

Going Green: The Application of Informal Music Learning Strategies in High School Choral and Instrumental Ensembles

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Abstract

This collaborative project studied the applications of informal music learning within the context of high school performing ensembles. For a 12-week period, the conductors of four high school choirs and one high school band assigned students to small groups. The conductors charged each group to copy a Christmas carol of their choice from a recording or to create a new arrangement inspired by the recording without intervention from their conductor. The promise was to perform those carols at a public concert during the December holiday season. The team of teacher/researchers met face-to-face and on SKYPE at the beginning of the semester, to fine-tune the research design, procedures and methodology. The overarching research question addressed the efficacy of informal learning as a catalyst to nurture the students' musicianship. It also sought to uncover changes in perception on the part of both students and teachers relative to the school ensemble program. Data consisted primarily of interviews, video recordings and reflective journals. Results showed that working informally to copy an arrangement from a recording had a positive impact on group cooperation, peer-directed learning, autonomy, leadership and personal musical identity. It also served as a catalyst to change the culture of the ensemble as it changed perceptions of both students and teachers relative to musical skill and ability.

The Center for Critical Pedagogy at Westminster Choir College, where the senior researcher serves as director, provided support for this research. Research fellows included Daniel Abrahams, Anthony Rafaniello, Jason Vodicka, David Westawski and John Wilson. Research assistants for this project included Jacob Ezzo, Chad Keilman, Louis Spinelli and James Stirling.

Going Green: Applying Informal Music Learning Strategies in High School Choral and Instrumental Ensembles

The work of Lucy Green (2002, 2008) and others (Batt-Rawden & DeNora, 2005; Folkestad, 2006; Jaffurs, 2004) call attention to the power of informal learning to engage students in authentic music making and thereby empower musicianship. At British secondary schools, Green organized general music students into small friendship groups and asked them to copy, without intervention from their music teacher, arrangements of musics that were both popular and classical. Heuser (2008) applied informal learning techniques to an introductory music course for college students studying to be music teachers. Goodrich (2007) infused informal learning into a high school jazz ensemble focusing on peer mentoring and pedagogical practice. Lostetter (2009) adapted Green's model as a strategy to engage pre-adolescent children learning to play saxophone.

The issue of relevancy in music education is a complicated one. Elsewhere, I have written on the subject of critical pedagogy and critical pedagogy for music education (Abrahams, 2005a, 2005b, 2005c, 2007) to inform music teaching and music learning. I suggest that the purpose of music education is to empower students' musicianship and in the process transform both students and their teacher. That necessitates a shift in power relationships inside the classroom where teachers share power with the students. I urge music teachers to ensure that the experiences they have with children in school music classrooms and in ensemble rehearsals add value to their student's lives. When music teaching and music learning are meaningful to the students', the likelihood that such learning will be long lasting is strong. Further, I contend that students have rich, significant and ongoing engagements with music outside of school. Consequently, when music teachers bridge the gap and integrate those two musical lives, music education in schools becomes more relevant to all. Others have had similar thoughts.

Green (2002, 2007, 2008) wondered what would happen if students in general music classes were divided into cooperative learning groups and charged with copying a recording with minimal intervention from the music teacher. Research convinced her that meaningful and long-lasting engagements with music informally could be significant. She cited the many instances where popular musicians worked on their own in garage bands copying recordings. The Beatles started that way, as did the Rolling Stones and others. She reported success when general music students copied popular recordings and when they copied recordings of classical music. She concluded that the process connected well to students, increased motivation in, and attitudes about the efficacy of school music classes. The geniuses at Apple computer call their music composition program "GarageBand" to reference that exact process of students working on their own, in their home garage to create musical compositions. GarageBand comes as a standard program on every Macintosh computer.

Green (2007) identified five main characteristics that delimit informal learning practices. They are:

- 1) that learners always start with music that they know and like;
- 2) that the main learning practice involves copying recordings of real music by ear;
- 3) that learning takes place alone and, crucially, in groups of friends, mostly without adult guidance or supervision;
- 4) that learning is not progressively structured from simple to increasingly complex, but holistic, idiosyncratic and haphazard;
- 5) and that listening, performing, improvising and composing are all integrated throughout the learning process. (p. 3)

The motivation for this study was to examine the efficacy of informal music learning when applied to the students in high school performing ensembles. These students are ones who chose to participate in a school music experience rather than the general population Green studied in the United Kingdom.

Research Questions

Sociologists (Green, 2005b; Martin, 1995; Finnegan, 1989; Negus, 1999; DeNora, 2000, 2003; Clayton et al., 2003), note that current interests in music focus on how one applies discourse to construct musical meaning and how the media and the institution of schooling influence face-to-face interaction with music as a domain of study. Green (2005b) notes,

What people say about music, the uses to which they put it in their ordinary lives, and their music-making practices are all receiving interest from researchers and scholars, alongside questions about the structures and processes of the music industry and broadcasting corporations and perhaps to a lesser extent, of education. (p. 1)

To frame the research, we chose to ask foreshadowing questions (Malinowski, 1992) because we predicted that the outcomes would be positive. They were:

1. To what extents do informal music learning experiences facilitate group cooperation, peer-directed learning, autonomy, leadership and personal musical identity among student members of school music ensembles?
2. To what extent do informal music learning experiences bridge the gap between school music and the music students listen to and enjoy outside school?
3. To what extent do informal music learning experiences influence the music teacher's perception of the skills his or her students possess?
4. To what extent do informal music learning experiences empower student musicianship and transform or change the culture of the ensemble?

Definition of Informal Music Learning

Some researchers (Jorgensen, 1997; Ziehe, 1986) suggest that informal learning is a function of both the place where the learning occurs and the process by which it happens. Ziehe (1986) contends that when learners are aware that learning is taking place it is “common.” When the learners are unaware that learning is taking place, the learning is dubbed, “uncommon.” This happens when students learn by participating in an activity. Learning a new dance by watching others at a club is one example of uncommon learning. Jorgensen (1997), referencing ideas of Rousseau and Dewey noted that teachers create the situations whereby students learn. She contends that those situations may be formal or informal but that together, they constitute “education.” It is formal when the learning is teacher centered and informal when it occurs in ways that mirror learning outside of school. Without the teacher present, Folkestad (2006) adds, the learner is often unaware that learning is taking place. Rolf (1991, cited in Lilliestam, 1996) adds that when situated outside the school, informal learning as pedagogy shifts the power from the teacher to the student.

In this study, we acknowledge that informal learning occurs when there is no formal teacher guidance, direction, or formal evaluation from a teacher. Jaffurs (2004) states that being able to work with and collaborate with other musicians is an important aspect for developing musicality. Informal learning builds both community and musicianship. The informal situation fosters an environment that facilitates a passion for learning and music making. Zimmerman (2001) reinforces this point by stating that what is important is how people relate to the music, not the specific aspects being studied within the music.

Significance of the Study

Tenets of Critical Pedagogy for Music Education (Abrahams, 2005c) include the notion that music teaching and learning should be “value added.” We recognize that teachers are not always privy to the rich musical life students enjoy outside of school. They have large and impressive collections of music on their mp3 players and spend a considerable amount of time outside of school engaged in music listening and other musical activities. The research of Green (2002, 2006, 2007, 2008) and others (Goodrich, 2007; Heuser, 2008) confirms that students have the abilities to copy arrangements from recordings in ways that are both literal and creative. Their research confirms that when students have a part in determining what they will be learning, the learning is more significant, meaningful and long lasting. It was the contention of the research team that information gleaned from this study could inform school music teachers to consider yet another dimension to the ensemble experience.

Review of the Literature

A thorough review of the literature on informal music learning is beyond the scope of this study. Nonetheless, various researchers have investigated the efficacy of informal music learning in a variety of contexts. For example, Folkestad (1996, 1998)

studied the processes and strategies of computer-based creative music making applied by high school students over a 3-year period. In 2006, he studied both formal and informal music learning practices and concluded that informal music learning did influence formal music instruction in schools. Fömas et al., (1995) studied how three young rock bands learned music and found that these included more than just musical aspects. Results revealed that engaging in informal music learning helped to shape the personal identities of the band members. Söderman and Folkestad (2004) studied how hip-hop artists acquire their skills. Batt-Rawden and DeNora (2005) investigated informal music learning that occurred in and around everyday life experiences. The study produced two themes. Engaging in music making, or musicing (Small, 1998) provided the first theme. The Batt-Rawden and DeNora study found that “musicizing helps define social worlds, create identities, people and situations are constructed around these musical experiences” (p. 289). Additionally, they found that social purposes arise from “learning and being taught the complex skill of how to use music” (p. 289). Other researchers (Abrahams, 2007; Stauffer, 2002; Jorgensen, 2003; Smithrim & Uptis, 2004; Barrett, 2005; Green, 2005a; Woodford, 2005) have argued for the importance of connecting school music to the engagements with music that students have outside of school.

This study applied Lucy Green’s ideas relative to informal music learning. Therefore, her theory and research constitute the remainder of this literature review. Green’s work on popular music pedagogies first appeared in 2002 with the publication of *How Popular Musicians Learn*. Since that time her work has been the subject of special issues of *Visions of Research in Music Education* (Frierson-Campbell, 2008) and *The British Journal of Music Education* (Wright, 2010).

When looking at how students engage with music, Green (2002) found that many study music formally inside schools, but many also engage with music more informally outside the school music program. She noted specifically that popular musicians tend to learn music informally. To define those informal engagements she interviewed fourteen professional popular musicians ranging in age from 15 to 50 asking them how they acquired their musical skills. She queried their formal school music learning experiences, their views about popular music in music education, and experiences they had teaching music. Green (2002) found that some had successful careers as musicians without any formal music lessons or music classes. Green (2002) also discovered that informal music learning practices occur both consciously and unconsciously. She explained that spontaneous learning experiences happen unconsciously through “enculturation”. This spontaneous learning occurs through emersion in the students’ natural surroundings. Thus, no matter how one approaches informal music instruction, it often occurs while the learner does not even realize they are learning. Instead, the student perceives this acquisition of knowledge as having fun, figuring out the music, and interacting with people rather than as formal study. Such musical enculturation, Green contended, was impossible to escape because people cannot turn off their hearing. In addition, as a result of such enculturation, and especially when it comes to popular music, students often brought a greater knowledge to the table than their teachers simply because students associated with and identified themselves by the popular music that they listened to, created, or played.

Based on findings from her 2002 study of popular musicians, and believing that music classes in British secondary schools were not engaging students, Green (2008) developed a curriculum for informal music learning for use in school music programs. She applied her ideas at 21 secondary schools and studied the results. Her population included 32 classroom music teachers, and over 1,500 students, most of who were ages 13 and 14. Data included observations, video and audio recordings, and field notes. Her method was to infuse the music classes with an informal music curriculum that had seven stages:

- Stage 1 involved pupils choosing a piece of music, listening to it in friendship groups and copying it by ear on selected instruments;
- Stage 2 required pupils to create a version of a funk track by ear through listening and copying fifteen riffs (provided separately and in combinations). Worksheets with note names were provided to assist pupils if needed;
- Stage 3 was a repeat of Stage 1;
- In Stage 4 pupils composed, rehearsed and performed their own music, directing their own learning in friendship groups;
- Stage 5 was about song writing with a band of peer musicians or community musicians;
- Stage 6 provided pupils with recordings of five pieces of familiar classical music. In friendship groups pupils had to listen, discuss, select, copy, arrange, rehearse and perform the music as an ensemble.
- Stage 7 was similar to Stage 6, except the classical music provided was unfamiliar to the pupils. (Green, 2008, p. 193-194)

In self-selected friendship groups, students learned to listen to, interpret, analyze, and perform popular music by copying a recording of their choice. Students learned to work together, build relationships with colleagues, and did not rely on the guidance from their teachers. As a result, students became more attentive listeners. Green (2008) stated that just sitting and listening to music is not enough for informal music learning to stimulate student learning. Green's work suggested that having the students copy recordings of popular music in order to play it motivated them to listen to music analytically. Students became increasingly able to listen for: (a) detail, (b) quality, (c) texture, (d) harmony, (e) instrument, and (f) structure. This was a key finding that informed our study as well.

When applying Green's research to our study, we note some differences. Green worked with general music students. That is, students who were required to be present in music classes. Our study focused on students who freely selected to be in the school ensemble program. The school choral ensembles in our study were even more specialized as those students were accepted into the ensembles by competitive audition. Therefore, the issues Green faced with motivation did not exist for us.

Throughout Green's (2008) research, one finds themes of musical autonomy (Green, 2006) and of the values of peer-directed learning. In one study (Green, 2008), she noted that students prefer and are more comfortable helping each other rather than asking the teacher for guidance. Students felt less anxious and were more willing to explore and go beyond the boundaries usually set by teachers in formal music classrooms. This contributes to a feeling of student empowerment. Green (2009) also speaks to issue of

musical leadership. Although students work cooperatively in friendship groups, leaders emerge. We were curious to see if we would find similar themes.

Methodology

This research study was a collaborative effort that included a senior researcher and five research fellows who were also the conductors and teachers of the ensembles we studied. Bresler, et al., (1996) provides the rationale for a team approach to qualitative research. She asserts that working collaboratively ensures that subjectivity and reflexivity contribute positively to issues of validity. As with Bresler, we found that working together as a team, we were able to discuss findings, share insights and interpretations and to construct collectively the meanings gleaned from the data.

Research Protocol

In the fall 2009, and acting as the senior researcher, Frank invited five in-service music teachers to participate as research fellows in a study to investigate the efficacy of Green's theories when applied to the high school performing ensemble. Four were his former students and alumni of the college and had similar approaches to music teaching and learning. In addition, each had a similar number of years teaching. The fifth was an instrumental music teacher whom the research had collaborated on past studies. He had considerably more teaching experience. It was by chance that all were male. Frank invited two female teachers to participate but they declined. The same happened with the research assistants. An equal number of male and female students were invited; however, only the male students expressed interest. Frank assigned a research assistant to each teacher. An administrative assistant at the Center for Critical Pedagogy assisted him.

As a group, we all met together early in the fall. Frank, Jason, Anthony, John and Dave met in an office on campus. Dan joined us on SKYPE. We discussed the goals of the project, the Institutional Research Board (IRB) issues and revised a consent form for students and their parents to sign. We reviewed the research that Lucy Green conducted with general music students in the United Kingdom and each teacher received a copy of Green's texts, *How Popular Musicians Learn* (2002) and *Music, Informal Learning and the School: A New Classroom Pedagogy* (2008). As a team, we decided that each teacher would choose one of the ensembles at his school, and assign them to small groups. He would ask each group to find a Christmas carol or holiday song on YouTube and copy the arrangement adapting it for performance by the group in the upcoming December holiday concerts. All agreed to provide the students with time to complete the project at school but not to participate with the students while they were working. The teachers would ask students to keep personal journals. The teachers would also keep a journal and there would be periodic video recording of sessions when students were working together. Once the project was completed, Frank would visit each site to conduct semi-structured interviews with each teacher and the students who participated in the study. In all, 80 students participated and arranged 20 songs.

As the study progressed, there were some variations. Most students did keep personal journals. At one site, the students scribed their journals as blogs and posted them on a choir website. One teacher met with each student at the end of the project and provided video recordings of structured interviews where all students answered the same questions. Only one teacher kept a personal journal though all provided feedback through email or phone call when asked.

Consistent with qualitative research methodology (Charmaz, 2006; Strauss & Corbin, 1990), we applied methods of open and axial coding (Plano Clark & Creswell, 2010) to sort, categorize and analyze the data. During the process of open coding, concepts, categories and properties were developed. These categories were consistent with Green's (2008) themes of group cooperation, peer-directed learning, autonomy, leadership and personal musical identity. To these categories, we added change in perception on the part of both students and teachers.

Axial coding involves the researcher selecting one of the categories or themes identified during open coding and labeling it a central phenomenon. As a result of axial coding, we identified individual and group autonomy as a central phenomenon (Plano Clark & Creswell, 2010) for discussion later in the paper. Insights from selective coding grounds the conclusions presented at the end.

Triangulation (Stake, 2010; Denzen, 1970), catalytic validity (Brown & Tandom, 1978; Reason & Rowan, 1981; Cohen, Manion, & Morrison, 2007) and member checks (Stake, 2010; Lincoln & Guba, 1985) provided the verification for the study. Multiple times, we heard the same or similar comments from students and teachers across sites (triangulation). We noted "ah ha" moments from each conductor (catalytic validity). These are evident throughout the discussion of the data. Frank wrote the draft of the study and sent a copy to each teacher and to the research assistants to confirm accuracy (member checks). He then made changes as appropriate.

Presentation, Analysis, and Discussion of the Data

Dan's Story

Dan teaches instrumental music at an urban high school in the Midwest. At the time of this study, there were 40 students participating in the high school band. By happenstance, as Dan was preparing to select students for the study, a percussion player asked him if the band could learn Carol of the Bells. Dan took this inquiry as a teachable moment and asked the student to form a group to prepare and perform the arrangement on their own. The student chose four band members who became the sample, or what Green (2002, 2008) would call a friendship group, for the study at his school. In band, the students played trumpet, baritone horn and percussion. At the outset, Dan expected the students to use the instruments they played in band. Instead, the students played lead guitar, drum set, bass guitar and mallets respectively. This was a surprise to Dan (*teacher change in perception*) who shared in his journal that he had no idea the students played these other instruments. He wrote:

Something else that I noticed is that the participants are not playing their normal band instruments. [Student A] is a fantastic percussionist and set player [in band], but he is playing bass guitar. [Student B] is the band's second chair trumpet, and is playing electric guitar. [Student C] plays tenor sax in band, but for this group is playing [drum]set. And through this project, I am finding that he is the best set player in the school. [Student D] and [Student E] are freshman percussion players in band class and are playing mallets. They have no mallet experience other than messing around on the xylophone and bells. (Dan's journal, November 10, 2009)

The students gave permission and agreed to video record their sessions. The following is a transcription of an early session.

DRUMMER: (To BASSIST) Is yours in standard [tuning]?

BASSIST: No, I'm in C#, not C. (To GUITARIST) Did you tune to C?

GUITARIST: When I do it [tune], I do it to exactly the recording. It fits fine, when I did it.

DRUMMER: (To GUITARIST) I think it'd be easier in standard.

GUITARIST and BASSIST tune their instruments to one another.

BASSIST: (To DRUMMER) Don't play so loud 'cause we can't turn up [the recording] that much. (To GUITARIST) I dunno. It seems like it amps up in the second part.

GUITARIST: (To BASSIST) What do you want me to play? Chords or . .

BASSIST: Uh, well, like hold on. I'll do those chords where you know it's like (he demonstrates)

BASSIST: Sweet Jesus! (To GUITARIST) Play your first chord.

BASSIST: We'll just try it like this. (Sings the opening lick) What was the notes? A C?

GUITARIST: Uh, C, B-flat. . .

BASSIST: Play it! (GUITARIST plays the opening lick). What's the first one?

GUITARIST: C, c-minor. Yea, it's a c-minor.

BASSIST: Listen! Listen though. Play the chord (to the GUITARIST. BASSIST begins to play the piece, all others join him.) Alright, let's try it again. Ok, I'm just gonna play (demonstrates) that's gonna be the sleigh bell part. (Begins the piece) That's the sleighbell. Xylophone right here. 1, 2, 3. How about we take it slower? It's like, alright. . .

DRUMMER: That's the same speed. It's still too fast.

BASSIST: (Adjusts the volume of his amp.) That's too loud. (Turns the amp down.) Alright! We'll start from just the first note. Ready? (To DRUMMER) Start it off.

Group runs the piece until it falls apart.

BASSIST: (To GUITARIST) Do you need help on that part? (Demonstrates)

GUITARIST: Alright, now I got it.

DRUMMER: (To BASSIST) What notes are they? (Comes over to help.)

They practice.

BASSIST: And that's the part where it's like sings the part.

GUITARIST: Yeah, yeah.

They practice.

BASSIST: I think we are gonna have to tune down to C because there's a part where it's like (sings the part)

DRUMMER: (To GUITARIST) Do you know that part?

GUITARIST: Yeah. It's like (GUITARIST plays the part)

DRUMMER: What notes does it start on?

They practice.

BASSIST: Ok, let's try it from the first part. (To Drummer) You're supposed to count it off. (Demonstrates the tempo and GUITARIST counts off)

They practice.

BASSIST: (To GUITARIST) Turn it up a little. I can't hear over this cat. (To DRUMMER) Not so loud. Alright, ready? Counts off. . .

They practice.

BASSIST: (To GUITARIST) Slide between them notes a little. (Demonstrates)

GUITARIST: Yeah, yeah.

BASSIST: I dunno about that. Let's just try it again and see. Take it slower though.

DRUMMER: What [key] are you guys playing it in? (Demonstrates for the XYLOPHONE)

BASSIST: Hold on! This stupid chord's making me so mad. Let's try it again, you want to?

DRUMMER: Ready?

BASSIST: Hold on, I gotta get the chord. (DRUMMER comes to help)

DRUMMER: 1, 2, 3, 4.

They practice.

BASSIST: We've only practiced it for like ten minutes (total practice time, not entire time) and we already sound good! Let's try this again. Yea, from the beginning.

They practice.

BASSIST: It changes key after (demonstrates on the guitar). Oh no, it goes back to (demonstrates on the guitar).

DRUMMER: (To BASSIST) Do you want me to (inaudible) and then you?

BASSIST: These chords?

GUITARIST: Yeah, and this plays (demonstrates on the guitar).

BASSIST: I do that?

DRUMMER: Yeah, do those chords with GUITARIST. (To GUITARIST) You don't have to do all that part. Let's run through it a couple times.

They count off and practice.

(Video transcription from session on November 13, 2009)

Analysis and interpretation reveal that students worked well together during their sessions (*group cooperation*). Watching their video recordings one observes that their routine was to play the recording phrase by phrase and then to imitate what they heard (*peer-directed learning*). On his own, the lead guitar player took the responsibility to start and stop the recording (*leadership*). As time passed, different students assumed roles of leadership. In a later rehearsal, the drummer assumed the principal role of leader. After each phrase, the students discussed what they had done. Each shared opinions and eventually, they reached consensus (*peer-directed*). There were several instances where one student helped another. For example in one session, the xylophone player helped the drummer by offering him the opportunity to listen to a particular passage on his iPod and to play along with that recording (*peer-directed learning*). Throughout the sessions, the students were focused, engaged and collegial (*group cooperation*). Each shared responsibility for what was happening, accepted, and appreciated the critiques and peer-critiques. Comments like "We've only practiced it for like ten and we already sound good!" (video transcription) provides evidence of autonomy and a feeling of accomplishment.

While Dan did not interfere when the students worked, his observations are consistent with the above analysis. On November 13, he wrote:

I watched some of the rehearsal from my office today and was fascinated with the dynamic of the students. They spent a great deal of time trying to figure out how to start. There wasn't a defined leader of the group. After about 10 minutes of set-up, tuning, hacking/noodling, [Student A] jumped in and claimed the leader role getting everyone started. As the rehearsal progressed, he seemed to have a clear vision of what he wanted to happen and for the arrangement to be learned. [Student C] also had an idea of what he wanted to do and often has offered suggestions to enhance what [Student A] has played.

[Student B] is a follower. She is taking direction from the others. They tell her what to play and she writes it down. This may be a strategy for her to combat her Dyslexia. [Student D], who is a freshman, is very quiet and just does what he is told. He doesn't seem to know exactly what is happening and trying to take in as much as he can. (Dan's journal)

At one point during the project, Dan met with the students to process and reflect on the experience. He wrote:

I asked [Student A, Student B and Student C] what they thought has been the hardest in putting the piece together? [Student A] answered that the piece was in the key of C and they had to change the tunings of the guitars from traditional down to C so that they could play in the key of the recording. I found that to be interesting that they did not try to figure out the fingerings in standard tuning to place them in the correct key, but rather just change the tuning of the strings and play it normal. [Student C] explained that it has been hard to read the TAB for the piece because it is in standard tuning and her instrument is pitched in C. I asked where they found TAB and they explained that they Google searched Carol of the bells and found TAB to help them learn it faster. [Student B] said that the hardest thing is that not everyone that said they would be in the group has shown to the rehearsals and that it frustrates him. (Dan's journal, November 10, 2009)

As the concert approached, he met again with the students:

I asked the group what was giving them the most problems. They responded that it was the transitions. We went over strategies they could use to help in the transitions. I guided them with questions about what I do in band to help with transitions and how that might apply to what they were doing. They decided that there needed to be more communication and some cues for people to know when the transitions happen. (Dan's journal, December 13, 2009)

Clearly, Dan was pleased with the experience his students had. In a final journal entry, a week before the concert, he hints at the changes he sees in the students and wrote:

The piece is starting to take shape into something really close to the original recording. I am very impressed with how serious the students are taking the project. The three main players (set, guitar and bass) are all sophomores. They are working very hard and making fantastic progress.

My issue is how I will be able to explain what we have been doing so that the parents understand the importance of the study and the work that the students have put into this project. Also, not sure if I need to play the original over the sound system before the kids play so that the audience has a better understanding of what the students did. (Dan's journal, December 13, 2009)

Jason's Story

Jason chose his top select ensemble, the chamber choir, to participate in the study. He grouped them into smaller choirs of about six singers each. Each small group selected a song on their own to transcribe and perform in the December holiday concert. The following is a transcription of one group's practice session.

They play the first run through.

STUDENT A: Is that the tenor or is that the bass? That last note. Cuz that's the lowest pitch that I can hear. The lowest pitch that I can hear is the one that I could hear you singing. I don't think there's a bass part there, at that part.

STUDENT C: If there isn't a bass part, can you...?

STUDENT A: I can sing that, I can find that low note, I'm saying that that's the lowest part I can hear on this recording and that was the one that [student C] was singing most of the time. If that's the case then, if tenors and basses are in unison there?"

STUDENT C: You can just make it up.

STUDENT B: Yah!

STUDENT C: As long as it like, works.

STUDENT A: When in doubt, I'll just sing what [Student C is] singing, cuz that's what I can hear. I cant hear any bass part.

STUDENT F: Hmm?

Another run through of the CD.

STUDENT A: I'm going down at the end.

STUDENT C: I mean, should we like, write it out what we think it is?

STUDENT B: No!

STUDENT C: I feel like that'd take a long time though.

STUDENT C: I could write it as, we could do it. We just don't know if we'd have time.

STUDENT A: I have no idea!

STUDENT B: " guess we'll just do it again.

STUDENT A: If I had another lyric I'd just try to put it together.

They listen to the recording again.

STUDENT F: Uhm, can we play the part with the solo again? Because the rest is the main chorus and the fa la la's.

STUDENT C: The solo's like the holly...something something..."

STUDENT A: There's like a girl and then a guy and that's it.

STUDENT C: And then the second part is with "the rising of the sun and the running of the deer."

STUDENT A: I'm convinced there is no bass part. If it is, then it's just the same as

[what] the tenors are singing. I'm convinced there is no bass part.

STUDENT C: I know.

STUDENT B: Or its like so low it isn't even audible.

STUDENT F: Can you play it again?

STUDENT C: Yah

STUDENT A: I'm convinced there is no bass part from like, halfway to the end. Like, until the last part, like I can't hear it.

STUDENT B: Now you can.

STUDENT A: No not here, but like toward the end.

They listen to the CD.

STUDENT F: The second part of the solo is the rising of the sun.

STUDENT C: Right, but what's the first part?

STUDENT F: "The holly bears the berry, and red as any blood, then Mary bore sweet Jesus Christ..." its like, there are more verses than that, and I think they are trying to splice that together. I don't know if all of what I said was on there, but you can just sing out and pick a different verse. Uhm, and then, after the solo its just the fa la la's?

STUDENT C: Yah!

STUDENT F: And the chorus.

(Audio transcription from October 20, 2009)

The transcript, typical of each of the rehearsals, shows that students that the students are all working cooperatively together (*group cooperation*). In this instance, particularly with Student C, they are making independent as well as group (*peer-directed*) musical decisions. Student A has difficulty hearing a particular part and the other members of the group help him to find his notes (*peer-directed learning*). Student C emerges as the leader (*leadership*) in this session, but each student does contribute to the good of the whole group.

After the students perform their completed arrangement for their peers in the other groups, Jason asks them how and why they picked the song. His interest was in holding them accountable for the musical decisions they made. This proved a catalyst for autonomy. What follows is a transcription of their discourse.

JASON: Why'd you pick it?

STUDENT 1: Cuz its great.

STUDENT 3: I think it'll be a little bit of a challenge, but, I think that's the purpose of

this, is to, challenge ourselves, and see how well, we can do this on our own.

STUDENT 4: And if we can do it well, it'll be awesome.

STUDENT 2: It's exactly like that.

STUDENT 3: We're doing a lot of improvement with that.

STUDENT 2: And even cut it, to like make it shorter.

STUDENT 3: Like, the element of surprise in the song, the changing keys, and the chord progressions, its really interesting.

STUDENT 2: And I like that first, the first ding dong or whatever, I was surprised there wasn't a repeat of it, cuz that was a great part, but the other ding dongs or whatever uhh..."

STUDENT 3: Like the one random at the end.

STUDENT 2: Yah!

STUDENT 4: It would sound really cool, if everybody got in little groups and did that randomly, that would sound really cool.

STUDENT 4: I think a lot of people will like it, cuz a lot of people get bored. I mean, even if they're coming to see the concert, they don't want to be bored cuz it's the same old Christmas songs over and over, and over again.

STUDENT 3: This is very unique and different.

JASON: Cool!

(Audio transcription of Jason's meeting with his students, October 6, 2009)

Students selected music that they liked (*personal musical identity*) and that they thought their family and friends would like to hear at the concert. They acknowledged that the selections were from different genres than their teacher chose for the members of the ensemble to sing, and the students felt that this would add interest to the concert program. Like Dan, Jason felt the experience was a positive one. Like Dan's students, Jason's students wanted to do another piece for the spring concert and hoped that their teacher would include this activity in each semester henceforth.

In lieu of personal journals, Jason's students posted comments on a group blog he set up on NING, a social networking site on the Internet. As a catalyst for responses, Jason posted prompts to help students focus their posts. These included:

How did you choose your piece of music?
 What about your piece did you keep the same?
 What did you change and why?
 How was this project problematic?
 What was easy?
 What was more difficult than using a printed score?
 What was easier than using a printed score?

What was more difficult about not having a teacher?
 What was easier about not having a teacher?
 What advice would you give to your choir teachers about how to approach music in the future?
 How much did you use a keyboard?
 Do you think this could work with a less experienced choir or only an advanced group?
 What was the most valuable part of this experience?
 How have you changed because of this experience? (Jason's NING page)

Posting the prompts enabled students to write freely and provide valuable insights. Some excerpts follow.

Student 1

Sometimes it was hard to separate the harmonies. I, in particular, had a lot of trouble with this, as it is hard for me to just hear something once and then sing it. During practice, we were fortunate enough to have music theory students and people who were amazing at hearing the notes in our group to pick out the parts. They could then sing them back to us and play them on the keyboard (*Peer-directed learning*). What may or may not be surprising, is that we were really focused during our rehearsal time. We knew what we had to do and we went straight at it, while still having a good time (*group cooperation*).

Student 2

We were able to focus in on these problems easier without a teacher because we knew what we not comfortable on and what needed more focus (*autonomy*). Overall, this experience shows to teachers that students can learn in a non traditional manner. The most valuable part of this experience to me was seeing the great amount that we are capable of by ourselves that I wouldn't of known before. Because of this experience I pay more attention to the different voice parts that are in a song not just the melody (*student change in perception*).

Student 3

My group chose to learn and perform the Holly and the Ivy by AWKapella. We chose this recording because it is a classic holiday song, and at first listening to the parts sounded well represented. One of our difficulties as we dug into the project was hearing the alto, tenor, and bass parts, as well as figuring out the starting key and key changes. Eventually we listened to the recording enough that we got some parts, and made it up in areas where we couldn't hear the recording well (*group cooperation* and *peer-directed*). Reading music is very important, but learning by ear is not a choral faux pas. Our work in these projects demonstrates the value of listening by ear. Perhaps all choral directors, or anyone aspiring to be a choral director, should develop warm-ups that intensely focus on strengthening the ear. These projects have given me confidence about our ability to learn challenging pieces (*personal musical identity*).

Student 4 blogged in response to teacher prompts.

JASON: What was easy?

STUDENT 4: The easiest part of learning the piece was listening to everyone's ideas.

Also, since most of the songs were so familiar to us, it was easy to pick up the tunes.

JASON: What was more difficult than using a printed score?

STUDENT 4: Figuring out the harmonies. Listening to what the original piece sounds like as something that we were aiming for.

JASON: What was more difficult about not having a teacher?

STUDENT 4: We didn't have too much music background knowledge, so figuring out the musical issues was more difficult than it would have been if we had a teacher to help us out.

JASON: What was easier about not having a teacher?

STUDENT 4: I felt less pressured and less nervous to make a mistake. I learn from making mistakes. And, generally, if one of us made a mistake we would laugh about it and fix it. It was a nice, low-pressure environment.

JASON: What advice would you give to your choir teachers about how to approach music in the future?

STUDENT 4: Let us pick our pieces every once in a while. I think our motivation increased when we really wanted to sound like "that group in the youtube video." I really enjoyed having a Glee-like experience!

JASON: What was the most valuable part of this experience?

STUDENT 4: I learned that we are capable of a lot of things. I honestly thought the whole experiment would fall through after we all failed, but NONE of us failed. In fact, I think we all sounded really great!

JASON: How have you changed because of this experience?

STUDENT 4: I now hear song on the radio and think about how it would sound in a choir. This is completely true. I sincerely make harmonies to popular songs on the radio... all the time.

The comments from this student go to the heart of the research project. The student felt empowered to learn the piece with her peers independent of the teacher (*group cooperation, peer-directed learning, autonomy, personal musical identity, and a change in perception*).

Student 5 concurred. She blogged:

We could really focus on parts that may have been skipped over with a teacher, because they may have had to concentrate on another vocal part that was messing up. We also really learned to use our ears in this project, and i think we wouldn't have gained some of those skills with a teacher. The listening skills that I obtained from this project made me happy that we did it. It was a great experience to not have a teacher for once and have to correct your own mistakes with only the help from a small group of kids on the same level as you.

This reinforces the value such an informal learning experience has on honing listening skills (*personal musical identity and autonomy*).

On the efficacy of informal music learning, Student 6 blogged:

Not having a teacher meant that all the decisions were left to us (*autonomy and personal musical identity*). And when working with a group, everyone has to agree on the same thing (*group cooperation*). When you have a teacher, they tell you what to do. Not having

a teacher was easier in the sense that you could figure out the problems by yourself rather than a teacher trying to dissect the piece and figure out what is going wrong (*peer-directed learning*).

John's Story

Like Jason, John chose his top choral ensemble to participate. He divided them into five small groups and charged them with selecting a Christmas song to copy. Three groups chose traditional carols to copy. The other two groups chose more general Christmas songs. In one group, a single student, who elected to keep a video journal of the experience, decided to take charge, write the arrangement and teach it to his group. This was not the intention of the project and so the data from that group was not included in the study. In another group, a student's father helped with the transcription. While a child's father is not the schoolteacher, data from this group were eliminated from the study as it confounded the group's final product and compromised the goals of the research project. In fact, only one group at this school stayed true to the boundaries of the project. Unlike Jason and Dan's students, most of the students in John's cohort met outside of school at individual homes to complete their arrangements. This too, was not the intention of the study. Instead, the study was to apply informal music learning strategies as part of the in-school experience. Nonetheless, data gleaned from student journals confirm findings that support goals of group cooperation, peer-directed learning, autonomy, leadership and personal musical identity. Therefore the data are included in the analysis.

In her journal, one student described the process her group used to complete their transcription. She wrote:

We decided that we wanted to rearrange the harmonies of the chorus. Instead of rewriting them all at once, we rewrote one part at a time based off the melody. Once we put all part together, some notes were conflicting because we had just written them to agree with the melody only, so we had to adjust some of them (Student A journal entry 3).

In another entry she wrote:

Instead of getting much work done, we contemplated the direction of our arrangement. It seemed as though the new harmonies we had written were too troublesome for people to learn. After much discussion as to how we would reproach the situation, we talked for some time about the shape of the piece (Student A journal entry 5).

Then, she wrote:

We progressed further in harmonizing and blending our voices, which did not come easily. We focused mostly on a section of the piece that involves voice parts beginnings at different measures but ending at once. Rhythmically it was challenging but eventually we accomplished our goal (Student A journal entry 7).

Not all of John's students found the task easy. Student B wrote,

By this point, I began to realize that trying to learn a piece of choral music without some sort of visual aid was a real challenge for me. Excluding rock songs, learning a piece by

ear is not necessary a strong point for me (Student B journal entry 4).

Concerning personal musical identity this student also noted,

While we were there [at rehearsal], we decided that the best way to “make it our own” was to merge it with another song. We chose God Rest Ye Merry Gentlemen, and listened to a few recordings of it to get some ideas (Student B journal entry 2).

Different students contributed to the arrangement in different ways. Student C wrote the transitions and commented:

On my own, I created a possible transition from Carol of the Bells into Got Rest Ye Merry Gentlemen. I had the sopranos and altos hold out the line “on, on they send, on without end” while the tenors sing the next line and basses sing dings and dong. It was a simplistic way of making the transition but I felt that we might be able to build off of it (Student C journal entry 4).

To connect to personal musical identity, she continues:

To come up with my idea, I used a guess and check style. I went through a number of different approaches, with varying chords and tempos, before coming to the one that I will present to my group tomorrow. I did not have a clear thought for the transition but messing around with various notes was useful in that it got me thinking and allowed me to be open to a number of possibilities instead of going in feeling that there was only one correct way (Student C journal entry 4).

This is consistent with what Green (2007) found popular musicians would do in their garages. In addition, it became apparent that Student C had become the group’s leader (*leadership*). As time went on, the instances of peer-directed learning became apparent. Student C comments,

Today was amazing. [Student D] and I were able to figure out how to fit in God Rest Ye Merry Gentlemen. To put it together still involved a good amount of guess and check, but there was definitely an improvement from the last time. (Student C journal entry 8).

We see in Student E the emergence of a personal musical identity as well as a sense of autonomy. In his journal, he wrote:

We met after school, this time in the choir room. We continued working on parts and sang together with the CD. I began to feel more confident on my part, especially since I am not used to hearing the tenor line in a song. Towards the end of the meeting, a few of us stayed in the choir room and played around with some harmonies for God Rest Ye Merry Gentlemen. I found a few that fit and I plan on sharing them at the next meeting (Student E journal 3).

Although there were some issues with the research protocol that made it impossible to include data from every group, there were instances of note. In one group, a single student appointed himself the leader and wrote the entire arrangement himself (*leadership*). He then, again by himself, taught it to the group (*peer-directed learning*). One student wrote of her own personal method of creation that she called “guess and check” (Student C) but which clearly connected to her sense of personal empowerment

(*personal musical identity*) and facilitated a change in her own perceptions of her musical abilities. In the end, all five groups did produce something for performance. This evidenced an ability to work together and to meet a goal (*group cooperation* and *peer-directed*). The fact that most did not follow the instructions for the study, in a curious way suggests autonomy.

Dave's Story

At Robbinsville, a student explained the process. He said,

Mr. Westawski put us into groups and sent us off to practice rooms to arrange a pop song of their choice. We all worked together, and we figured out the voice parts. We chose a song by Linkin Park. Actually, I know everything about them and could already and so I was like hey, I know it. So I became the leader but each member of the group came up with their own voice parts. Then, we taught it to the rest of the choir.

As with all of the other groups, one student emerged as the leader (*leadership*). However at this school, each group taught their arrangement to the entire choir. When interviewed about what it was like to teach the arrangement to the group, the student leader revealed some noteworthy insights. He said,

[Teaching the other students] was a lot harder. It was like a different perspective (*change in student perspective*) 'cause when you teach and stuff, it's like we joke around. When I was sitting there, it was like "stop!" It was annoying. And it pissed me off when people wouldn't get it right.

Dave spoke about the connection of the informal learning experience to the formal learning in the classroom (*change in teacher perception*). At their interview with me, several students talked about how much longer it took to get the song ready when they worked on their own than when they worked with their teacher in the formal rehearsal. Dave said,

They would find the problem and not know exactly what it was or how to fix it, go through the things we talk about in class all the time, and eventually hit on the right one whether it be a vowel shape or a tuning issue or whatever the case was. They found it on their own, but it took a little bit longer than if I been in the front of the room. But, they got the answer themselves at the end of it.

All throughout the process, I heard them using terms and terminology from class and exercises from class. They didn't even realize, a lot of the time, that so much of what we do on a daily basis, whether it be warm-ups or actually rehearsing pieces, they were pulling out from somewhere to put that together. So it's kinda cool to watch on the sidelines. Every method that we do during the class period they could pull from to put together that piece on their own. (Interview with Dave)

I asked Dave's students if they noticed any change in their teacher's teaching style since the completion of the informal learning project? One student said,

I think like in the beginning of the year it was always like counting notes and this is what you have to do and we're doing it exactly like what's on the page because that's how it's written. And now, we are more independent and we learn more stuff on our own and we

have more freedom (*autonomy*). (Student interview)

Another student responded that their teacher did not change. Instead they, i.e., the students, changed (*student change of perception*). I asked them to describe in what ways. A student responded:

He looks at us like we're not stupid (all laugh) (*change in student perception*). My focus has improved because of working with the group (*group cooperation* and *peer-directed learning*). I listen to other parts better. I listen to my own part better (*personal musical identity*), more than I did at the beginning of the year. (Student interview)

Another student said,

I think that as a choir we matured (*change in student perception* and *connection to research question 4*) since the beginning of the year. We sing better together and listen more to each other. (Student interview)

I asked how did the two pieces that you worked on together help that? A student answered,

Working on our own we had to listen to each other and it made us understand better and be more musicians ourselves (*personal musical identity*). (Student interview)

Another student added,

I feel like it was a good test of what we've done and like how much we've really learned. OK, we learned all this stuff. Now can you put it to use though? That was pretty cool. (Student interview)

I asked, "Was one of you more in charge?" As in all the other groups, they said, "Yes!"

Dave agreed that the challenge for him was to find ways to add value to what the students could do on their own (*change in teacher perception*). He said, "Rather than assuming the choir can't do anything, I better teach you your part. How do you tap into that as a conductor knowing what they are capable of doing?" [This study showed that students] don't really need the traditional means and methods. They can do far more on their own" (interview with Dave).

It was interesting that before the interview, I heard the students rehearsing with student teachers from a local college on pieces that they were preparing for a concert. There were intonation issues, uniformity of vowel issues and more. However, when the students sang their own arrangements, these issues disappeared. The high school students suggested that one reason might be that they were reading from notation for the formal choral pieces and learned their own arrangements by ear (*autonomy, personal musical identity*).

Anthony's Story

Anthony chose his separate men's and women's ensembles to participate in the

research study. The men copied two arrangements, and the women transcribed one.

In addition to student journals, Anthony conducted a short video interview with each student who participated. In response to a question asking about the positive aspects of the project, a student answered:

Well, you really have to know the music and so you really know it especially when I was singing the song, I felt as though I knew the music must better than any other piece that I've done because we created the piece (*peer-directed, autonomy, and personal musical identity*). It also forces you to look at how the parts really work together and what each part does (*change in student perception*).

He continued:

You need to make the piece and teach the piece to other people (*peer-directed learning and leadership*).

In answer to a question asking what the student believed were the positive aspects of the informal learning project, another student spoke to the issue of change in perception. He said,

I feel it helps us grow musically and anyone who really enjoys arranging, composing and performing if helps you understand the process you go through making sure all the touches are like neat and fine. Then, you actually get to perform or see your finished product and you feel kind a like a sense of pride and you understand what a composer actually goes through (student 4 video interview).

When asked if the student felt hindered without input from the teacher, he responded,

No, I don't think we felt any, or I didn't, because we had at least one trustworthy member of our group (*leadership*) that kept us going and I felt that we had like a good group discussion like we always heard everyone's side (*group cooperation*). It was basically like a class but it was sort of all of us teaching the class (*peer-directed learning*) at like one point or another (student 4 video interview).

Some months later, I visited several of the schools to interview the students and their teacher. I was curious to find out if the ensemble culture changed because of the study. This data were needed to answer research questions 2 and 3. I also wanted to ask how the individual students changed and whether the teacher felt that he changed or whether the students noticed a change in the teacher. When I asked the teachers how they felt that they changed because of what their students accomplished, John said,

It was a good situation. People all played to their strengths and so it was just nice to see strengths come out from everybody. There were some cool things that happened corporately. Lisa's group decided originally to do Carol of the Bells and then they decided to layer on God Rest Ye Merry Gentlemen. And they just did it, put it together and it was fantastic. So, it was nice to see that cohesion. In other groups there were folks looking to one person for guidance. It was so cool. (Interview with John and his students, June 3, 2009)

This speaks to the issue of musical autonomy. I asked whether he changed in any way

after the experience. He responded:

Just that I realized that they have really long memories. We didn't originally record these, then one day I said, "we need to record these", so we just did it, and it was fantastic. That confirms my suspicions that there is some really good musicians in here and some pretty awesome musical thinkers. (Interview with John and his students, June 3, 2009)

This comment may suggest that students tend to remember what they do on their own more so than what teachers do with them. Such connects further to issues of musical autonomy. The analysis of data revealed and confirmed the same themes found in Green's (2007) research. They are: group cooperation, peer-directed learning, autonomy, leadership, and personal musical identity.

Jason's students (Interview with Jason and his students, June 1, 2010) told me that they felt a great sense of accomplishment (*autonomy*) upon completing their song. Jason stated that he wondered what might happen if he gave them a legitimate choral piece to learn informally (*teacher change in perception*).

Autonomy

Because of axial coding, the theme autonomy emerged as a central phenomenon. Autonomy was closely connected to the theme of personal musical identity and issues of changes in student perception. One example happened at Dave's school. Before the interview, I heard the students rehearsing with student teachers from a local college on pieces that they were preparing for a concert. There were intonation issues, uniformity of vowel issues and more. However, when the students sang their own arrangements, these issues disappeared. The high school students suggested that one reason might be that they were reading from notation for the formal choral pieces and learned their own arrangements by ear (*autonomy, personal musical identity*). Regarding autonomy, one of Dave's students said,

I think that as a choir we matured (*autonomy, change in student perception and connection to research question 4*) since the beginning of the year. We sing better together and listen more to each other. (Student interview)

I asked how did the two pieces that you worked on together help that? A student answered,

Working on our own we had to listen to each other and it made us understand better and be more musicians ourselves (*autonomy and personal musical identity*). (Student interview)

Another student added,

I feel like it was a good test of what we've done and like how much we've really learned. OK, we learned all this stuff. Now can you put it to use though? That was pretty cool.

As a result, a student at Dave's school shared,

I try to listen a little bit more to Mr. Westawski when he gives us directions. I try to look at my music more to make sure I know what I am doing. (Student interview at Dave's school)

Section V: Conclusions

Green (2006) writes:

By paying attention to how children learn informally in music, whether it is applied to popular or classical or any other music, I wish to suggest, we allow an engagement with musical inherent meanings as a theoretical aspect of virtual musical autonomy from social contexts. When they engage with music's materials themselves, especially through aural, informal learning practices, pupils are touching on an aspect of inherent meaning that is virtually freed for a moment from social context. They are bringing inherent meanings into being and are able to imbue the music with a new delineated content of their own. They touch a quality of musical experience which, precisely because of its fleeting freedom from delineation, at the same time exposes the inevitability of delineation. (p. 113)

We found this to be true as well. Students took ownership for the arrangements they created. Teachers validated their work by including the performances in the December concert programs and permitting students to do an arrangement for the spring concert. At each site, students said in our group interview that they wanted to do at least one piece of their own making at every concert. Several of the conductors agreed that this would be a good and worthwhile practice. As stated previously, four questions framed the research.

Research Question 1:

To what extents do informal music learning experiences facilitate group cooperation, peer-directed learning, autonomy, leadership and personal musical identity among student members of school music ensembles?

As with Green's (2002, 2008) research with general music students, members of the school ensembles reported that they felt positive about their music learning experiences. They documented this in journals (John's students, Dave's students), in online blog postings (Jason's students), and in video interviews (Anthony's students). This was confirmed when watching video recordings of their rehearsals (Dan's students) and in reading the teacher's personal journal (Dan's journal). Students found members of the groups to be cooperative for the most part (*group cooperation*) and the learning in groups to be helpful (*peer-directed*). Frequently, students helped each other (*peer-directed learning*) and assumed roles of authority (*leadership*). In all the experience provided students with a sense of accomplishment, ownership, pride and a desire to do the project again in the future (*autonomy*). In interviews, journals and blogs, students reported that they felt the arrangements were representative of who they are as musicians (*personal musical identity*). Many students reported that they came to realize how much is involved in creating a musical arrangement even when there was a recording to serve

as the model and had a new respect for the musical arrangements of others (*student change of perception*). Live interviews, interviews on video recording, online blogs, and personal journals provided the triangulation of data. Instances of change in perception by students and their teachers such as John's comments relative to how impressed he was with what his students accomplished (*teacher change in perception*) and Dan's surprise at learning students were playing instruments other than those they played in band (Dan's journal) were instances of the "ah ha" moments that define catalytic validity. Students in their blogs, interviews and journals provided instances of "ah ha" moments as well. An example of this was one of Dave's students who said that because of this experience she realized that she could learn from someone other than the teacher (*change in student perception*). In fact, she realized that all could learn from each other (*peer-directed*).

Research Question 2:

To what extent do informal music learning experiences bridge the gap between school music and the music students listen to and enjoy outside school?

In all instances, students chose the music to transcribe and arrange without input from their teacher. Anthony reported that at his school the students chose music that he would not have considered when selecting music for the ensemble to perform. He expressed pleasure in the breadth that brought too the choral program. Dave and Jason concurred (personal correspondence). Students were asked to transcribe a Christmas carol or song and all found interesting versions on YouTube to transcribe Carol of the Bells seemed to be most popular with separate groups from three schools choosing it. When asked in interviews and on blogs if they enjoyed the informal learning project, all were unanimous in responding, "Yes!" They felt pride that their teacher believed enough in their abilities to complete the project successfully and expressed gratitude to their teachers for including the finished products in the winter concerts.

Research Question 3:

To what extent do informal music learning experiences influence the music teacher's perception of the skills his or her students possess?

Throughout this process, students worked without input from their teacher. Most groups reported that a leader emerged from inside each group to ensure that the group kept moving forward. This represented a shift in the power structures within the choral and instrumental classroom. In addition, it showed the students that their teacher had the confidence that they had the ability to complete the informal music-learning project successfully. This was consistent with every teacher at every school. Students commented in journals, blogs and interviews that they appreciated that responsibility and the trust their teachers showed them.

Each teacher believed that his students would be able to complete the project and each teacher was certain that the results would be of a high level. This may have been

because the teachers chose their best students to participate and in this sense the project differed significantly from Green's (2002, 2008) experiences with general music students. John noted that he was particularly surprised that students were able to recall their arrangements when asked to record them several months after the performance. Dave's students performed their arrangements for me when I visited the school six months after the public performance. As with John's students, Dave's singers remembered exactly how to sing the arrangement. In both instances, there were no printed scores. Students learned everything aurally and recalled it from memory.

Regarding one of the pieces the students arranged, Dave said,

If I actually saw that in print, I don't think I would have picked it. I would have looked at all those inner voices and said "No way!" And, that would have been a shame because of what they were able to do on their own. I would have limited them by looking at that score and thinking that they were not ready for or not capable of [meeting the challenges]. That could limit what I am going to choose music wise because they obviously can get that stuff down without having a score in front of them (*change in teacher perception*). (Interview with Dave)

This was an important insight for him. Dave agreed that the challenge for him was to find ways to add value to what the students could do on their own (*change in teacher perception*). He said, "Rather than assuming the choir can't do anything, I better teach you your part. How do you tap into that as a conductor knowing what they are capable of doing?" [This study showed that students] don't really need the traditional means and methods. They can do far more on their own" (interview with Dave).

Dave also spoke about the connection of the informal learning experience to the formal learning in the classroom (*change in teacher perception*). At their interview with me, several students talked about how much longer it took to get the song ready when they worked on their own than when they worked with their teacher in the formal rehearsal. Dave said,

They would find the problem and not know exactly what it was or how to fix it, go through the things we talk about in class all the time, and eventually hit on the right one whether it be a vowel shape or a tuning issue or whatever the case was. They found it on their own, but it took a little bit longer than if I been in the front of the room. But, they got the answer themselves at the end of it.

All throughout the process, I heard them using terms and terminology from class and exercises from class. They didn't even realize, a lot of the time, that so much of what we do on a daily basis, whether it be warm-ups or actually rehearsing pieces, they were pulling out from somewhere to put that together. So it's kinda cool to watch on the sidelines. Every method that we do during the class period they could pull from to put together that piece on their own. (Interview with Dave)

I asked Dave's students if they noticed a change in their teacher because of the informal music learning project. One student responded,

I think like in the beginning of the year it was always like counting notes and this is what

you have to do and we're doing it exactly like what's on the page because that's how it's written. And now, we are more independent and we learn more stuff on our own and we have more freedom (*autonomy*) (Student interview)

Another student responded that their teacher did not change. Instead they, i.e., the students, changed (*student change of perception*). I asked them to describe in what ways. A student responded:

He looks at us like we're not stupid (all laugh) (*change in student perception*). My focus has improved because of working with the group (*group cooperation, peer-directed learning*). I listen to other parts better. I listen to my own part better (*personal musical identity*), more than I did at the beginning of the year. (Student interview)

Research Question 4:

To what extent do informal music learning experiences empower student musicianship and transform or change the culture of the ensemble?

Students felt that they became more aware of the process that composers follow to produce a piece. As a result, they had a new found respect for the music of others that they were singing or playing in the ensemble. One of Anthony's students summed it best when she said in her video interview:

I think that it helps each of us individually a lot. I was an Alto I for this, so I had to listen for a part that wasn't there. Usually, you have maybe at the most a melody and then maybe a little bit of harmony but there's no alto I in a piece. So, I feel like having us search for that really helped me grow as a musician and it helped me grow in choir too, because now I can listen for things that maybe don't come so easily. (Student interview)

Students from every school and in each group mentioned the importance of leadership as part of the culture of the ensemble. In nearly every instance, a leader emerged from the group to help guide and shepherd the ensemble toward performance. With very few exceptions, students felt that that project brought them closer together, despite minor instances of disagreement during the process and all were proud of their public performance. Most felt that the project challenged and improved their musicianship and predicted that such improvement would be beneficial to their choir and band in the future.

One noted changes in perception on the part of the students at varying points during the project. For example, one of Dave's students said that because of this experience she realized that she could learn from someone other than the teacher (*change in student perception*). In fact, she realized that all could learn from each other (*peer-directed learning*).

In the interviews I did at their schools or in their personal journal, each teacher remarked either that they were pleased with the results and proud of how well their students worked together and met the expectations of the project. All have agreed to include an informal learning experience where students do their own transcriptions in future concerts.

Dewey (1899, 1902, 1914) argued for a student-centered pedagogy. Freire (1970, 1973) advocated that students bring materials of their own to the classroom for teachers to use as the basal teaching texts. Swanwick (1999) urged music teachers to teach music musically. Green (2002, 2006, 2007, 2008) suggested that informal music learning has curricular applications that enhance motivation and nurture both musical and social skills.

Generating Theory

This research posits a theory for informal music learning as a strategy for music teaching and learning in high school ensembles. Specifically, informal engagements with musicking (Small, 1998) should be included along side the traditional ensemble experience with the music teacher at the core. When students are empowered by their teachers to choose music they like, and bring music from their engagements outside the school, they have “voice.” Music teachers do not always hear these voices. Instead, these teachers are intent on training students to respond only to the gestures and verbal instructions of their conductor without student input. Informal music learning experiences provide a process for self-created arrangements that student members of school ensembles produce independently of their music teacher. Next, when engaging in this process, students in school ensembles focus, become leaders, and produce musical products of high quality worthy of public performance. Students, working independently and with minimal intervention from their teacher, become better musicians. They take ownership and feel empowered. Their musical contributions broaden the culture of the ensemble.

Returning to the issue of relevancy and the perspective of critical pedagogy for music education, the informal music learning project did indeed empower student musicianship. Group cooperation and peer-directed learning contributed to students’ abilities to create original transcriptions and arrangements. In one instance, the project inspired a student to complete his own arrangement independent of the group. Several teachers shared insights that confirm such empowerment caused a change or transformation in their students and in them. The students shared similar insights. In all instances, the teachers who participated in the study changed their strategies and expectations because of the work produced independently and informally by the students. Power relationships inside the classroom and ensemble rehearsal changed, as well as a mutual respect for the abilities of students by their teachers and from the students to their teachers. Students recognized that it was because of the fine programs to which they belonged that they acquired the skills needed to arrange their pieces. By allowing students to pick their own music to arrange and perform, teachers honored their students’ personal musical preferences and taste. That was a positive step toward linking the music that students enjoy outside of school with the music they perform in school.

Future research might replicate this study with students in middle school ensembles or with students who are not in top performing groups in the high school. Individual action research studies, as originally proposed for this project, would inform teachers of the efficacy of informal music learning in their own programs as well as add

to the literature. Policy for curriculum might be developed to ensure that students do have regular opportunities for informal music learning in school ensemble programs and that teachers are prepared to facilitate such musical endeavors.

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Appendix



**CONSENT TO PARTICIPATE IN A
UNIVERSITY RESEARCH STUDY**

**Westminster Choir College
Center for Critical Pedagogy**

CHILD'S NAME _____ **DATE** _____

TITLE: **Going Green: Applying Informal Music Learning Strategies in High School Choral and Instrumental Ensembles - A Collaborative Research Project**

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PURPOSE OF THE RESEARCH: This collaborative project studies the applications of informal music learning within the context of high school performing ensembles. For a 12-week period, the teachers of five high school ensembles will assign students to small groups. Each group will copy a holiday song from a recording or create a new arrangement of the song inspired by the recording without

intervention from their teacher. The intent is to perform those original arrangements at a public concert during the December holiday season. The overarching purpose is to investigate the possibilities for informal learning to be a catalyst to inform students' musical performance when singing and playing music they created themselves.

Students will not be identified by name in the research document. All responses by students will be reported in the research anonymously. Only the school name and teacher's name will be included in the final document.

CONSENT: My signature below indicates that I grant permission for my child to participate in the study. I understand that participation is voluntary and that my child's name will not be disclosed. I also understand that I may refuse consent or withdraw from the study at any time prior to the completion of the final document without prejudice or penalty. I understand that if I wish further information I may contact the researchers at the numbers or e-mails listed above.

I have read and understood this consent form and I voluntarily give consent for my child to participate in this research project without compensation. This form shall be kept in the researcher's confidential files for a period of five (5) years following the completion of the study and then destroyed. I understand that I will be given a copy of the signed consent form.

Signature of the Parent/Guardian

Date

Signature of the Investigator

Date