The Effect of Parameters on Composition Anxiety

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Background

Composition and improvisation are considered to be integral components in American elementary music curriculum. The National Standards, according to the National Association for Music Education (NAfME), list composition and improvisation as Standards Three and Four, respectively (Music Educators National Conference, 1994). Composition and improvisation are also cited as important curricular activities through all grade levels in the Texas Essential Knowledge and Skills Standards (Texas, 2013). The musical skill of composition has been shown to promote metacognition, higher level thinking, collaboration, problem solving, and cross-curricular synthesis (Barrett, 2006; Burnard & Younker, 2004; Major & Cottle, 2010). Marrinan (2017) expressed concern that “the tasks and activities provided to students [for composition] can sometimes discourage motivation and dampen creativity” (p. 3) if the tasks are “too open-ended as to overwhelm, or too strictly guided by the teacher to allow for exploration by the child” (p. 3). Similar findings were concluded by Hickey (2003) and Menard (2015). Furthermore, there have been inconclusive results regarding the influence of certain variables, including gender, on anxiety levels during improvisation (Alexander, 2012; Wehr-Flowers, 2006). While there have been numerous studies conducted regarding anxiety in improvisation activities, there was no literature found by the researcher regarding composition anxiety.

Upon reviewing the literature, the current research available can be categorized into five groups: (1) the study of compositional processes, (2) benefits of composition, (3) teacher belief regarding composition, (4) anxiety and psychology surrounding improvisation and composition, and (5) student interactions with composition. Kratus (1989) concluded that students of different ages spent varying lengths of time on the compositional processes of exploration, development, repetition, and silence. Technology has been used as a medium to facilitate composition for elementary-aged students (Kratus, 1989; Younker, 2000). Composition studies
have been conducted in both group and individual settings, with varying challenges rising in each. In both settings, students exercised decision-making processes to create new music (Burland & Davidson, 2001; Burnard, 2002; Burnard & Younker, 2004).

There have been many documented benefits of composition observed within the elementary music classroom. Composition has been shown to aid in metacognition development, justification for choices, and critical reasoning (Major & Cottle, 2010). Music composition has also been shown to aid in development of social skills and foster leadership (Burnard, 2002). Composition practices have been linked to the deepening of musical understanding and the encouragement of growth in student potential (Menard, 2015). There have also been positive connections found between musical composition and reading comprehension (Hogenes et al., 2015).

There have been inconclusive results regarding the teacher perspectives regarding the value of composition. Some researchers found that teachers value composition in the general music classroom, but incorporating composition is impeded by various factors including time, space, experience, and equipment (Menard, 2015; Shouldice, 2014). In contrast, composition has been found to often be the topic that is among the least explored in the music classroom, leading to lack of student proficiency (Bell, 2003; Kirkland, 1996). Schiff (2015) in particular highlighted the differing definitions of composition used by currently practicing music educators, which led to variations of in the uses and teaching of composition in the classroom.

It is not uncommon for musicians to experience what is known as music performance anxiety and demonstrating a tendency for “perfectionism” when sharing their work (Helding, 2016; Mitchell, 2011). As such, students may feel the need for work to be perfect which can create heightened levels of anxiety. Performance anxiety can also affect basic cognitive skills, resulting in negative experiences that have been shown to have an impact of future performances and creations (Marye, 2011). Menard (2015) indicated that the act of starting a composition can result in stress for the participant. There are many initial decisions that must be made before the true composition can begin (Menard, 2015). Time and lack of fundamental knowledge have also
been cited as stress-inducing factors (Menard, 2015).

It has been concluded that students interact with improvisation and composition in different ways. According to Burnard (2000), school-aged students experience both activities “along several concurrent multi-dimensional continuums” (p. 242). It has been found that students “produce more creative, original music when they are more confident with their musical ability” (Coulson & Burke, 2013, p. 428). When taught in the proper manner, students have identified enjoyment, increased interest, and greater musical understanding as benefits of composition (Menard, 2015).

While there has been extensive research concerning composition execution and benefits in general, there has been limited research found specifically regarding how the initiation of a composition project effects student anxiety levels. There have been a dearth of studies examining specific prompts or directions given to students before they begin their compositions. Therefore, the purpose of this study is to investigate the effect of parameters on the self-described composition anxiety level of students. Additionally, it is the purpose of this study to identify compositional tools deemed meaningful by students over the course of the composition task.

**Method**

For this mixed-method research study, third grade students ($N = 17$) from a central Texas elementary school participated in a composition activity after school. Participants were enrolled in general music classes taught by the researcher. Due to the transient nature of this school community, none of the participants in this study had been with the researcher for longer than two years. The general music classes were taught in a blended methodology, with elements of Orff, Music Learning Theory, and Kodaly practices.

Prior to the study, the participants were divided into two groups. Participants were divided as evenly as possible to create two approximately equal groups based on musical and academic
ability, gender, and exceptionality. Groups were verbally designated as ‘green’ and ‘orange’ to avoid any participant bias.

Both groups were given exactly ten minutes to create their composition. Participants in neither group were provided with visual aids or physical tools. Work was done individually and there was no assistance provided during the composition period. Groups were located on opposite ends of a large cafeteria and monitored by two research assistants.

The experimental group (n = 9), labeled as the orange group, was given verbal direction and reminders prior to starting the composition period. The participants in the experimental group were then provided with the following instructions prior to the composition activity:

Good afternoon students. Thank you so much for your participation in this project today. Your task today will be to create an original composition. Your composition should be at least sixteen beats in length and should include both rhythm and melody. In class, we have worked with several tools for composition. Think back to our beat bars, melodic patterns, rhythmic building blocks, and the staff. You may use these for your project. We also talked about how to create a composition. Start out small, then add more as you go. Also, you might find it helpful to start with the rhythm first, and then add melody. Remember, you can use patterns, or form, in your piece. Because you are the orange group, you will have an orange piece of paper and a pencil. During the composition period, I will not be available for questions. You will have ten minutes to complete your project. Remember, there are no wrong answers. This is your composition, your song.

The control group (n = 8), labeled as the green group, was not given any guidelines. Students were provided with a green sheet of paper and pencil. Prior to the composition period, participants in the control group were not given any specific instructions and were told “to make music.” They were not reminded of any classroom strategies or tools.

Following the ten-minute composition period, students were interviewed individually. Interviews were completed by the researcher and two research assistants, and the audio was
recorded and transcribed for further analysis. Each participant was asked to rate his/her anxiety and understanding of the task using a Likert-type scale (see Figures 1 and 2).

Figure 1. Likert-type scale for Question 1: “How did this task make you feel?”

Figure 2. Likert-type scale for Question 2: “How difficult was your task? Did you understand what to do?”

Students were then asked a series of follow-up questions regarding their feelings during the task, tactics used to complete the activity, and further thoughts regarding the composition process (see Table 1). Participants were then interviewed in a group setting.
Table 1

*Interview Questions*

1. What were your thoughts about the task you just worked on?
   a. General thoughts. Feel free to explore based on responses.
2. When I asked how the task made you feel, you said (insert sun face answer here). Can you tell me why you felt that way?
3. When I asked about the difficulty, you said (insert sun face answer here). What made it easy/hard?
   a. If they understood: What helped you to understand?
   b. If they didn’t understand: What part was confusing?
4. Were there any tools that helped you with your task?
5. What would have helped you with this task?
6. Overall, how do you feel about the work you did?
7. Is there anything else you want your teacher to know about your task?

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**Results**

**Quantitative**

A quantitative analysis of the Likert-type scale data was performed. The Mann-Whitney U test was used to analyze the ordinal data from both questions. The results from question one, regarding the anxiety levels felt by students (as shown in Figure 1), were not statistically significant ($U(1,15) = 21.5, p = 0.09$). The results from question two, regarding the difficulty of the task and understanding (as shown in Figure 2), were not statistically significant ($U(1, 15) = 20.5, p = 0.07$).

**Qualitative validity**

Validity of qualitative results was confirmed using multiple methods. During the interview process, member checking was used with participants to confirm statements. Following the data collection, interviews were scripted and coded for themes. Researcher observations were also documented using rich descriptions. Triangulation was used with the research assistants to confirm the observations and conclusions (Creswell, 2003; Phillips, 2008). Qualitative results were organized by themes that emerged during the coding of the interviews.

**Qualitative data: Anxiety**

Participants in the control group were visibly nervous at the start of their ten-minute composition period. There was much apprehension seen and stated by students when the task was presented, and frequently a look of fear and confusion on their faces. Following the composition
period, students reported feeling nervous in the individual and group interviews. Students’ feelings of confusion and anxiety were visibly apparent throughout the task. One student in the control group, identified as “Jo,” demonstrated extreme levels of anxiety during his interview and during the composition period. The researcher’s observations stated:

At the beginning of the composition period, Jo became visibly frightened. His eyes were wide and he began to fidget constantly. He raised his hand repeatedly before the ten-minute time frame began and asked for clarity. When the researcher didn’t answer his questions, his face demonstrated fear, confusion, and frustration. During the interview process, he was looking around the room as though looking for a clue or for help. While Jo was completing his interview, he would not meet the researcher’s gaze. He often sat in silence, seeming not to have the words to answer the questions. At many points, he appeared as though he was on the verge of tears, due to frustration. The research had to reassure him several times during the interview that there were no wrong answers. He expressed pride in his work and stated that he really didn’t know what he was supposed to be doing, but that he tried his best. On his Likert scale, he reported that he felt confident in his task. Following the interview, he amended his answer to say that he felt extremely nervous.

Students in the experimental group did not report anxiety. They appeared to be confident and excited about their task. Participants in this group reported that the task was easy for them because they were reminded of activities and strategies that had been used in class. They also stated that having a clear understanding of what to do made them feel more comfortable.

**Qualitative data: Task understanding**

As stated previously, there were no parameters provided for participants in the control group during the composition activity. This appeared to lead to confusion, as reported by the students. All students in the control group expressed, in their interviews, a lack of understanding about exactly what to do. Examples of student statements include “When she said ‘make music’, it could have been done either way. It could have been done with tas and ti-tis [quarter notes and paired eighth notes], or it could have been done with words, and I didn’t understand” and “well, at first I was
like, does she want us to do a certain thing, and then I just felt a little bit confused.” When asked for clarification regarding their feelings of confusion, the participants cited several factors including how to start, what the finished project should look like, and what tools or methods to use.

In contrast, participants in the experimental group expressed greater clarity regarding their task. Students restated parameters and explained how they met, and even exceeded, the preliminary guidelines. One participant expressed her desire to surpass the original sixteen beats. She was confident with the song in her mind, and felt inspired to put that idea on paper beyond the parameters: “I felt confident. I kept working hard to make it how I thought it was”.

**Qualitative data: Directions**

One of the most prominent causes of confusion involved the lack of directions. In the control group, participants expressed a desire for directions. This was discovered in both individual and group interviews from the control group. When asked if the participants would have liked more directions, the group was in unanimous agreement. The experimental group felt that they had sufficient direction and knew how to complete the task, using statements such as “it was much more descriptive” and “we actually knew what to do”.

**Qualitative data: Tools**

Many participants cited tools that were useful to them during their composition. Tools mentioned included beat bars, the staff, melodic patterns, and rhythmic building blocks. The building blocks were mentioned with greater frequency. One participant said that the building blocks helped her to organize her ideas. Participants stated that the tools they had learned in class were a benefit to them on their compositions.

**Qualitative data: Confidence**

Despite feeling nervous, participants in both the control and experimental groups expressed a strong sense of confidence in their work. They stated that they were proud of the work they had created, feeling that they had “figured it out” to the best of their abilities. One student in the experimental group felt so confident in her work that the parameters served only as a starting point for her to expand upon.
During her interview, Katie expressed a deep sense of pride in her work. She sat up tall and spoke with self-assurance. When asked about her piece, she stated that she had a specific song in mind that was all her own, and that was what she was going to write. In both her individual interview and the group discussion, she displayed a powerful sense of purpose and determination in the creation of the “song in [her] mind”.

A student from the control group also expressed a high level of confidence, even when he didn’t completely understand the task.

During his interview, Jacob expressed that he didn’t really understand how to complete the task. However, he expressed that he was proud of his work and that his composition was something that he enjoyed. He spoke with a clear understanding of his intention. He maintained eye contact with the researcher when giving his responses. When speaking about his work, he sat up taller and smiled.

Discussion

Analysis of the results of this study revealed that students felt higher levels of composition anxiety when asked to compose without parameters. Those who did have parameters at the start of the project felt more confident and excited about the task, and were able to, by their own words, “be more creative.” Overall, the participants completed their task to the best of their abilities and showed great pride in their created work. Based on the results of this study, it can be concluded that while it is critical to foster creativity, it is just as critical to avoid overwhelming students. The parameters provided served as a starting point, and a point of direction, for the compositions. In this study, it was found that being provided with parameters was greatly preferred by students, lessening their feelings of composition anxiety. The results of this study contradict previous research which concluded it was preferable “not to impose strict parameters which may inhibit” composition (Burnard, 2000). This conclusion has been discussed in previous research studies in the context of children understanding their own creativity (Gardner, 1982; Grave & Walsh, 1998; Hennessey & Amabile, 1988; Silvers, 1977). As
such, further research is needed to examine the role of parameters on creativity as a whole.

Upon reviewing the literature, it was found that students have expressed a difference in experience between composition and improvisation (Burnard, 2000). Therefore, the experiences of improvisation anxiety and composition anxiety might also be experienced in different ways. Further research is needed to investigate differences in anxiety and experience between composition and improvisation from the perspective of young students.

The participants discussed the benefits of tools and technique that assisted with the organization of information while composing. Participants cited beat bars, the staff, and simple melodic patterns as tools that were extremely helpful in the composition process. Overall, students most frequently cited rhythmic building blocks as the most beneficial tool. It is challenging for many young students to approach a blank page and synthesize a musical idea. Robinson (2011) discussed the importance of the control one has over his or her medium. One must have the skills and tools to be successful at a creative task (Robinson, 2011). Having an ample supply of tools and techniques builds one’s understandings of the medium and allows for greater freedom and flexibility in expressing new and creative ideas. As such, the challenge of composition may not stem from a lack of musical creativity, but rather be an issue with regards to having the tools and skills to express it. Rhythmic building blocks have shown to be a simple and effective tool for organizing rhythmic ideas and are considered fundamental in the Orff-Schulwerk methodology (Keetman, 1974). This is consistent with the interview responses from the participants in this study. Further research should continue the investigation of beneficial tools for composition, with particular emphasis to rhythmic building blocks.

Kratus (1989) stated that improvisation is the creative activity most suited to seven-year olds. The results of this study support that idea that composition is also an appropriate creative task when approached with proper tools and guidance. The participants expressed the desire to share the songs they had in their heads, and, following the study, asked to revisit them in order to continue their creation. Further research is needed to investigate potential reasons for students to resonate with composition tasks, as well as to discover if students have the same affinity for
other music creation tasks such as improvisation.

The participants of the study were completely aware of the researcher’s purpose for the study. Because of the relationship with the researcher, students appeared to be more willing to push creative boundaries and to take risks. For example, the participants of this study stated a willingness to “figure it out” and to do their best, even when the directions were limited or did not provide the amount of clarity they desired. However, during the interview process, students responded in a different manner than their body language suggested they felt. When asked about their responses compared to their appearance during the task, students expressed a strong desire to “help” their teacher. This may have been the reason for the discrepancies between the Likert-type scale results and the interviews. Therefore, this study should be replicated in a setting in which the researcher does not have a personal or educational connection with the students.

Analysis of the quantitative data was not statistically significant, with the results at $p = 0.09$ and $p = 0.07$, respectively. While the anxiety levels indicated through the Likert-type scales were not statistically significant for either group, the vastly different perspectives expressed through the interview responses may warrant further investigation. Various factors could have had an impact in these results, including sample size and relationship to the researcher. In addition to these factors, the quantitative survey method of data collection may not have been effective for this setting. Future research is needed to determine the appropriate method for collecting quantitative data regarding student perceptions.

The results of this study have important application for educators. Composition should be fostered and encouraged within the music classroom. It is important to build a classroom environment that lends itself to creative thinking, and to develop the tool set of students to meet unique creative and compositional challenges. Rhythmic building blocks were found to be an effective tool that was simple for young students to understand and apply. The teacher’s understanding of the desired outcome must also be expressed in the parameters given to students. The findings of this study provide some understanding into the compositional mind of
students and highlight strategies that educators may find effective in fostering creative thinking in their students.

**Keywords**
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