acquisition of musical skills and knowledge by immersion in everyday music and musical practice of one's social context" (p. 22). This cultural influence in the lives of band members provides a palate of musical genres and styles from which they learn and then transfer to their own music making.

The very nature of playing music by ear creates a framework for assimilating musical information obtained by immersion, and revealed in the act of performance. The intricacy of this process cannot always be fully detailed in words. This is a way of knowing that Polanyi (1983) describes as tacit knowledge or, simply defined, "(W)e can know more than we can tell" (p. 4). In conjunction with aural musicianship, Lilliestam (1996) describes three facets of tacit knowledge utilized by "aural musicians" or whenever a musician plays by ear as (a) "knowledge or skills that cannot be expressed in words alone," (b) "the implicit," and (c) "knowledge that we just do not recognize as knowledge" (originally defined by Molander, 1993, as cited in Lilliestam, 1996). For aural musicians, communication in rehearsals is accomplished chiefly through nonverbal gestures, eye contact, and active listening (Campbell, 1995; Lilliestam, 1996). As band members are generally friends, these types of communications are made that much easier because of their shared experiences (MacDonald & Miell, 2000) and common tacit knowledge (Polanyi, 1983).

Rock musicians bring to the rehearsal venue shared knowledge of song structures and stylistic patterns. Lilliestam (1996) referred to these song structures as "formulas which provide a common musical language" (p. 204). Musical communication among members then becomes a special type of language. Because of their shared knowledge of song structures, "formulas," and listening experiences, band members communicate with one another in jargon associated with a particular style or band (Lilliestam, 1996). Derek Bailey and Wynton Marsalis define this phenomenon as the "musicians personal vocabulary" that when "combined with others becomes a common pool of language" (as cited in MacDonald & Miell, 2000).

Making musical sounds with the voice or musical vocables is another tool often used by band members to describe or imitate instrumental and particularly drum sounds. They often use vocables to describe to one another what should be happening in the music as it is created. Musical vocables also aid memory for aural musicians. Lilliestam refers to this technique as "verbal memory" used by aural musicians to "design mental maps" of the music they hear (Lilliestam, 1996, p. 202). Campbell also found thatguitar and bass players often communicate ideas to one another through playing rather than through talking (Campbell, 1995).

Musical Enculturation

Musical enculturation plays a key role in the compositional development of rock musicians. Stored information about song structures and "formulas" become a part of rock musicians' musical DNA and serve as points of departure for original ideas for composition (Lilliestam, 1996). Particularly early in their development, rock musicians copy tunes of favorite bands or players (known as covering or playing covers) and then progress to writing original music in the style of these copies (Boespflug, 1999; Campbell, 1995; Green, 2004; Lilliestam, 1996). Keith Richards describes the process: "You don't go out of your way to lift songs, but what you play is eventually the product of what you've heard before" (Santoro, 1986, as cited in Lilliestam, 1996). Green (2002) speaks about copying recordings and playing covers as a developmental tool for performance but also as a "fundamental building block in compositional skill" (p. 7). Green (2002) and Lilliestam (1996) also discuss the importance of copying in developing a template for style and form that transfers to other musical situations.

Collaborative Composing

Collaborative composing is a common process of bands. One member of the band brings a musical riff or idea to the rehearsal and other members are free to elaborate on and add to the original idea (Boespflug, 1999; Lilliestam, 1996). Boespflug describes the many tasks that pop musicians envelop in their music as they embody the roles of composer, arranger, and performer. For Boespflug, in collaborative work, "[a]ll members are simultaneously creators, teachers, and learners" (Boespflug, 2004, p. 195). Musical collaboration here is accomplished on many levels by all members of the group in a real-life scenario.

Method

With these understandings, I collected and analyzed data from rehearsals of a rock band called *Our Delay*. Because I sought to learn about the nature of the processes through which these rock band members created their own music, I chose a qualitative design, as qualitative research is concerned more with process or journey than with outcome (Bogdan & Biklen, 1998, p. 6). Constructing meaning and reflecting upon that meaning provides growth in any learning environment. Qualitative inquiry endeavors to understand how people construct meaning (Bogdan & Biklen, 1998, p. 7).

All data for this study were collected in a naturalistic setting, in the homes of the band members where the rehearsals took place. (Note 1) I began my data collection from the inception of the band and collected data at every rehearsal until the time of their first *gig* (musical performance). Data were collected each time they met, constituting six rehearsals, of eleven hours over a 4-month period, using a stationary video camera and audio recorder in an attempt to be as unobtrusive as possible.

As observer, I took field notes during each rehearsal ensuring a detailed portrayal of the environment in which these musicians were interacting (Patton, 1980, p. 36). On January 21st, at the conclusion of the observation period, I conducted a joint interview with the band

members in order to gain deeper understanding of their perspectives of the phenomenological essence of their musical experience ((Kvale, 1996; Van Manen, 1990). Since they always worked collaboratively, I anticipated that interviewing them as a group might bring to the surface some of their tacit knowledge about the nature of their musical process (Polanyi, 1983).

That data were collected through multiple sources (video- and audio-recording, interview, and the researcher's observation field notes and reflective journal) provided a means for triangulation which helped establish trustworthiness and credibility (Lincoln & Guba, p. 305, 1985). I transcribed all video and audio data and analyzed all transcripts and field notes for emergent themes. The importance of these themes was verified through an interview, which in addition to providing new information, served as a member check for my perceptions of what occurred (Bogdan & Biklen, 1998, p. 7; Lincoln & Guba, 1985, p. 314). Because I used a digital camera to collect the video data, I was able to isolate pertinent passages of discussion using "iMovie" software. Sharing these video excerpts with the band members during the interview enabled me to obtain their input about what had been said or meant during rehearsals. Credibility was further enhanced by persistent observation and prolonged engagement (Lincoln & Guba, 198, p. 301), in that I collected data over a 4-month period and had known two members of this band for six months; the third member was my son. (Note 2)

I often had the opportunity to chat with individual band members prior to rehearsal as they were setting up instruments or waiting for other band members to arrive. These conversations allowed me insight into their musical background. In addition, as these band members were friends of my son and were often guests in our home, I had the opportunity to speak with them outside the rehearsal setting where I was able to clarify what I was observing in the rehearsal setting (member checking). This occurred during the data collection period as well as up to a year after the conclusion of the data collection. My relationship with the band members did not conclude with that last videotaped rehearsal but remains ongoing. My goal was to understand how these musicians created musical meaning in their rehearsal sessions. I sought to discover not only the techniques they employed in writing their songs but also the inspiration behind their passion for music making.

The Journey for a Song

"Hey, hit an E." The tuning began and the players embarked upon a journey. The destination was unknown but the search for a song was the ultimate goal. For these musicians there are many paths to this goal and their only compass seemed to be the sound of the music. The initial rehearsal revealed the collaborative nature of their music making as well as a high level of talent and a serious approach to study. Once the equipment had been carried in and set up, each band member began to prepare for the session. Roal, the guitar player, began to tune; Mike, the bass player, set up his tape recorder to record the session for study at home; Jack assembled his percussion equipment, tuning his snare drum and adjusting his auxiliary instruments. Conversations ensued regarding various pieces of equipment in the rehearsal room and their functions as well as the hunt for the proper equalization (Note 3) and intonation for each instrument. The rehearsal room, located in the basement of Jack's home, was dedicated to music rehearsal and recording. Along the wall, was a Marshall stack amplifier next to a 16-track digital recorder and effects boxes. A large "road box" filled with stands and cords rested next to the drum kit and, when needed, served as container and chair. Cords were strewn along the floor connected to microphones that were strategically placed in various areas of the room.

This physical journey of carrying in and setting up equipment can be a daunting task, however it became routine. These opening moments were also a time of rich discussion for the band members, both socially and musically. Humor seemed to encase these

conversations as they discussed new ideas for the music they were about to play or music in general. These lighthearted beginnings seemed to be the adhesive in the mosaic of their relationships—establishing a safe, non-threatening, positive environment. It was clear they enjoyed being together.

The social structure of this band was based around friendship and acquaintance. Mike and Ro knew each other quite well from high school and had played together in a band prior to this d While Jack had known Mike in high school, he was only briefly acquainted with Roal from w at a local pizza restaurant. However, as the rehearsal sessions progressed, their friendships developed with more time spent together in various social settings as well as rehearsals.

This first rehearsal, the first time the band had played together, was essentially a jam session. knew from my experience as a teacher and parent of teenage musicians that this was common rock musicians' initial experiences together. From the summative interview, I learned that the first rehearsal is the time to show one's abilities, but it also reveals one's limitations. As in an team effort, knowing each other's strengths and weaknesses helps navigate the channels of m making. In the words of Mick Jagger "The musical communication is enough, that you know what the other guy can do, what his limitations are....You don't have to talk but gestures are very important" (Flanagan 1990, as cited in Lilliestam, 1996). I described this warm-up perio the initial rehearsal sessions as *safe-mode*. Players can experiment in a non-threatening way revealing their abilities through technical exercises, well-known "riffs," (Note 4) and improvisational channels. In subsequent rehearsals, band members arrived ready to work on music and the warm-up time consisted basically of tuning and then diving into the song at har

Getting Started

Experimentation through *fiddling* (testing and modifying short musical phrases) is a compositional technique the band used to get started in the rehearsal. After tuning, they adjus for equalization. This took some time. Critically listening for balance, Roal moved in a cyclic pattern of fiddling with improvisational riffs while making equalization adjustments. In the fi rehearsal, this opened the door for the jam session to commence. While Roal was making adjustments, to his guitar, Mike began to harmonically support on his bass the fiddling riffs R played.

Example 1: Initial fiddling riff



Mike: Let's play that.

Roal: What?

Mike: What you were just playing.

Roal: I was just messing around.

But Mike pressed on: "You know, briff, briff, briff," vocally imitating the rhythmic sound

(musical vocable) that Roal had played (See: Example 1). While Roal did play the same chord progression, the melody was now somewhat altered. However, Mike was firmly locked into the complementary bass line he developed earlier and Jack began to complement Mike's riff and they launched into a lengthy jam session.

Once they reached this stage, notation and verbal discussion became superfluous due to keen focus and familiarity with chord progression patterns (Green, 2002). The group played almost nonstop for the first fifteen minutes without a break or discussion of tempo, scale, or stylistic approach. It became apparent this was not only a jam session but also a type of search or journey for a song. After observing subsequent rehearsals, I realized it was a common process in their music making. Ostinato and repetitive chord progressions provided a vehicle for moving the members forward. Sometimes players mirrored a riff in unison until another riff could be worked out and then the originator would branch off and play the newly devised riff as a complementary pattern to the original. They did not want to stop the song or let the moment dissipate, even if it seemed as if the generating riff had died away. They needed to bring it to closure even if that meant a sort of hunting and pecking until that moment arrived. That the music was not always seamless did not seem to stop the rehearsal or experimentation. In the follow-up interview, Mike stated that, for him, melodic ideas were generated by strong accented rhythmical patterns; this enabled him to "work a melody around the accented beats." Jack commented that one method he employed had been learned from his high school jazz band teacher: "to comment on a solo, as in a conversation." He then asked the others, "Do you guys agree?" All confirmed.

A cyclical pattern of listening, experimenting, featuring, and "backing off" when others were soloing, emerged from this hunt. Experimentation generally happened after the "groove" was established and one person felt secure enough to experiment within the established chord structure. Sometimes this experimentation was generated by one musician playing a "riff" and the others complementing until a new pattern or riff emerged with which the journey continued. By "backing off," the players showed respect for the person soloing or experimenting, in that they subdued their own ornamentation and simply supported, allowing the soloist to have space to develop his idea. Nonverbal communication through gestures and physical movement enabled the players to continue this cycle. During the group interview, the band members discussed what kept this cyclical pattern alive. Roal said they "just feed off each other and listen a lot" and Mike added, "If everyone is making something up at the same time you have a big mess, but you have to follow each other."

Particularly in jam sessions, the process of *following* produced ideas. One member played a pattern thus prompting complementary patterns or accompaniments from the others. These in turn generated the next idea. These musicians were able to function this way because of what Lilliestam (1996) described as *formulas* established as a result of the group members musical enculturation. (Note 5) Most of the compositions written by *Our Delay* were in duple meter and reflective of their shared musical listening experiences. In discussing their compositional processes, I asked them how they knew when to change chords or what prompted them to change chords. Roal responded, "I don't know; I just think that is how that kind of music sounds." Jack added,

Like when you are in your car listening to a song, you always know when the next part's gonna come, because you like get excited about it so when you are playing on an instrument it is like, I don't know. I don't think it's that hard. I mean like four bars feels natural for when a transition occurs.

The pop music of western culture is predominantly duple meter, and lends itself to four-measure phrases. This natural feeling Jack describes is a clear example of tacit knowledge these young musicians acquired as a result of their acute listening and musical enculturation.

Mnemonic processes

Mnemonic processes for aural musicians reside in remembering the sound as well as in muscle memory (Lilliestam, 1996). Since their normal practice of composing music was devoid of written notation, I asked the band members how they remembered music. All agreed that mentally singing the song while playing helped their memory, but Jack's response brings more clarity to the role of muscle memory:

You just memorize it. You memorize the movements. You associate the movements with the feel of the song, I guess. That's how I do it with drums. Well, how I do it actually when we are writing a song. Roal will be like OK we are playing this part four times, you know, after we have learned the parts. Then what I do is like get the feel of the song, and I would go through the song in my head before we're like maybe a couple—I don't want to say measures—but before the part....You are singing the song as it happens but you already have the song in your head.

It is evident in this statement that formulas ("four times") as well as muscle memory help establish a framework for his compositional process. Wiggins (2003) also found evidence that students create from a holistic idea and perhaps work on "chunks" of a song at a time but that "students generate musical ideas that are conceived before they play them" (p. 147). Her interviews with fourth grade students illuminate this point, "We just do stuff in our heads sometimes, and then we take an instrument and try to find it" (p. 148).

Navigating the Journey: Peer Teacher as Guide

After the initial "jam" session, subsequent rehearsals consisted of rich peer teaching and collaboration. This instituted a cyclical teaching-learning-collaborating-developing phenomenon permeating the fabric of the remaining rehearsals. Solitary and group work, both in and out of rehearsals, fueled the group's journey. By the second session I observed, two members had come to the rehearsal with compositional ideas developed independently, and brought to the group for *consideration*. Jack had worked out his ideas on the computer using music software and Roal had the beginnings of a song he had worked out on guitar. Other researchers have found the process of solitary work characteristic of bands learning "covers," but this group used this process for original compositional work (Campbell, 1995; Green, 2002).

When issues with technology sometimes delayed their ability to start playing, small group work ensued; thus little time was wasted. All conversations were about the song and its development. While Jack set up his computer equipment, Roal began to play his song for Mike. Although the song was incomplete, Roal had a holistic picture of the song and could hear the ensemble parts in his head. He was also certain of the form and expression the song would take and vocalized drum patterns that would separate sections of the song. This corresponds with Wiggins' (1994) work in children's compositional processes in that "the initial decisions made by the children in the early planning stages in composing reflected consideration of the more holistic elements of the composition in progress and of how these elements would eventually operate within the final work" with special attention given to texture, form and sense of ensemble (p. 239).

Musical vocables helped inform the others about what should be happening at what time because no one was writing anything down on paper. In this instance the owner of the fragmentary song was the initial facilitator of the path the song would take. However, ownership did not reside with the initiator. It belonged to the group for input and elaboration (a phenomenon also noted by Allsup, 2002, and Faulkner, 2003).

Roal: OK. It starts off kinda like...

Video Clip: Roal teaching Mike the first song.

Roal played the beginning of the song for Mike and, after playing, commented about the last note: "Just like solid notes that have tons of bass in it". Roal continued with the next section, playing and at times humming a variation of example 2 above. At the completion of this section Roal comments "....and then a chorus". Mike asked, "You got vocals?" Roal replied, "Well I can write 'em for that part but I can't really write them until the song's done." Roal continued "but uh right before the chorus I want it to slow down." Roal then demonstrated this section again while humming. Mike replied, "Play that first part again," put on his bass, and played along with the first riff that Roal had played. Roal inserted musical vocables to indicate the drum sounds that would separate the two sections. (see video clip 1) Roal and Mike played the first riff together. They proceeded to play the next rhythmic pattern and Mike did not miss a single chord change due largely to his acute listening and observation of Roal's hands. In the middle of the playing they confirmed with one another through comments and gestures that they were on the right path. It was evident their evolving compositional process involved musical thinking about form and expression. At the conclusion Mike began to interject his ideas as he comments, "then we'll both go dun, dun" indicating with vocables his musical intention.

Roal had a holistic view of the structure and expression of the song (Wiggins, 1994) and it was up to the other group members to develop their parts. Lyrics were secondary; the music was clearly driving the creation. The melodic line was fashioned after the chord progression was established. Roal would create the melody line by singing while playing the guitar line. Much of the creation, even melodic ideas, were rhythmically generated. The process of writing lyrics last clearly points to the importance that the music played in their compositional process.

Further rehearsal of this established fragment allowed Mike to experiment with the bass line. Discussion ensued regarding various embellishments that surfaced as the piece progressed. What had started out as peer teaching quickly dissolved into what Rogoff (1990) describes as guided participation as Mike learned the part and began to offer his own ideas. The process of problem solving in the development of the piece allowed the players to mutually establish what should and should not be used and to value the outcome because it was a joint rather than individual decision.

The two band members worked together until they reached a point where Mike expressed a need for rhythm in order to continue. Bass players and drummers often "work off" each other in a performance setting. At this point, Jack joined the rehearsal and the drums served as the rhythmic glue that Mike required. The rhythmic support provided a foundation for the embellishments needed to fill in the holes that existed in the music at this point. After the first break in the song, the group discussed what should happen in an unfinished section of the piece. Suggestions were immediately tried and tested. Each new idea produced a lengthy jam session in which the cycle of collaborating and developing ideas was recurrent. The musical ideas had lives of their own and existed as a common understanding of the artistic direction. Everyone seemed to share a common understanding of the destination. Positive comments like "that's sweet" and "that's tight" were always their first comments before a summing up occurred. This summing up time was rich in musical conversation regarding clarification of certain aspects of the song and what should happen in the next rehearsal. Usually a "demo" CD was burned so that all band members could have take-home music to play along with and generate additional ideas.

This collaborative process enabled the musicians to function as performers, creators, and arrangers. Boespflug (1999) found this to be a unique aspect of pop music as opposed to

traditional ensemble music. My awareness of Boespflug's perspective helped me identify and observe each member's development in these roles throughout the rehearsal. While all members operated as performers, some exhibited more strength in creating and some in arranging. This natural blend yielded cohesive musical rehearsals and was the catalyst for musical growth.

Guideposts: Timbre and Technology

Technological effects play an important role in crafting the sonic quality of rock music. Many groups are known by their individual sound created through the unique sonic variances in the overall timbre of their music. The members of *Our Delay* were aware of the nuances defining these individual sounds and worked to achieve these exact representations through their own music. This required a disciplined and sensitive ear and repeated listening opportunities. Sound effects and timbre were very important to this group, and to Jack in particular. They regarded timbre as part of melody. They considered melody to be more than just contour, but rather a fusion of contour and sound effects partnered with the texture of the song to generate a harmonic structure as well as depict the mood they were trying to establish. As Jack comments, "well the sound is the melody the way the song goes but I think there is more to melody now. Like for punk bands, melody is the whole thing, they have a tune and they just play that and there are no effects, but effects, there is so much more to the sound than just the melody. So you can put a lot of reverb on it and then harmonize that with the guitar."

This attention to sound was a product of their acute analytical listening to their favorite groups, one of which was Sigur Rós, a band from Iceland. Jack described attending one of their concerts:

They use their voice as an instrument not really a voice, he plays the guitar with a cello bow and there is a lot of reverb and it sounds like....most bands feel like a piece of sound but Sigur Rós feels like a huge field of sound.

The desire to replicate this "huge field of sound" and other sonic qualities found in favorite groups led to much experimentation with software and external hardware devices. This followed a familiar pattern of copying an effect and then, once comfortable with it, changing and molding the results into their own effect. This process of working with sound effects was ubiquitous throughout each rehearsal and consistent with what Boespflug (1999) describes: "To become conversant with pop styles demands aural skills that go beyond recognizing rhythm, melody, and harmony; musicians must also recognize and be able to create or reproduce original texture and color" (p. 34). These acute aural skills set the direction for many of the compositional paths about to unfold.

For several rehearsals Jack and Roal collaborated on a song that Jack had started to compose on the keyboard. Lilliestam (1996) found that in exploring for new sounds or effects, musicians might choose to compose on instruments they do not normally play or know very well simply to discover new sounds. From the outset, Jack had preconceived ideas of timbre and working with the keyboard and digital audio sequencing software enabled him to experiment and manipulate timbre in the process of writing. Recording his song with sequencing software facilitated experimentation for both players simultaneously. Roal was free to practice the chord progression and experiment while Jack was free to experiment with additional obbligato passages as well as utilizing different timbres. Setting the sequence to loop enabled the players to continually practice less secure parts of the song. This process was used again when teaching it to the whole band.

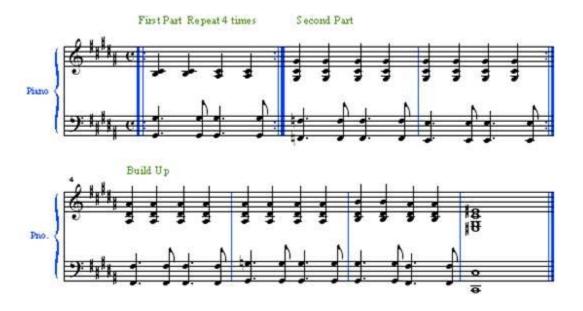
As Roal and Jack built on Jack's initial idea they seemed to know intuitively how many additional sections were needed.

Roal: The first part with the verses, do that four times...then do the second part four times and then go into *that thing you do*. Do that four times. Get this recorded so I can bring it home.

Jack: Wait...but when you do it over again, [he plays it] it doesn't sound cool to repeat that part, [the second part] but if I do this...[he plays it without a repeat in the second part as Roal had suggested].

Roal: Yeah, do that build up thing...[that thing you do].

Example 3: Jack's first song.



They continued working on this section for quite some time, tweaking the chord progression, experimenting with alternate timbres and attempting to extend the bridge. After about an hour it was clear that they reached a creative wall.

Roal: Yeah. OK...well it [this section of the song] can't be over then.

Jack: Well we can figure that out when we have the band.

Roal: OK cool.

Technology greatly facilitated their rehearsals allowing for experimentation, critical listening analysis, and compositional construction, however completion of the song required the input from the entire band. Because of the development of the song at this rehearsal, it was decided that Jack would play keyboard for this song and another drummer would be called in to take Jack's place at the drum kit.

Collaborative Nature of the Journey

Collaborative composing is facilitated by shared musical taste and, in this particular case, was grounded in friendship and commitment to music making. As creative ideas materialized throughout the course of a rehearsal, group decisions were made regarding what would be included in the song. Trial and error, experimentation, practice and reflection, ensued before committing to a newfound musical phrase. Each player learned from the others through listening and watching, and then rehearsing. After one section was secure, there was always a desire to "take it from the top" to hear how the newly mastered

section fit with the initial idea. Wiggins (2003) found similar cyclical procedures in her research on children's compositional process: "Setting musical ideas into the context of the whole involves organizing, evaluating, revising, refining. If the product is coming together consistent with what the group intends, the group will move quickly to rehearsing" (p. 149).

For *Our Delay*, collaborative composing occurred in both small and whole group settings. In the previously described effort, Jack and Roal nearly completed a song together but found they needed the rest of the band to help them find an ending because they needed the instrumental support structure and input from the other "voices" in the band. "Collaboration requires a mutual task in which the partners work together to produce something that neither could have produced alone" (Forman & Cazden, 1985, p. 329). In this instance, we see that they had a holistic view of the song but were at a point where they needed more group input to finish the product.

Completing the song required bringing in another drummer because Jack was going to play keyboards for several of the songs. Joseph was an excellent drummer and friend of both Roal and Mike. After Jack and Roal performed the entire song they began to teach it to the others section by section. When band members had difficulty with a passage, Jack and Roal broke it down through repetition, playing slowly and non-verbal gesturing to help know when to change chords. Their teaching process reflected a tacit understanding of scaffolding (Wood, Bruner, & Ross, 1976) within their peers' zone of proximal development (Note 6) (Vygotsky, 1987). As soon as the parts were securely learned, they began "looping" while one player or another experimented. As new ideas emerged, players gestured their approval of what they were hearing. Throughout, there was consistent discussion about dynamics and references to nuances of their favorite bands as stylistic guides.

The search for the ending of this song came when all players were familiar with the entire song. All members, including Joseph, contributed to the formulation of this song's conclusion. Joseph's ideas were given equal weight to those of the rest of the band, possibly due to his friendship with Roal and to the humorous comments he made throughout the rehearsal, which seemed to establish a healthy bond with the others.

Identity: A Beacon of Light in the Uncharted Waters of Adolescence

One of the most significant findings that resulted from this study was the role that music played in the construction of *identity*. This was not something grasped by observing musicians playing music together but rather illuminated through the interview with the band members. This discussion took place after four months of data collection and observation. It served as a rich source of information regarding their personal and collective perspectives on the impact of music in their lives inside and outside of school.

School is one of the chief contributors in the development of identity. Bruner (1996) depicts two critical components in this development: *agency* and *self-esteem*. Agency is the power of an individual or group to start and follow through with a desired activity. This indicates abilities or expertise in order to achieve these acts and as human beings we subjectively keep track of our success and failures in reaching desired outcomes. Our culture judges our successes and failures; these, in turn, nurture the development of the individual, positively. As Bruner (1996) points out, "(W)e must constantly reassess what school does to the young student's conception of his own powers (his sense of agency) and his sensed chances of being able to cope with the world both in school and after (his self-esteem)" (p. 39). Schools therefore must be aware of the impact of their judgments.

Cultural influences play a central role in the development of an individual and provide a venue for the exploration of personal meaning. According to Reimer (2003), "(M)uch of the meaning of our lives, including musical meaning, stems from the particularities of our social

condition—the ways we are, beyond the universal, also situated in time, in place, in an inhabited social space pervading every aspect of our lives" (p. 171). Cultural factors, experience, and biology converge to help construct personal identity.

Identity, then, is a web continuously woven throughout our lives. In the youth culture music is key in establishing both personal and social identity. As I began to delve deeper into the musical journey that brought the members of *Our Delay* to this point in their lives, they began to describe the role music had played in enabling them to understand their world. Music had been a part of all of their lives from early childhood. Each band member could recall the names of all the important musical groups they had listened to stemming back to early elementary school. Each group seemed to mark off a region of time in their lives that for one reason or another was distinct from the rest. Here music served as a tool to help construct memory of certain people and relive certain experiences. From a series of ethnographic studies of music in people's experience of everyday life, DeNora (2000) articulated the importance of music as essential in the "construction of self and the illumination of identity" and "as a device for the reflexive process of remembering/constructing who one is, a technology for spinning the apparently continuous tale of who one is" (p. 63).

From my experience as an elementary school teacher, I am aware that personal taste in popular music begins to emerge as early as first grade. When popular music is brought into the classroom, lines are quickly drawn on personal taste with students actually segregating themselves into *camps* according to musical preference. This segregation according to Epstein "defines who you are within a youth culture" (Epstein, 1994, as cited in Allsup, 2004). The work of Tarrant (Tarrant *et al.*, 2002), also revealed that musical preference is one way that enabled adolescents to make positive comparisons regarding the musical tastes of their own peer groups from other groups, and thus enhancing their individual identity.

For the members of *Our Delay*, the attraction to certain music through each stage of their lives was reflective of what was occurring in their lives at the time. For adolescents, sadness, depression, or losing a girlfriend or boyfriend are emotionally uncertain stages; and music serves as a constant companion, abating the storm of the uncertain middle and high school years. These band members reminisced about various groups they listened to through certain stages of their lives and could recall memories stored through music, from those periods in their lives. When asked about current music they listen to, they all agreed that they do relate the music to how they are feeling. Swanwick (1999) refers to music in this application as discourse, saying, "music significantly enhances and enriches our understanding of ourselves and the world" (p. 3).

Throughout the data collection it became evident that depicting emotion through manipulation of sound was very important to each member of the group, both in the music they wrote and the groups they listened to. Mike and Jack poignantly described the musical *discourse* they experienced when jamming.

Mike: A lot of times, playing music with somebody is a lot more than creating something. If you have a conversation with somebody you are just exchanging ideas but with music, well for me, like a lot of times if you have a really good jam, you can exchange feelings....You know if you are jamming you really don't have to say much, just you know...that was cool. Now we are thinking on the same level we both have the same kind of feelings going through our head.

Jack: Yeah, that is how music is so expressive....It is a blanket for your emotions to lay down on.

From their words, it is evident that music is a part of their real life experience in what

Swanwick (1999) refers to as "[t]he peak of aesthetic experience [that] is scaled only when a work relates strongly to the structures of our own individual experience, when it calls for a new way of organizing the schemata, or traces, of previous life events" (p. 6).

These young people's musical tastes changed as they matured and they gravitated to music that not only talked about what they were experiencing in their lives, but music that reflected their emotions, e.g., anger, happiness, or mellow moods through the use of timbres and texture. Jack spoke directly to this:

Jack: The sounds represent different emotions I think and how they [emotions] progress and the emotions that the band is trying to relay through their music and that is why a band like Sigur Rós doesn't have to have lyrics because you know what they are trying to say through the sound of their music...lyrics aren't always that important, you can express much more through the sound of the music and the way the music goes.

For the members of *Our Delay*, playing music is more than for the purpose of a concert or festival award. The process or journey of playing meaningful music is more important than the actual outcome. Music serves as a vehicle to inform their world of feelings and emotions.

Music is powerful. That is why many dedicate their lives to teaching and performing music. Music strikes at the core of our humanity, helping define our culture, and helping us make meaning in our lives. In the lives of these band members music was the compass that helped steer them during calm and turbulent waters of school years. It helped them relate to issues in their lives and helped them cope. Mike summed it up perfectly by stating that music "is like the soundtrack to your life." Music is not just a part of their lives; it under girds and fuses with their lives.

Summary of Findings

The most salient findings that emerged from this study lie at the intersections of musical growth, musical enculturation, and musical meaning. Throughout this journey, these young musicians grew in their ability to invent ideas, modify them fiddle with them in the safe environment they established, and work collaboratively and supportively until they achieved a complex product reflecting their intended meaning. Ideas brought to the group belonged to the whole group, and everyone had the opportunity to experiment with them. Musical enculturation was the barometer that determined the form and structure they conceived. Form was an important issue because it enabled them to improvise in real time, cognizant of the next section that lay just over the horizon. While they sometimes worked in smaller groups, the completion of the song entailed the commitment of the entire group. This commitment provided the support structure in the ensemble and was in direct parallel to the social structure of the group. Commitment to one another and the music was paramount.

Their conception of musical material was holistic in nature and rooted in their shared understanding of the song they were composing and of the music of their common experience. Their musical enculturation supplied a storehouse of data that provided initial templates for constructing new songs. These templates acted as musical schemas from which they drew, and the band members interpersonal relationships facilitated their personal and collective musical development. (Anderson & Pearson, 1984; Dowling, 1984; Wiggins, 2001). Internalizing these templates (or formulas) enabled them to detect variances and complexities in their own music, an ability fostered by their continuous and gradually maturing music listening experiences. Music they valued served as a point of departure for developing their own unique style and expression. This expression was cultivated through flexible song structures allowing for improvisation and timbral effects facilitated by

technology. This flexibility was revealed even in the ways they constructed their music (i.e., always leaving room in the structure for improvisation). This was in contrast to what they found in school band music. In the interview, they articulated that the rigid structure of school band music had alienated them. (Note 7)

Perhaps it is from here that their passion stems. It is not only the music, but also their ability to engage in and invest part of themselves in the music that made this such a meaningful experience for them. Ownership, agency, relevance, and personal expression fuse at the core of the value they place on this musical and social experience.

Implications

Engaging in this study made me increasingly aware of the rich musical understanding that occurs when engaged in playing and *learning* music by ear. I came to understand and value the depth of the band members' learning, the enjoyment with which they learned, and their motivation to continue to learn and perform. While I do feel reading notation is an important aspect of music learning, it is only one aspect, and one to which I have given too much weight to in my own teaching. As a result of engaging in this study, I have made efforts to foster aural musicianship in my beginning band classes. When I asked my beginning band students to *cover* some of their favorite songs, I found that the holistic nature of the experience opened up opportunities to study musical concepts other than those initially intended. It so quickly and successfully captured the attention of the students that I know I will continue to explore this way of teaching beginning instrumentalists.

In my interview with the band members, we discussed an idea for establishing a rock band ensemble in a secondary school setting. They proposed a full-year course that would encompass instruction, rehearsal, and performance. There would be student input regarding music choice, teacher guidance for learning about that music, and guidance in developing their own music. They remarked that this class would have to be meaningful and challenging and not "a blow off class." Perhaps students would study mutually agreed upon classic rock pieces. An end-of-semester concert of original tunes or covers would be required. The teacher would help them learn to analyze what they were hearing in the music, help them hone strategies for achieving greater complexity in their music, and foster their development as musicians. These young people expressed a desire to be involved in classes with these kinds of ensembles if they could exercise ownership in the structure of the class. Clearly they wanted to learn and would want music teachers to help scaffold this process.

Formal music education certainly has much to learn from the ways that young people make and learn music informally outside the walls of the classrooms. We need to find ways to bring into formal music learning the ownership, agency, relevance, and means of personal expression that will enable our students to begin to feel as passionate about school music experiences as they do about non-school music experiences.

Notes

- 1. This place was most often the drummer's home because of the logistics of packing a drum kit.
- 2. I have worked as the music teacher in the elementary, middle, and high school that my son has attended. For most of his life, I have been his teacher as well as taught in the same school that he attended. This experience has taught me about dealing with bias in regards to my own child, likewise he has come to deal with his mother in the role of teacher. In this study, my role was non-participant observer.
- 3. Equalization is adjusting the bass, treble and mid-range frequencies to ensure proper

sound.

- 4. Riffs are memorable melodic or rhythmic patterns repeated many times.
- 5. Lilliestam (1996) defines a formula as "a characteristic musical motive or pattern, which has a recognizable core even if the exact performance of the formula can be varied within given cultural frameworks" (p. 203). These formulas provide a "common musical language" particularly amongst aural musicians and serve as memory devices (p. 204).
- 6. Vygotsky (1978) defines the zone of proximal development as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86).
- 7. The American high school band setting is driven by traditional band repertoire. Statewide festivals and contests allow band directors little rehearsal time for students to develop their own compositional skills. This is unlike band programs in other countries which do accommodate this much needed opportunity for developing students compositional voice.

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