The Difference in Attributions of Success and Failure, Out-of-

Class Engagement, and Predictions of Future Success of Middle

School Band Students in Open and Closed Composition Tasks

by

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ABSTRACT

The purpose of this study was to compare perceptions of success and failure, attributions of success and failure, predictions of future success, and reports of out-of-class engagement in composition among middle school band students composing in open task conditions ($n = 32$) and closed task conditions ($n = 31$). Two intact band classes at the same middle school were randomly assigned to treatment groups. Both treatment groups composed music once a week for eight weeks during their regular band time. In Treatment A ($n = 32$), the open task group, students were told to compose music however they wished. In Treatment B ($n = 31$), the closed task group, students were given specific, structured composition assignments to complete each week. At the end of each session, students were asked to complete a Composing Diary in which they reported what they did each week. Their responses were coded for evidence of perceptions of success and failure as well as out-of-class engagement in composing. At the end of eight weeks, students were given three additional measures: the Music Attributions Survey to measure attributions of success and failure on 11 different subscales; the Future Success survey to measure students' predictions of future success; and the Out-of-Class Engagement Letter to measure students' engagement with composition outside of the classroom. Results indicated that students in the open task group and students in the closed task group behaved similarly. There were no significant differences between treatment groups in terms of perceptions of success or failure as composers, predictions of future success composing music, and reports of out-of-class engagement in composition. Students who felt they failed at composing made similar attributions for their failure in both treatment groups. Students who felt they succeeded also made similar attributions for their success

in both treatment groups, with one exception. Successful students in the closed task group rated Peer Influence significantly higher than the successful students in the open task group. The findings of this study suggest that understanding individual student's attributions and offering a variety of composing tasks as part of music curricula may help educators meet students' needs.

DEDICATION

This dissertation is dedicated to Dan Schwartz. The kindest and smartest person I know.

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I would like to thank my fifth and sixth-grade band students at my first teaching job who showed me that kids are capable of so much more creative thought and musical expression than we give them credit for, and who started me down my current research path of music composition in instrumental classrooms. Thank you to Dr. Sandra Stauffer for helping me shape that research path into this dissertation, and for your continuous support and guidance through this degree. I will be forever grateful. Thanks also to my committee, Dr. Jennifer Broatch, Dr. Margaret Schmidt, Dr. Jill Sullivan, and Dr. Evan Tobias, who have taught me a tremendous amount and whose unique insights and ideas have each shaped my experiences at ASU in a special way and helped transform my skills as a researcher and educator.

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CHAPTER 1

INTRODUCTION

Background

The subject of music composition in school music settings has received

considerable attention. While music performance has been the traditional focus of

instrumental ensembles, scholars in the field of music education have called for the

inclusion of composition and improvisation as part of a well-balanced, comprehensive

music curriculum (Elliott, 1995; Gordon, 2007; Reimer, 2003). This suggests not only

that music composition is a means of learning and teaching musical concepts, but also

that composing is a means of developing musicianship and creative thinking skills

(Gordon, 2007; Music Educators National Conference, 1994; Webster, 2003; Wiggins,

2003).

The inclusion of composition in the music classroom has taken many forms. In

1963, the Ford Foundation awarded the Music Educator's National Conference (MENC)

a grant to fund the Contemporary Music Project for Creativity in Music Education, which

matched composers with public schools and provided future teachers with resources to

help teach composition in the classroom (Mark, 1986). In 1965, the Seminar on

Comprehensive Musicianship, held at Northwestern University, discussed ways to

expand the music curricular model beyond the traditional performance-based model.

Music classes taught with Comprehensive Musicianship use not only performance but

also music history, improvisation, and composition to teach musical concepts (Mark &

Gary, 1992). In 1997, a group of music educators met at Lawrence University in

Appleton Wisconsin to solidify the goals of Comprehensive Musicianship in the

classroom, or the Comprehensive Musicianship through Performance (CMP) model as it would later be known (Sindberg, 2009). While not specifically designed to promote music composition, the development of the CMP model and the broadening of the aims of music education helped enhance the presence of music composition in school music classrooms.

In 1994, music composition became recognized as part of the voluntary standards of school music curricula through various educational policy moves. In that year, the Goals 2000: Educate America Act officially declared that every child should receive instruction in the arts as part of his or her education (MENC, 1994). In response, the Music Educators National Conference released the *National Standards for Music Education*. This list of nine voluntary standards intended both to define what it meant to be educated in music and to provide a framework for school districts to adapt their own comprehensive music curricula (MENC, 1994). Two of those standards (standards 3 and 4) relate specifically to improvisation and composition.

The impact and inclusion of these standards in school music programs have been studied at both the K-12 and post-secondary levels. One survey of 267 National Association of Schools of Music member institutions found that 77% of schools had restructured course materials, changed required texts, or made other alterations to their music education curricula following the public announcement of the National Standards (Fonder and Eckrick, 1999). McCaskill (1998), who surveyed general music methods professors, found that 90% of respondents reported that the National Standards were included in their methods classes and that students should be prepared to teach all nine, including the standards addressing improvisation and composition.

While administrators and faculty at institutions of higher education reported altering their curricula to include all nine National Standards, in practice, music teachers reported addressing only a few standards in depth in the classroom. In a study of 30 elementary music specialists, Orman (2002) found that teachers spent the most time on standards 1, 2, and 5 (singing, playing instruments, and notating/reading music) while the remaining standards comprised less than 5% of class time. Byo (1999) surveyed music specialists and found that while they believed it was important to teach all nine standards, they reported that they did not have time to do so effectively, citing composing and improvising as being the most difficult to implement. In reality, standards other than 1, 2, and 5 may receive even less attention than these findings suggest. In a survey of 45 elementary music specialists, Wang and Sogin (1999) found that teachers tended to overestimate the classroom time devoted to various musical tasks, including composing and improvising.

Other researchers have found that music composition is underrepresented in music classrooms when compared with other forms of musical engagement (Brittin, 2005; Louk, 2002; Orman, 2002; Strand, 2006). Teachers who did not include composition cited a lack of time, technology, and background (Strand, 2006) and considered composition more difficult to teach (Bell, 2003). However, teachers who did include composition reported that students' composing experience enriched other learning (Strand, 2006). Therefore, finding ways to overcome the obstacles to teaching music composition in the classroom has become a topic of research in the field of music education.

The question of *how* to teach composition raises valid concerns. As Bruce and Lupton (2010) note, music composition in higher education is typically taught using the eminence model in which students work one-on-one with an expert composer with the expressed purpose of becoming professional composers themselves. This model is not practical in classroom and ensemble settings, both because of large classes sizes and due to the fact that the goal of composition in the K-12 classroom is not necessarily to transform students into professional composers.

A growing number of resources have become available to address the issues of how to facilitate composition experiences in the classroom setting as well as to help close the gap of background knowledge in composition. Researchers and music education practitioners have published books that address strategies to include composition in the classroom (Hickey, 2003, 2012; Kaschub & Smith, 2009; Randles & Stringham, 2013; Wiggins, 1990). Publications for music teachers such as *The Music Educator's Journal* and *Teaching Music* have included articles about the importance of composition, how to include it as part of the curriculum, and models for implementing composition activities in the classroom (Brophy, 1996; Hickey, 2001; Hickey & Webster, 2001; Kaschub, 1997a; Priest, 2002; Randles & Sullivan, 2013; Reese, 2001; Stambaugh, 2003; Ruthmann, 2007). Popular instrumental method books such as *The Standard of Excellence* (1993), *Accent on Achievement* (1999), and *Essential Elements* (2000) include supplemental composition exercises (Lautzenheiser et al., 2000; O'Reilly & Williams, 1998; Pearson, 1993). In addition, the National Association for Music Education (NAfME) established a National Council for Composition and held a summer Composition Academy for music teachers to learn how to help their students compose.

Part of including composition in classrooms and ensembles also involves making decisions about which types of composition lessons to present to students. One of the considerations is the amount of teacher-imposed parameters present in the composition assignment, often referred to as task design (Hickey, 2003). Tasks with fewer parameters are referred to as open or unstructured tasks, while tasks with more parameters are referred to as closed or structured tasks. This study will contribute to the growing body of research about the impacts of open and closed task design.

Personal Interest in this Research

This research was inspired by my own experience teaching fifth and sixth-grade band. I did not include composition in my instruction until I cleaned out the school-owned instruments at the end of one school year and found a folded scrap of notebook paper tucked behind the backing of one of the clarinet cases. On the outside, a student had written, "My Song: Do Not Touch or Else." On the inside were a few scribbled music notes labeled with letter names. I had not given the students a composition assignment that year. I surmised that this student had written this piece at home on her own time.

A quick survey the next fall revealed that she was not the only student who was interested in composition. I needed to do something. Rather than attempt to "teach" composing, I decided to give my students a forum to bring the compositions they made on their own time to school and record them onto a CD. This was my first introduction to open task design.

Students created a "Recording Studio" in the band room out of cardboard boxes and signed up for five-minute time slots before school to perform and record their compositions onto my laptop. The project was a success with the students, and I decided

to replicate the experience the following year as an action research study with the fifth- and sixth-grade band students at one of my other schools. Students could sign up for an afterschool "Composing Club" where they could compose their own music and record it. The purpose of the action research study was to document the process beginning band students used to compose in the absence of teacher-given parameters. Through field notes, composition analysis, and daily "Composing Diaries" completed by the students, I found that the processes students used to compose were related to their perceptions of the lack of teacher-imposed parameters (Schwartz, 2012).

The following year, I wanted to compare the open task design with which I had become familiar with a closed task design in which composing activities were much more structured. I conducted a pilot study with my fifth-grade band students in which some students experienced six sessions of open composing tasks while other students experienced six sessions of closed composing tasks. I measured their attitudes with a researcher-designed survey consisting of 15 six-point Likert-type scale questions. This survey was administered both before and after the six-week treatment period. Results indicated that there was no significant difference in perceptions of value or difficulty of composition between students in the open task group and students in the closed task group (Schwartz, 2012).

The results of my pilot study made me realize that I had been asking the wrong questions. I thought I wanted to know about how students perceived the value and difficulty of composition, but I actually wanted to know more about students' engagement with music composition outside of the school day. I wanted to know if the ways music teachers engage students in composition had any effect on whether or not

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students continue composing after they left the band room, and whether or not they felt successful as composers.

<div align="center">Purpose/Research Questions</div>

The purpose of this study was to compare perceptions of success and failure, attributions of success and failure, predictions of future success, and reports of out-of-class engagement in composition among middle school band students composing in open task conditions ($n = 32$) and closed task conditions ($n = 31$). The following research questions guided this study:

1. What is the difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups?

2. What is the difference in attributions of success and failure between students in open task groups and students in closed task groups?

3. What is the difference in predictions of future success between students in open task groups and students in closed task groups?

4. What is the difference in proportion of students who report composing outside of class between students in open task groups and closed task groups?

<div align="center">Need for Study</div>

Researchers have studied composition in school music classes and ensembles. Studies include those in general music settings (Brophy, 2005; Guthmann, 2013; Kaschub, 1999; Kratus, 2001; Mellor, 2007; Smith, 2004; Stauffer, 2002; Strand 2005; Wiggins, 1993), secondary instrumental settings (Allsup, 2003; Randles, 2010; Riley, 2006; Shewan, 2002; Stringham, 2010; Webster, 1979), and college settings (Barrett & Gromko, 2007; Draves, 2008; Kennedy, 1999; Leung, Wan, & Lee, 2009; Lupton &

Bruce, 2010; Priest, 2006). However, there have been relatively few studies about composition in beginning instrumental classes. Much of the composition research focuses on either the process students use to compose (DeLorenzo, 1989; Kascub, 1997; Kratus, 1989, 1991; Stauffer, 2002; Wiggins 2003; Younker, 2000) or the quality or creativity of the final product (Brinkman,1994; Kratus, 1985; Smith, 2004). Research about students' motivation to engage in composition represents a gap in the literature that I seek to fill.

The composition research in the literature includes a wide spectrum of composition task-designs using a variety of composing mediums. Some researchers have presented students with an open task design while others have used closed task design. Some of these studies involve the use of technology as a composition medium (Hickey, 1997; Kennedy, 2002; Stauffer, 2002), while others use keyboard (Brinkman, 1994; Kratus 1985, 1989), general music instruments (DeLorenzo, 1989; Kascub, 1999; McCoy, 1999; Smith, 2004; Wiggins, 1993), voice (Kaschub, 1997b) or band/orchestra instruments (Brinkman, 1994; Burnard, 1995; Riley, 2006; Stringham, 2010). Researchers who directly compared open and closed task design have focused on how task design affects the composing process (Burnard, 1995; Kennedy, 2002) and product (Kaschub, 1999; McCoy, 1999; Smith, 2004). No studies have been identified that compare open and closed composition task designs to students' attributions and out-of-class engagement in composing.

Beyond filling a gap in the research, this study seeks to address a philosophical concern in education about how classroom instruction affects students' behaviors once they leave the classroom door, both at the end of the school day and in their lives. One of the assumptions in education is that what students learn in school will impact their lives

outside of school. While only a small fraction of music students who participate in school music programs will go on to pursue music as a career, participating in school music programs can motivate students to make music engagement an important part of their lives, whether it be through listening, performing, or creating, no matter which career path they follow. In his book, *Teaching Eternity: The Enduring Outcomes of Teaching*, Barone (2001) discusses the ways in which teachers impact their students years after they leave the classroom. This study may help to discover whether or not students' engagement with music composition outside of the classroom is an "enduring outcome" of including music composition in the curriculum.

A great deal of contemporary education research is focused on student achievement, which is important in today's climate of accountability (Harris & Sass, 2011); however, achievement is merely a measure of what students have done in the classroom, not a prediction of what they will do with the knowledge they have acquired. This study seeks to take a step toward investigating a connection between how music teachers engage students in composing activities and whether or not they feel motivated to engage in composing activities in the future.

<center>Theoretical Framework of Motivation</center>

Simply stated, motivation is the why behind an action. Most actions, however, are not based on only one "why." Instead, the motivation behind an individual's actions is based on "a set of interrelated beliefs and emotions" that drive behavior (Martin, 2009; Wentzel, 1999). Early theories of motivation, such as those based on the work of Skinner and Thorndike, were based on a needs-driven behavioral approach (Hallam, 2002). More recent motivation theories, such as Self Efficacy Theory (Bandura, 1986, 1997), Self

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Worth Theory (Covington, 1992, 1998, 2002), Self-Determination Theory (Deci & Ryan, 2000, 2004), and Attribution Theory (Weiner, 1979) emphasize the importance of cognition, or the way in which individuals interpret events in their environment and use that interpretation to determine a course of action (Hallam, 2002). This study will use the framework of Attribution Theory to examine students' motivations related to composing music.

According to Asmus (1994), "attributional development begins with an action, which leads to an outcome, which results in attributions, which produces affect. This then influences the next attribution sequence" (p. 10). In other words, according to Attribution Theory, when individuals perform an action that produces a result of either success or failure, they assign a cause (attribution) to that result. The cause to which they attribute that result will in turn produce an emotion or affect that will influence their future engagement in the same or similar action. Fritz Heider's book, *The Psychology of Interpersonal Relations* (1958), is considered the first outlining of Attribution Theory, which was later modified by Jones (1965), Kelley (1967), and Weiner (1979).

Attribution theorists generally focus on the four attributions of Ability, Effort, Task Difficulty, and Luck (Weiner, 1979). Those four attributions can be classified by the dimensions of locus of control and stability. Individuals who attribute their successes and failures to Ability or Effort have an *internal locus of control*, meaning the cause of the resulting action lies within themselves. Likewise, people who attribute their successes and failures to Luck or Task Difficulty have an *external locus of control,* meaning the cause of the resulting action lies beyond themselves (Gage & Berliner, 1998).

Attributions are also classified by their stability. For example, the attributions of Ability and Task Difficulty are stable and are viewed as being unlikely to change in the future. The stability of the Ability attribution appears to be linked with age. Children older than nine see Ability as being fixed and unchangeable, however, younger children who have not yet moved into the Piagetian stage of operational thinking view Ability as being within their power to change (Austin, Renwick, & McPherson, 2006). The features of the four attributions of Ability, Effort, Luck, and Task Difficulty can be summarized using Werner's 2x2 model of attribution dimensions:

Table 1.1 *A Two-Dimension Model of Attribution Beliefs*

		Locus of Control	
		Internal	External
Stability	Stable	Ability	Task Difficulty
	Unstable	Effort	Luck

Source: Weiner, B. (1972). *Theories of motivation: From mechanism to cognition.* Chicago: Rand McNally.

The dimensions of students' attribution beliefs impact their affective responses to experiences in their lives, as well as their *expectancy*, or predictions of future success or failure on future tasks of a similar nature. Internal attributions (Ability and Effort) lead to strong affective responses, including pride in the case of success and humiliation in the case of failure (Weiner, 1979). For example, a student who does well on a math test and attributes that success to his Ability will take more pride in his work than he would if he attributed his grade to an easy test (an external attribution of Task Difficulty). Likewise, if that same student failed the math test, he might feel a greater sense of humiliation if he attributed that failure to Ability (internal and stable) than if he attributed that failure to a difficult test (external and stable attribution of Task Difficulty).

Stable attributions (Ability and Task Difficulty) lead students to expect similar results in the future while the unstable attribution of Effort may lead to motivation for increased persistence. Teachers are also more likely to praise or punish students for their Effort, which is within students' control, than their Ability, which may be perceived as not in students' control (Weiner, 1979). Teachers' encouragement of Effort is likely due to the problems Ability attributions can cause in an academic context. If a student does well on an essay assignment and attributes that success to her abilities as a writer, she is likely to predict a similar level of success on future essay assignments, as her perceptions of her writing ability will not change. However, if that same student fails an essay assignment and attributes that failure to her poor writing abilities, she might expect to fail at future essay assignments since she believes she is unable to change her writing ability. A failure attribution of *Effort* might cause her to change her writing strategy in the future in the hopes of a better outcome, but a failure attribution of *Ability* may cause her to feel helpless. Students with failure attributions of Ability could engage in failure-avoidance strategies to protect their self worth, such as withholding effort, self-handicapping, and procrastinating (Martin, Marsh, Williamson, & Debus, 2003). This is known as *learned helplessness* which means an individual has concluded that there is nothing he can do that will enable him to succeed (Gage & Berliner, 1998).

Theories of learned helplessness are based on the idea that attribution beliefs are learned and therefore can be changed over time (Martin, 2009). In an education context, students rely on the feedback of significant others, in this case parents and teachers, to reinforce or refine their attributions beliefs (Weiner, 1986). In particular, the feeling of control over their successes and failures is, in part, a learned behavior (Martin, 2009). If,

for example, parents and teachers in an individual's life consistently commend Ability above Effort, then that individual may learn to perceive less control over his education outcomes.

While Ability, Effort, Task Difficulty, and Luck are the attributions most commonly used in studies of achievement motivations, some researchers have included additional attributions such as: classroom environment (Legette, 2003), knowledge of instrument (Chandler, Chiarella, & Auria, 1988), family influence, peer influence, strategy, persistence, and metacognition (Austin & Vispoel, 1998). Attribution studies will be reviewed in Chapter 2.

Definition of Terms

For the purposes of this study, the following definitions will be used.

Motivation: A set of interrelated beliefs and emotions that influence and direct behavior (Martin, 2009; Wentzel, 1999).

Composition: Sounds organized into a form that can be replicated (Smith, 2004).

Composition Task Design: The structure of a composition task presented to students and its associated parameters.

Open Task: A composition activity for which the teacher provides little instruction or parameters other than the request to create a composition (Smith, 2004).

Closed Task: A composition activity for which the teacher requests specific parameters and controls the choices students are able to make (Smith, 2004).

Organization of the Following Chapters

Chapter 2 contains a review of the literature regarding task design in music composition and studies of attribution theory in music education. Chapter 3 includes the

research methodology for gathering and analyzing data in this study. Chapter 4 contains

the findings of this study, and Chapter 5 presents the conclusions and recommendations

based on those findings.

CHAPTER 2

REVIEW OF LITERATURE

The present study examines composition in the middle school band classroom

under two different task conditions using the lens of Attribution Theory. While many

researchers have studied composition in band (Allsup, 2003; Randles, 2010; Riley, 2006;

Shewan, 2002; Stringham, 2010; Webster, 1979), this review of literature will focus only

on studies that involve Attribution theory and task desk. The review of literature is

divided into two categories. In the first section, I summarize the work of researchers who

have used attribution theory to study students' motivation in music education contexts.

The second section summarizes work of researchers who have studied composition in the

music classroom including studies of task design, process, and product.

Attribution Theory in Music

Attribution theory has been used to study overall attribution dispositions of music

students (Asmus 1986; Legette, 2003), the differences in success and failure attributions

(Asmus, 1985; Austin & Vispoel, 1995, 1998), motivation after failure (Austin &

Vispoel, 1992), students' practice habits (Schatt, 2011), teacher feedback (Schmidt,

1995), music achievement (Dick, 2006), and performance expectancy (Chandler,

Chiarella, & Auria, 1998). Each of the following sections includes a review of one or

more studies followed by a discussion.

Attribution Disposition

Attribution disposition is an individual's general attribution tendency rather than

an attribution made as a result of a specific incident (Austin & Vispoel, 1998). Both

Asmus (1986) and Legette (2003) studied the attribution dispositions of music students.

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Asmus

Asmus (1986) looked at the attributions of success and failure among 589 students in grades 4 through 12 enrolled in music classes (instrumental, vocal, or general music) at eight different schools with student populations representing a wide variety of socioeconomic statuses. Students were asked to list five reasons why some students succeed in music and five reasons why some students fail. The questions were open-ended to allow for the maximum possibility of answers and to avoid skewing the results by leading students toward specific responses.

A panel of three judges coded students' responses for the four dimensions of Weiner's attribution model: internal-stable, internal-unstable, external-stable, and external-unstable. Of the 5,092 total attributions, internal-stable attributions were cited 42.92% of the time, followed by internal-unstable (38.65%), external-unstable (9.85%), and external-stable attributions (8.59%). Overall, more than 80% of the attributions subjects made were internal attributions. In terms of gender, females made more internal-stable attributions than males. As grade level increased, the number of internal-stable attributions increased and the number of internal-unstable attributions decreased.

Legette

Legette (2003) investigated the success and failure attributions of 301 third-, fourth-, and fifth-grade music students at two public elementary schools. Of the students at school A, 18% participated in a free and reduced lunch program, and 95% of participants were Caucasian. Of the students in school B, 80% participated in a free and reduced lunch program, and 75% of the participants were African American. During one of their music classes, the students were given the Musical Attribution Orientation Scale,

which included 35 five-point Likert-type questions measuring the attributions of effort, background, classroom environment, and ability.

The results revealed that these elementary school students most frequently attributed successes and failures in music to ability and effort (internal attributions) but females were more likely than males to rate those attributions higher. Also, students at school B rated the attribution of background higher than the students at school A.

Discussion

Both Asmus and Legette asked students to make attributions for both success and failure without asking them to consider a specific incident or condition in which success or failure occurred. While Legette gave students a list of questions related to five attributions he selected (ability, effort, background, classroom environment, and affect), Asmus allowed for open-ended responses and then coded for dimensions of locus of control and stability. Both researchers found that students cited internal attributions for success and failure in music more frequently than external attributions, which would suggest that students view music as an internal ability that can improve with effort.

The findings of these studies suggest that attributions can vary based on demographic factors such as age, gender, and socioeconomic status. Asmus found that as the age of students increased (grades 4-12), the number of internal-stable attributions increased while the number of internal-unstable attributions decreased. This implies that students feel they have less control over their successes and failures as they age. Legette did not find any significant difference between grade levels, but this could be due to the younger age (grades 3-5) of his participants.

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In terms of gender, both researchers found that females were more likely to cite internal-stable attributions than males. Since attribution theorists suggest that internal-stable attributions produce strong affect, it would be interesting to research further whether females take more pride in their musical successes and suffer greater humiliation in their failures than males. While Asmus did not specifically research differences in socioeconomic status, Legette found that students at the lower income school were more likely to stress the importance of background and affect than students at the higher income school. This finding suggests that perhaps socioeconomic status needs to be considered when studying attributions of success and failure.

Differences Between Success and Failure Attributions

While other researchers have examined attributions of both success and failure, Asmus (1985) and Austin and Vispoel (1995, 1998) studied the *differences* between music students' success and failure attributions. Those studies are reviewed below.

Austin & Vispoel (1995)

Austin and Vispoel (1995) studied the attribution responses of junior high students to specific successes or failures in four subject areas. Two-hundred-and-eleven predominantly Caucasian seventh and eighth-grade students at a junior high school in eastern Iowa participated in this study. Students were asked to recall a particular incident of either success or failure in four performance domains: English, math, general music, and physical education. Half of students were asked to recall failures and half of students were asked to recall successes. They were then told to fill out a questionnaire consisting of 24 six-point Likert-type questions measuring the eight attributions of Ability, Effort,

Strategy, Interest, Task Difficulty, Luck, Family Influence, and Teacher Influence. Students were given a 50-minute class period to complete the questionnaire.

The results of the study revealed that of the 32 success attributions, 28 mean ratings were above the midpoint of the Likert-type scale, while only 7 means of the 32 failure attributions were above the midpoint of the scale. Effort, Interest, and Teacher Influence were the most highly rated success attributions, while Interest, Task Difficulty, and Strategy were the most highly rated failure attributions. The researchers also found evidence of the "self serving effect" in which students took personal responsibility for their successes, but attributed their failures to external factors. The results also suggested that students were more likely to attribute success to their friends and family members than they were to blame friends and family for their failures. The researchers called this the "altruism effect." The combination of the self-serving and altruism effects suggest that students were being honest in their attribution assessments, rather than intentionally distorting their beliefs to preserve their egos.

Austin and Vispoel found significant differences in the success and failure attributions in the four different domain areas, suggesting that attributions may be domain specific. For example, in the domain of general music, teacher and effort attributions for failure were rated higher than in other domains, and family attributions for success were rated lower. This could be due to these students' negative perception of their music teacher or a lack of family investment in their music studies. Students attributed success or failure in singing to Ability more than they did for any other musical tasks listed (playing an instrument, taking a test, or reading music).

Austin and Vispoel (1998)

In a subsequent investigation, Austin and Vispoel (1998) studied the relationships among attribution beliefs, self-concept, and achievement in the context of the music classroom. Researchers administered self-concept and attribution questionnaires as well as a music achievement test to 153 seventh-grade music students at a middle school in the midwestern United States. Students were predominantly Caucasian and came from middle to upper-class backgrounds. Music self-concept was measured using a modified version of Schmitt's (1979) Self Esteem of Music Ability scale. Attributions were measured using 52 six-point Likert-type questions. Whereas Weiner's original attribution theory model specifies four attributions of Luck, Effort, Ability and Task Difficulty, Austin and Vispoel's test measured a total of 11 attributions: Ability, Effort, Persistence, Strategy, Metacognition, Interest, Task Difficulty, Luck, Family Influence, Teacher Influence, and Peer Influence. While other attribution studies examined students' attributions to hypothetical situations involving other people (situational) or their own attributions to a specific situation (critical incident), Austin and Vispoel's study examined students' attributions of success and failure in music as overall traits instead of states relating to a single situation (dispositional). The researchers also measured music achievement using Colwell's (1969) Music Achievement Test 2 and 3, which assesses rhythm and pitch discrimination, and aural instrument recognition respectively.

The tests were administered during two 50-minute class periods. Two versions of the attribution test were distributed. The attribution tests were identical except that one measured failure attributions and the other success attributions. For example, a question from the success survey read, "When I do well on a music related activity it is usually

because…I have strong music skills," and the same question on the failure survey read, "When I do poorly on a music related activity it is usually because…I have weak music skills." An equal number of each attribution test was distributed randomly to students. Each student only received one version of the attribution test.

The results of the study revealed that students make different attributions to failure than they do to success. The mean of all eleven success attribution subscales fell above the scale midpoint, with Teacher Influence (5.05), Peer Influence (4.78), and Family Influence (4. 46) rated the highest. The failure attributions, however, did not follow the same pattern. Only three of the eleven failure attribution subscale means fell above the scale mid point: Family Influence (3.92), Ability (3.65), and Luck (3.52).

The results also showed that music attributions were strongly linked to self-concept and achievement. Of all the success and failure attributions, the ability attribution was most strongly correlated with self-concept and achievement (*r= .74*).

Asmus

Asmus (1985) measured the success and failure attributions (effort, ability, luck, and task difficulty) of 118 sixth-grade general music students at three different elementary schools. One school was a middle-class parochial school, one was a lower-class inner city public school, and the third was a public school in an affluent area of the same city. Students were asked to identify five reasons that some students do well in music and five reasons why some students do poorly. Their responses were then coded for the attributions of ability, effort, luck, and task difficulty.

Asmus found that students most commonly cited the internal attributions of ability and effort as reasons for both success and failure in music. There was no significant difference between attributions made for success and attributions made for failure. The middle SES parochial school students most often attributed success and failure in music to ability, the lower SES public school students most often attributed success and failure in music to effort, and the upper SES public school students attributed success and failure in music to a balance of effort and ability. Asmus hypothesizes that students' selection of internal attributions suggests that they perceive music to be both an internal and stable quality.

Discussion

These studies present conflicting information. In both the 1995 study and the 1998 study, Austin and Vispoel found that students rated more success attributions than failure attributions above the midpoint of the scale. Teacher and Peer Influence were highly rated success attributions while Interest, Ability, and Family Influence were highly rated failure attributions. Asmus (1985) found no significant difference between attributions of success and failure; however, he only coded for the four attributions of Ability, Effort, Luck, and Task Difficulty. Also, Asmus found that students are most likely to cite internal attributions as reasons for their success, whereas Austin and Vispoel (1998) found Teacher Influence, an external attribution, to be the highest rated for success. There are several possible reasons for these differences. Austin and Vispoel (1998) included a wider array of attributions including Persistence, Strategy, Family Influence, Peer Influence, and Teacher Influence. Also, Austin and Vispoel asked

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students to recall their own *personal* successes and failures while Asmus asked students to make more general attributions about other people. Austin and Vispoel suggested that students might make different attributions for others than they do for themselves.

Asmus found that students from schools with differing socioeconomic statuses held differing attribution beliefs. Upper SES students commonly cited both Ability and Effort, middle SES students cited Ability, and lower SES students cited Effort as reasons for success and failure in music. Unlike Asmus, Austin and Vispoel did not use SES or student background as a factor in their study, which may account in part for the difference in results between the two studies.

Motivation After Failure

Austin and Vispoel (1992) studied the effect of music students' failure attributions and goal structure on motivation and decision-making. The participants were 107 band students in grades 5 through 8 who attended one of six elementary or junior high schools in an Illinois school district. Participants were asked to respond to a hypothetical scenario involving a fictitious band student named "Bill" who failed to meet his performance goal at contest.

Participants were assigned to one of nine treatment groups in which Bill was described using different combinations of three goal orientations and three failure attributions. Goal orientation was manipulated by designating the criteria to receive an award at the contest: Bill was described as participating in either a competitive structure (the top three students received an award), an individual-standard structure (all students who achieve more than 20 points receive an award), or an individual-progress structure

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(all students who improve their score by 5 points receive an award). The failure attributions were manipulated by describing an evaluation filled out by both Bill and his band teacher. In this evaluation, Bill's failure was attributed to either ability and skill, effort, or practice methods and strategies. After being presented with one of the nine scenarios (three goal orientations x three failure attributions), students were asked to respond to a questionnaire with 35 six-point Likert-type questions about Bill's feelings and future actions, including future effort, future performance, future risk taking, and affect.

The results of the study indicated that students were most likely to anticipate future musical improvement when they attributed failure to effort or strategies than when they attributed failure to ability. No significant goal structure effects were present, but the researchers hypothesize this is because students did not actually experience the failure themselves.

Discussion

Austin and Vispoel's research confirms Weiner's assertions that internal-stable failure attributions (Ability) lead to strong affect and self-protecting strategies (Weiner, 1979). Students who attribute their failures to low ability have diminished motivation to try harder, since they believe that success is outside of their control. The researchers hypothesized that the lack of significant difference in student responses among the three goal structures was due to students' inability to respond to a hypothetical situation in the same way they would respond to events in their own lives. Additional research is needed to determine whether students' predictions of future success are different in hypothetical situations than in real life. The present study contributes to this gap in the literature.

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Practice Habits

Schatt (2011) studied high school band students' attitudes and beliefs about at-home practice habits through the lens of attribution theory. The participants were 218 high school band students from three midwestern school districts. Students were given the Practice Attribution Survey (PAS), which consisted of 21 belief statements related to attribution (ability, effort, or luck) and motivation orientation (intrinsic or extrinsic), which students rated using a 5-point Likert-type scale. This test was modified from McPherson and McCormick's (2000) Motivated Strategies for Learning Questionnaire.

The results of the surveys indicated that students believed that practicing contributes to success in music through the internal attributions of ability and effort. The two statements that were rated most highly by the students were "If I practice hard enough, I can learn to play anything," and "If I want to improve on my instrument, I could practice my instrument more." Females were more likely to attribute success to Effort while males were more likely to attribute success to innate ability.

Discussion

This study confirms previous research findings (Asmus, 1985) that music students tend to make internal attributions (such as Ability and Effort) in music, however, the difference in attributions between the genders differs from previous research. Asmus (1986) found that females were more likely to cite internal-stable attributions (such as Ability) for success in music, but Schatt (2011) found that females were more likely to attribute success to Effort, which is internal and unstable. The difference might be related to the sample group. Asmus used a wider range of participants than Schatt did. Asmus's participants were in grades 4 through 12 and were involved in instrumental, choral, or

general music while Schatt studied only high school band students. A sample that includes a combination of age, music specialty, and gender might produce different results than one that is more homogeneous.

Teacher Feedback

Schmidt (1995) studied choral students' perceptions of teacher feedback and how these perceptions are related to their attribution beliefs, grade level, and gender. The participants were 120 secondary choir students enrolled in a summer camp, representing 55 different school districts in 10 states. Students were given a questionnaire in which they answered questions about their attributions of success and failure in vocal music. This information was gathered in a free response format, with students listing the most important reason some students succeed in vocal music and the most important reason some students fail. Students also listened to an audio tape featuring short episodes of teachers giving students approving and disapproving feedback (such as "No, that pitch is incorrect" and "That pitch was sung in tune"). Students were asked to assess these comments using four 7-point scales with the anchor points good-bad, meaningful-meaningless, sincere-insincere, and effective-ineffective.

The results indicated that the students most commonly cited internal attributions of effort and ability as reasons for success in choir, with no difference in terms of grade or gender. Also, students preferred approval feedback that emphasized personal improvement. Success and failure attributions were not "significant sources of variance in ratings of teacher behavior" (p. 325). Ratings of the approval and disapproval feedback did vary by gender. Girls rated more of the approval statements higher than the boys rated them.

Discussion

This study confirms previous research that music students tend to cite internal attributions of Effort and Ability for their successes and failures in a free-response format (Asmus, 1985). While students preferred feedback that emphasized personal improvement, attributions were not a significant factor in perception of teacher feedback. While it may seem that students who hold strong attribution beliefs of Effort would rate teacher feedback that emphasized personal improvement higher than other students, this was not the case. Schmidt found no significant difference among grade and gender in terms of attribution beliefs, which runs contrary to previous research (Asmus 1986; Schatt, 2011). However, the voluntary nature of the summer camp and the socio-economic status required to attend such an event may have had an impact on those attributions.

Music Achievement

Dick (2006) studied the relationship between achievement in instrumental music and attributions for success or failure in music. The participants were 299 high school students in band at suburban schools in the Minneapolis area. Participants were selected from the highest and lowest 10% of their ensembles in terms of musical achievement as determined by their band directors using criteria such as report card grades, audition scores, and playing tests.

All students were given a researcher-created survey asking them to rate factors that contribute to their success or failure in music. The attributions measured by the survey were ability, luck, task difficulty, effort, and strategy. Students were asked how much each attribution contributes to their success or failure at a musical performance.

Students rated each attribution statement on a nine point scale from 9 = mostly to 1 = not at all. They were also asked to rate their own performance ability and their desire to continue in band in future years.

Both the high achieving group and the low achieving group indicated that effort was the strongest influence on their success or failure and luck had the least influence. However, there was a significant difference in how strongly the students rated those factors. The high achievers rated effort as having a stronger influence, with a mean of 8.05, while the mean for effort among low achievers was 7.35. The only factor that had a mean above the scale midpoint for one group but below the scale midpoint for another group was task difficulty. The low achieving group rated ease of task higher than the high achieving group.

The desire to continue with band in future years was stronger in high achievers than in low achievers. However, a Pearson product-moment correlation analysis revealed that there was not a significant correlation between attributions and intent to continue playing in band.

Discussion

This study revealed that students with different achievement levels may hold similar attribution beliefs, but they rate them at different levels of strength. However, Dick (2006) asked students to rate the attribution in terms of both success and failure, and some studies have demonstrated that students hold different attribution beliefs for success than they do for failure and that those attributions must be measured separately (Austin & Vispoel, 1995, 1998). Since high achievers may experience success more frequently than low achievers, both groups of students might hold different attributions if asked to rate

success and failure statements separately than if they are asked to consider success and failure together. Dick also found that the students' attributions were not correlated to their expressed intent to continue engagement in band, suggesting that perhaps desire to continue stems from achievement and enjoyment rather than the attributions behind that achievement and enjoyment.

Performance Expectancy

Chandler, Chiarella, and Auria (1988) studied band students' degree of satisfaction regarding their current performance level, how frequently they challenged for chair positions, and their expected degree of success on future challenges. The participants were 234 high school band students from three high schools: one urban, one suburban, and one rural. All students were given a survey gathering demographic information, information about why they chose their instruments, how many times they challenged for chairs, their degree of satisfaction with their current performance level, and their expectations for chair challenge outcomes in the next three months. In addition, they rated seven attributions that may or may not influence their musical performance using a 7-point Likert-type scale. The attributions included technical knowledge of instrument, effort, natural musical ability, difficulty level of the instrument, help from the director, help from others, and luck.

Results indicated that students who were satisfied with their current level of performance attributed that success to internal factors such as natural musical ability and effort, and they also challenged more. Students who did not feel successful on their instrument were less likely to challenge and more likely to attribute their feelings of failure to external factors. Students who held negative predictions for future challenge

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results were also more likely to indicate that help from their band director was a factor in their musical performance. The researchers hypothesized that help from the band director is seen as external and uncontrollable and leaves students feeling helpless.

Discussion

Chandler et al. added "technical knowledge of instrument," "help from the director," and "help from others" to the four traditional attributions of Ability, Effort, Luck, and Task Difficulty. Based on the findings, the researchers hypothesized that the external attribution of "help from the band director" may cause students to feel helpless, as though they were not capable of succeeding on their own. Other researchers have found that music teachers can play a prominent role in students' attributions. Austin and Vispoel (1998) found that "Teacher Influence" was one of the most highly rated reasons for success. Perhaps the attribution of Teacher Influence depends on the specific teacher's words and actions and the students' perceptions of both the teacher and the help the teacher offers.

Summary of Attribution Research

Researchers have studied attribution theory in school music contexts. Music students' attributions of both success and failure differ by age (Asmus, 1986), gender (Asmus, 1986; Schatt, 2011), and the manner in which the data were collected (Austin & Vispoel 1992, 1995, 1998). Students also appear to make different attributions for success and failure (Austin & Vispoel, 1998). For example, students tend to rate attributions of success higher than attributions of failure and might attribute their successes to Teacher Influence, but not their failures (Austin & Vispoel, 1998).

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While some research has been done with the four standard attributions of Ability, Effort, Luck, and Task Difficulty (Asmus, 1985), other researchers have given participants more options such as Teacher, Peer, and Family Influences (Austin & Vispoel, 1998), while others ask for students' attributions in a free-response format (Asmus, 1986). The number of attribution choices given to students as well as the method in which those attributions are recorded seems to also play a role in the attributions students cite for their successes and failures. For example, students cited internal and stable attributions when given only a few attribution choices (Asmus, 1986), but cited external attributions such as Teacher Influence when presented with that option (Austin & Vispoel, 1998).

Composition Task Design

The musical engagement under investigation in this study is composition, and more specifically, the impact of open and closed composition tasks on students in a middle school band setting. Researchers have studied composition task design in the music classroom and how task design relates to students' composition process (DeLorenzo, 1989; Kaschub, 1997, 1999; Kennedy, 2002), the quality of the final compositions (Brinkman, 1994; McCoy, 1999; Smith, 2004), students' perceptions of success (Burnard, 1995; Hickey, 1997) and student attitudes (Riley, 2006).

Process

Several researchers have studied how task design affects a student's composition process (DeLorenzo, 1989; Kaschub, 1997, 1999; Kennedy, 2002). The studies involved students of varying ages and music disciplines.

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DeLorenzo

DeLorenzo (1989) studied the problem solving processes of general music students when engaged in creative musical tasks with a focus on the design of the task and the teacher's involvement. The participants were members of four intact sixth-grade classes at four schools attended by students of varying socioeconomic backgrounds in the northeastern United States. Each class engaged in one to three composition-based creative tasks of the music teacher's choosing. Depending on the nature of the task, time needed to create each composition ranged in duration from one to four class sessions. The data gathered consisted of videotapes of the sessions, the students' musical products, field notes, and student demographic information.

Through field note and videotape analysis, the researcher identified students' perception of choice as an influential factor on their creative processes. Students who perceived few choices in the composition task tended to repeat their initial ideas with little revision. However, students who perceived many choices were more likely to use their initial musical ideas as a starting point for future expansion in their final work. Students who perceived few choices tended to make musical decisions based on how well their decisions fit into the structure of the problem. Students who perceived many choices tended to make musical decisions based on the sound. DeLorenzo also noted that students who perceived many choices were more likely to be personally invested and highly involved in their final product while students who perceived few choices were more likely to be distracted and lose interest. DeLorenzo also hypothesized that for a student to truly be engaged in sound exploration, he or she must be evaluating the musical sound

in the context of the piece, rather than merely engaging in the physical gesture of producing sound.

Kaschub

Kaschub (1997) studied the composing processes of sixth-grade general music students and high school choral students in a group composing setting. The participants were six intact sixth-grade general music classes and an 85-member high school choir. Each group of students worked with a professional composer to help them express their musical thoughts in a choral composition. The high school composition was written over the course of 15 work sessions and was a relatively open task. Musical ideas were written and revised on a chalkboard, then transcribed onto overhead transparencies for the next meeting. The general music composition was written over two 80-minute meetings, as well as a dress rehearsal at the end of the year to prepare for a final performance of the work. The harmonic structure of the composition was pre-determined.

The researcher found that revision played a strong part in the group composition process. In a group setting, students were able to share ideas and choose the "best" one, which allowed for exploration of a wide range of musical options. She found that the partnership with the composer was helpful in facilitating the growth of ideas, but differed between the older and younger students. The composer working with the younger students focused on musical ideas rather than notation and was able to communicate clearly. The composer working with the older students focused more on musical terminology and became frustrated when the students' understanding of that terminology differed from his own.

In a later study, Kaschub (1999) investigated the processes children use to compose and their final compositions produced in both open and closed task designs. The participants were 39 sixth-grade students in two general music/choral classes. Each student was asked to compose two prompted pieces (closed task design) and two unprompted pieces (open task design). The prompted task was to create the background music for a poem designated by the teacher, and the unprompted task was to create a piece in any manner the students chose. One composition in each category was completed as an individual and the other in a small group. Students could choose from a variety of classroom instruments for their compositions including metallophones, bells, wood blocks, and maracas. They were not required to use standard notation. After they finished their compositions, students were asked to write a "letter of advice" to a friend who would hypothetically be completing a similar composition assignment. They were also asked to describe their compositions and reflect on which ones they liked the best and least.

Kaschub found that students described their group and unprompted compositions more favorably than their individual and prompted ones. Kaschub hypothesizes this is because students enjoy expressing their own ideas and working with their friends for support. She found that when working as individuals, students tended to use the first idea they thought of, whereas when they worked as a group they chose the idea they liked best from a pool of everyone's ideas. This could explain why group compositions were rated higher than the individual ones.

Kaschub also found that 19 students preferred the unprompted task while 10 expressed their preference for the prompted task. Those who preferred the unprompted

task indicated that they enjoyed being able to come up with their own ideas. Those who preferred the prompted task expressed that it was easier to get started. In further research, Kaschub noted that giving students a choice of which poem to use may be helpful. She hypothesized that students may have expressed their displeasure of the prompted task because they disliked the poem they were given, not because they disliked the task of setting words to music.

Kennedy

Kennedy (2002) studied the compositional processes of high school students in response to open and closed composing tasks. The participants were four high school students, two girls and two boys, in grades 10 through 12 attending two high schools in British Columbia, Canada. All four were involved in their school music programs, but their formal training and musical background varied greatly. They were asked to complete two composition assignments. The first was a structured task in which students were given a poem and told to write a piece for voice and acoustic accompaniment using the text. The second was an unstructured task in which students composed a piece in any manner they chose using computer work stations provided by the school. While students worked, they recorded their processes using audio journals. Other data collected include field notes, student interviews, drafts of the compositions, and recordings of the finished products.

All four students spent more time working on the unstructured computer task than the structured poem task; however, the extra time did not result in more revisions to their work. This extra time consisted of more exploration of available tools and timbres. In both tasks, listening played a pivotal role in the students' composition processes. Many of

their ideas evolved from music they had heard previously. Once they settled on an idea, listening also helped to evolve it. Students listened to what they had already written, improvised new ideas, and then either accepted or rejected them.

The researcher also noted the students' preferences for working at home outside of school hours as individuals rather than members of a group or as students under teacher surveillance. Kennedy recommends that music teachers give their students time outside of class to complete their compositions.

Discussion

These studies demonstrate that composition task design and how students perceive the elements of that design may influence the process students use to compose. Students may spend more time revising their work when they perceive a task to be open with many choices (DeLorenzo, 1989) and when working with a group (Kaschub, 1999). However, it is important to note that students might also spend substantial time at home revising their compositions as individuals, in which case that revision time would not be observed by a teacher or researcher. Students may also spend more time exploring the tools and timbres available to them when given open tasks (Kennedy, 2002).

While more students preferred open composition tasks to closed tasks (Kaschub, 1999), those who did prefer the closed option stated that it was easier to get started. However, when given closed tasks, DeLorenzo (1989) found that students made musical decisions based on which idea best fit the assignment, rather than seeking a musical idea they liked the best. Given this information, perhaps teachers should offer a wide variety of closed-task options for students who struggle to get started in an open-task

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environment. This may give students the structure they need while also allowing them more choices so they can take more ownership over their final work.

Quality of Final Composition

Several researchers have studied how task design affects the quality of students' final composition or product (Brinkman, 1994; McCoy, 1999; Smith, 2004). In these studies, compositions were rated on factors such as originality (Brinkman, 1994), musicality (McCoy, 1999), and imagination (Smith, 2004).

Brinkman

Brinkman (1994) studied the effect of students' creativity style on their final musical compositions in two different task designs (open and closed). Seventy-four high school band students were given the *Kirton Adaption-Innovation Inventory* to find out whether they had an adaptive or innovative creativity style. People with an adaptive style are described as wanting to "do things better" while people with an innovative style are described as wanting to "do things differently." Brinkman selected 32 students to participate in the study: the 16 students with the highest scores for adaptive style and the 16 students with the highest scores for innovative style.

Students were given fifteen minutes to complete an open composition task (compose a melody) and fifteen minutes to complete a closed composition task (compose a melody that uses mostly white keys on the keyboard, is in ¾ time, is energetic, and is approximately 12 to 20 measures in length). Half of the students received the open task assignment first while the other half received the closed task assignment first. All students were given access to a synthesizer, headphones, and staff paper to complete their compositions.

When the compositions were completed, the students recorded them and rated their own products. All 64 recordings were also scored by a panel of judges for originality, craftsmanship, and aesthetic value. There was no significant difference in students' compositions due to order of the tasks, creativity style, or problem type. There was, however, a difference in students' preference of tasks. When asked which type of problem they preferred (open or closed), 26 students preferred the open task while six preferred the closed.

McCoy

McCoy (1999) studied the effect of task design on composition quality and student attitude. The participants were 63 eleven-year-old students in three intact classes at a K-8 school in the Chicago Public School system. These students had not received formal school music instruction for the three years prior to the study. Each class was assigned to a different instructional treatment based on task structure and the presence or absence of guided self-reflection.

In treatment one, "problem solving," students were asked to complete composing worksheets which presented specific composing tasks to accomplish while following clearly defined parameters. Students in this group completed three different compositions: a rhythmic piece using found sounds, a melody using glockenspiels, and a blues song based on text provided by the teacher. In the case of all three tasks, students were given a model of a completed composition before they began. They were not guided through a reflection process during the activities, and they were only asked to assess their work after the compositions were complete.

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In treatment two, "problem solving with guided reflection," students were given the same composing worksheets as the students in treatment one, however, they participated in daily guided reflection through the use of journals. To aid in their reflections, students listened to an audio recording of their work after each session and were asked to assess their progress.

In treatment three, "problem finding with guided reflection," all three of the students' compositions were based on poems rather than worksheets and parameters were not clearly defined. Students could either choose one of the poems the teacher provided, or select their own poem and create a song using the text. They were given access to glockenspiels as well as pre-recorded blues rhythms and chords on the computer. Students in treatment three also kept daily reflection journals like the students in treatment two and listened to audio recordings of their progress.

Students worked on their compositions for fourteen consecutive days. Four different measurements were used to collect data: a pre and posttest survey using Likert-type questions measuring students' understanding of composing, a pre and posttest survey using Likert-type questions measuring students' attitudes about composing, students' self-assessments using Likert-type questions after each session (treatments two and three only), and judges' ratings of the students' final compositions in terms of creativity, rhythm, timbre use, and general impression.

The guided self-reflection component of the composing treatment was not significantly related to judges' ratings of quality. Students in treatment two (closed task design with guided reflection) were least likely to report that they looked forward to composing music in the future as measured by the posttest Likert-type questionnaire

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("How much are you looking forward to creating your own music in the future?"). The researcher hypothesized that this was due to students' frustration with the lack of control over their compositions. While the students in treatment one had the same lack of control, they were not asked to reflect upon their work so their lack of control may have been less evident to them.

Smith

Smith (2004) studied the compositions created under different task conditions and the composing processes of 12 fourth-grade recorder students at an elementary school in New England. Students were asked to complete six different composition tasks: an unstructured piece (students could write in any manner they wished), a piece using a four-note motive, a piece based on a given poem, a piece based on something the student had strong feelings about, a piece using a complete phrase, and a second unstructured piece. Students were video taped while completing each task, and then, through the process of stimulated recall, they watched the videos and talked about what they saw. Videos were coded for time spent on each composing task. The compositions were recorded and rated by four judges for quality of musicality. For the purposes of this study, musicality was defined by elements of composer craftsmanship, originality, imagination, and idiomatic recorder sound.

Judges rated compositions resulting from a low-structure task lower than compositions from high-structured tasks and judges' ratings were not related to time on task. Music literacy and academic skill, as measured by the Iowa Tests of Music Literacy and the Maine Educational Assessment respectively, did not appear to correlate with composition quality. Smith also found that while each child composed differently, their

composing styles fell into three broad categories: aural, visual, and kinesthetic. Students

using the aural style either hummed, sang, or played to compose their piece and only

notated their ideas when the composition was complete. Students using the visual style

wrote first and played second, while students in the kinesthetic group played the recorder

first and then wrote down what they played.

Discussion

All three of these researchers looked at the quality of compositions resulting from

different composition task designs. While Brinkman (1994) and McCoy (1999) found

that task design was not related to judges' ratings of quality, Smith (2004) found that it

was. There are several possible reasons for these differences in findings. In Brinkman's

study, students were only given 15 minutes to complete each task, so it is possible that

both compositions were similarly simplistic rather than similarly complex, creative, and

musical. In Smith's study, the students were able to compose for 35 minutes at a time,

which could have accounted for the greater variety among compositions. Also,

Brinkman's participants were high school students while Smith's were fourth graders and

the difference in prior musical experience could have been a factor.

The discussion of composition quality raises a question of goals. Is the goal of

composition assignments to lead students to create high-quality pieces? Or is it to instill a

desire to compose so that students may continue to grow both as musicians and as

composers? McCoy (1999) found that students who were given closed tasks and asked to

reflect on those tasks were less likely to look forward to composing again than students

who were given open tasks and students who were given closed tasks but not asked to

reflect upon them. These data suggest that teachers must strike a balance between setting

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students up to produce a product that conforms to a given rubric of quality, and creating conditions under which students are motivated and engaged.

Students' Perceptions of Composition Tasks

Researchers have also studied composition task design in terms of students' perception of composition tasks (Burnard, 1995, Hickey, 1997). Both studies involved a small sample group of participants.

Burnard

Burnard (1995) studied the composing experiences of eleven music students at an independent girls school in Australia. The students were 15 to 16 years old, could read and notate music, and were receiving either vocal or instrumental instruction. Over the course of the year, students completed four compositions in response to four different composition tasks. All drafts, sketches, and final compositions were collected for analysis. In addition, students self-reported and reflected on their composing processes by filling out a "Composer's Diary" about their progress during each work session and a "Composer Writes Page," which provided a description of the completed work. In addition, students completed three questionnaires: one in the beginning to gather background experience, and one in middle and one at the end of the study to gather students' feedback on composition task design.

The composition tasks students completed fell into three categories. Task one was a "Prescriptive Task" and involved a high level of constraint. The style, form, length, and instrument were dictated by the assignment. Tasks two and three were "Choice Tasks" in which students could pick from a few genre, style, and form options. Task four was a "Freedom Task" in which all decisions with the exception of instrumentation were left to

the student. Students described progress on the tasks in their Composing Diaries in terms of their execution, reflection, and approach. They analyzed their final compositions in terms of chosen medium, musical ideas, and meaning in their Composer Writes Page.

Students' response to the composition tasks varied based on their perception of the freedom and constraints presented to them and their background experiences in composition. For example, students with more composition experience preferred the more prescriptive tasks while students with less experience preferred tasks with fewer constraints.

Hickey

Hickey (1997) studied the musical processes and final compositions of two eleven-year-old boys composing with computers. The participants, Jon and Billy, were voluntarily enrolled in a class called "Composing with Computers" at their suburban Chicago school. They were selected for participation in this study based on their apparent lack of creative music ability as reported by their music teacher.

During three 2-hour Saturday morning sessions, the students completed composing activities using software called *Music Mania* and a MIDI keyboard. *Music Mania* has three sections: Introduction, Exploration, and Composition. In the Introduction section, students learn how the program works. In the Exploration section, concepts such as melody, rhythm, texture, dynamics and timbre are introduced; students can experiment with these elements on their keyboards and create brief recordings that demonstrate those concepts. In the final Composition section, students can create and record a final musical composition in any manner they wish with no parameters.

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Over three sessions, Hickey recorded Jon and Billy's work. When they played their final compositions, the participants were aware that their work was being recorded, however, the participants were unaware that their initial musical explorations were documented as well.

Hickey found that the participants took different approaches to the composition tasks. Jon spent more time in the Exploration section than the Final Composition section. His explorations (recorded without his knowledge) revealed dexterity on the piano as well as elements of creativity. He appeared to lose interest in the task over time and his final composition was unplanned and haphazard. Billy did not make it through all five sections of the Exploration section, however, he spent 45 minutes revising and practicing his final composition. The researcher found him to be "much more process oriented than product driven" (p. 62).

Three different factors affected the students' creative output: the reward, the task, and the students' perceptions of the reward and task. Supporting literature indicated that intrinsic motivation, open tasks, and low external rewards are the optimal conditions for producing a creative product, and Billy and Jon's perceptions of those conditions were a strong factor in the types of composition they produced. Jon perceived the final recording task as a necessary requirement that someone would listen to eventually, thus he produced his final composition under a high external reward condition. His musical creativity surfaced during the exploration tasks when he did not know his work was being recorded.

Billy spent more "time on task" than Jon and displayed a higher level of intrinsic motivation. He did not appear to perceive the presence of an external reward; thus he

viewed all composing experiences as "safe" and displayed high levels of creativity during both his explorations and final compositions. Both students' musical creativity surpassed the expectations of the researcher, and she suggests that if the participants had been exposed to low external reward open tasks, their creative abilities may have been evident to their teacher.

Discussion

These studies suggest that students may perceive the parameters and choices in a composition task differently, and that their perceptions influence both their composing style and their final compositions. Burnard (1995) found that a student's musical background influences perception of tasks. While a student with a strong musical background might welcome the closed task of writing a theme and variations as a chance to show off his or her skill, a student with less musical background might view that task as restrictive. Instead, he or she might prefer an open task in which any number of musical skills or styles could be used. In Hickey's study (1997), both students were given the same composing task, but Jon viewed it as an assignment to be completed while Billy viewed it as a fun activity.

Different students perceive tasks differently, which suggests that no one single task design will have the same effect on all students in a music class. This suggests that music teachers should be aware of the learning styles and backgrounds of the students in their classes so that they know which tasks designs are likely to speak to which students.

Attitude

Riley (2006) studied the effect of two different instructional approaches on the achievement, performance, and attitude of middle school band students. One approach

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involved music performance and music listening, while the other approach added music composition as well. Thirty-eight seventh- and eighth-grade band students were divided equally between the two treatment groups. Each group received instruction for forty minutes two times a week for 13 weeks. A pretest-posttest design was used to assess achievement, performance, and attitude. Achievement was measured using the Music Achievement Tests 1 and 2 (Colwell, 1968), which tested students' discrimination of pitch, interval, meter, mode, and tonal center. Performance was measured using the Watkins-Farnum Performance Scale in which students sight-read material of increasing difficulty. Attitude was measured using a researcher-developed Instrumental Music Attitude Inventory, which used Likert-type questions to measure students' attitudes toward music and music learning.

Both treatment groups completed music listening activities at the beginning of each class, followed by instruction in music performance. However, one treatment group received performance instruction for the remainder of class, while the other treatment group spent half of the remaining class composing in addition to the instruction in music performance. The composing exercises included 13 templates for students to fill out. All templates included parameters, but some had fewer than others. The early exercises included clefs, key signatures, bar lines, and the first and last note. Later exercises required the students to fill in more information. The final composition project was a group project in which students collaborated to write their final piece.

While scores on the Music Achievement Test increased from pretest to posttest for both treatment groups, there was no significant difference between the two groups. Similarly, ratings in music performance increased for both treatment groups, but there

was no significant difference between the two groups. The students in the composing treatment responded significantly more favorably on the attitude survey than the students in the non-composing group, suggesting that students enjoyed the addition of composition to their music experience.

Discussion

This study speaks to the question: "Why include composition in a music program?" While Riley (2006) found that including composition in the curriculum did not have a significant impact on music achievement, either positively or negatively, it did have a positive effect on students' attitude. The music curriculum can only reach students if they are enrolled in music class. A positive attitude might help keep them there, especially when participation in music is voluntary. Because attitude was the only factor in this study significantly affected by the addition of composition, perhaps attitude should be a factor when considering which task design is best for a composition task, in addition to considerations of students' final composition quality and composing process.

Composing Summary

In summary, task design and the way children perceive tasks impacts students' process, product, and attitude. The nature of the task can alter the time students spend revising (DeLorenzo, 1989; Kaschub, 1999), the time they spend exploring (Kennedy, 2002), and the quality of their final composition (Smith, 2004). Students who prefer closed tasks report that the prescriptive nature of the task made it easier to get started (Kaschub, 1999), while researchers hypothesize that students who prefer open tasks enjoy the freedom afforded to them and the control they have over their choices (Kaschub, 1999; McCoy, 1999). Task preference may also be influenced by students' background in

music (Burnard, 1995), perception of goals and rewards (Hickey, 1997), and creativity style (Brinkman, 1994). While composing may not affect students' musical achievement, it might affect students' attitudes toward music (Riley, 2006).

Task Design and Attribution Theory

Attribution theory suggests that students are likely to hold predictions of future success if they attribute their success to stable attributions (Ability and Task Design), and that they will take greater pride in that success if those attributions are internal (Ability and Effort). If students hold predictions of future success, they will be more likely to be motivated and put forth effort on future tasks. Therefore, if the goal of including music composition in music classrooms is to encourage future composition engagement, then an ideal composition task would enable students to attribute their successes or failures to controllable factors, such as effort, so that their hope for future success and motivation to compose again can be highest.

Organization of Following Chapter

This chapter summarized literature related to both attribution theory and composition task design. In the next chapter, I will detail the methodology used in the present study including the quasi-experimental design, data collection, and data analysis procedures.

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine the differences between middle school band students composing in an open task design and students composing in a closed task design. This chapter explains the procedures that were used in this study to address the following four research questions:

1. What is the difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups?

2. What is the difference in attributions of success and failure between students in open task groups and students in closed task groups?

3. What is the difference in predictions of future success between students in open task groups and students in closed task groups?

4. What is the difference in proportion of students who report composing outside of class between students in open task groups and closed task groups?

Design

The design for this study is quasi-experimental, posttest only. Intact classes, rather than individuals, were randomly assigned to two treatment groups, requiring the quasi-experimental design (Campbell & Stanley, 1963). The posttest only design was chosen so as not to skew the data by desensitizing the students to the experimental variable before the treatment (Huck, 2012). While a pretest would provide baseline data of students' music attributions before the composition treatment, it would also make students aware of the fact that their success and failure attributions were being measured. This might prompt them to behave differently due to the Hawthorne Effect.

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The participants in this study were 63 seventh-grade students, ages 11-13, enrolled in two intact band classes with the same band director at a public middle school in a suburban area in the southwestern United States. Permission to conduct the study was obtained from the school district, and the study was declared exempt by the ASU Office of Research Integrity and Assurance (Appendix A). The student population at this school at the time of this study was 55% White, 19% Hispanic, 12% Black, and 11% Asian. Twenty four percent of students qualified for a reduced lunch program (National Center for Education Statistics, 2014). This age group was chosen because of their minimal experience in instrumental music (as compared to that of high school students). Instrumental music in this school district begins in sixth grade and general music begins in kindergarten, so depending on students' prior schooling and out-of-school engagement in music, many had one year of prior instrumental experience and 0-6 years of general music experience.

These students received band instruction three times a week for a one-hour class period, and data collection occurred for 30 minutes once a week for eight weeks during their regularly scheduled band time. Each intact class was randomly assigned to one of two treatment groups. As shown in Table 3.1, 32 students were in Treatment A (open tasks) and 31 students in Treatment B (closed tasks). Treatments are described later in this chapter.

Table 3.1

Participants in Treatment A and Treatment B

	Treatment A *n = 32*	Treatment B *n = 31*
Males	18	14
Females	14	17
Outside of school instrumental experience	11	12
Previous composition experience	8	12

Prior to the study, students were asked to fill out a background questionnaire gathering demographic data such as gender, age, music background, and previous composing experience (see Appendix B). Most students had played their current band instrument for one year, but some reported experience in instrumental music outside of the school music classroom. These activities included piano lessons, guitar lessons, and private lessons on their band instruments. Eleven students in Treatment A and twelve students in Treatment B self-reported being involved in one or more of these non-classroom musical activities at some point in their childhood. Also, while the band teacher had not used composition as a part of her curriculum with these students, some students reported having made up their own music before. Eight students in Treatment A and twelve students in Treatment B reporting having made up their own music at some point. Students were asked if they had "made up" their own music instead of "written" so as to not limit students who might not have known how to write their ideas in traditional notation.

The independent variable in this study was the treatment, which consisted of different types of composition tasks. There were two treatment groups in this study:

Treatment A (open tasks) and Treatment B (closed tasks), which are described in the following section. The dependent variables were scores derived from four instruments administered in this study. These included coded results of Composing Diaries, the tabulated scores from a Music Attribution Survey and Future Success Survey, as well as the coded responses to an Out-of-Class Engagement Letter. These instruments are described below after descriptions of the treatment.

<div align="center">Treatment</div>

The treatments in this study were the types of composing activities presented to students during their regularly scheduled class time. Treatment A included open composition tasks, and Treatment B included a series of closed composition tasks with researcher-specified parameters. For the purposes of this study, open task is defined as one in which students have maximum choice over their musical decisions, while closed task is defined as one in which the teacher (or in this case, the researcher) creates parameters that dictate musical decisions for the student. These definitions were adapted from similar previous studies (e.g., Smith, 2004). Both treatment groups received 30 minutes of music composition time as part of their regularly scheduled band time. This composition instruction occurred once a week for eight weeks on a day of the music teacher's choosing.

Both the researcher and music teacher were present for all eight treatment sessions. My role as researcher was minimal. At the beginning of the first treatment session, I read the appropriate researcher script to each class (explained in the following sections). Then, at the beginning of each subsequent treatment session, the music teacher introduced me and I told students to resume work on their compositions. While students

worked, the music teacher and I walked around the room and answered questions as students needed. I also kept a researcher journal to record observations as students worked. At the end of each session, I collected the students' Composing Diaries. At the end of the final treatment session, I passed out and collected the remaining data collection instruments.

Treatment A

The purpose of Treatment A was to provide an open environment in which students had few parameters and maximum freedom over their composition decisions. During the composition instruction, students in Treatment A were told to compose a piece in any manner they wished. They could choose to work as individuals or with a group of other students. The instrumentation of the composition, as well as its length, meter, form, and other musical elements were subject to the creative decisions of the students. Students were able to choose any combination of instruments that were used in their regular band classes. The band teacher and researcher provided students with manuscript paper and pencils, however, standard notation was not a requirement of the compositions for either treatment group. Instead, students were told to come up with a way to remember what they did each week, using either standard notation, writing a paragraph, jotting down note names, or any other method they chose.

The band teacher, as well as the researcher, provided no help to students unless it was specifically requested. For example, if a student asked, "How do I draw a treble clef at the beginning of my piece?" the teacher or researcher demonstrated. However, if a student said, "I don't understand how to start," the teacher or researcher asked questions

instead of outlining a specific process to complete. Questions included, "How do you want your music to sound?" and "What have you done so far?"

At the end of each session, if students finished a composition, they were asked to turn it in so it could be photocopied. The original was then immediately returned to the student, and the copy was labeled with the treatment group and date. If students had not finished a piece, they were asked to put it in a safe place so it wasn't lost. This process ensured that students were able to work on their unfinished compositions at home if they so chose, but neither the teacher nor the researcher specifically addressed that option. For a script of student instructions for Treatment A, please refer to Appendix C.

Treatment B

The purpose of Treatment B was to provide closed composition activities in which students were asked to compose pieces with specific parameters. While the students in Treatment A had complete control over their musical decisions, the students in Treatment B had many decisions made for them. Each week, they were given a composition task that contained prescriptive parameters in regards to key, form, length, or tempo. Students could take multiple weeks to finish each composing task, however, they were required to spend at least one week on each task. If a student finished a composition before the end of a session, they were asked to create another composition using the same instructions, and received a new task the following week. A total of eight closed composing tasks were available and all students received tasks in the same order. The following composition tasks were given to the students in Treatment B:

1. Compose a piece in the key of B-flat concert, that starts and ends on B-flat

2. Compose a piece that is slow and solemn and uses long notes.

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3. Given the first four measures of a phrase, compose an ending to the piece.

4. Given three poems selected by the researcher, write a piece that depicts one of those poems.

5. Compose a piece that sounds scary.

6. Compose a piece using only 3 notes.

7. Compose a piece that uses the same notes as Mary Had a Little Lamb, but different rhythms (variation).

8. Compose a piece that is fast and energetic and uses short notes.

These composition tasks were gathered and modified from previous studies that have featured closed (structured) tasks for middle school students (Kaschub, 1999; McCoy, 1999; Smith, 2004) as well as composing activities featured in popular band methods (e.g., Pearson, 1993).

Like the students in Treatment A, the students in Treatment B were also given access to manuscript paper and pencils, but were not required to use them. Instead, like the students in Treatment A, they were asked to come up with a way to remember what they did from week to week. As with Treatment A, students in Treatment B only turned in their compositions when they decided they were completed. Students worked on a composing task for as many weeks as they wished, and were asked to keep their unfinished composition in a safe place at the end of each session. The complete tasks and script for Treatment B can be found in Appendix D.

Recording Student Compositions

Students in both treatments were allowed to work either as individuals or in small groups of their choosing. During the first session, students were told that they would not

be graded on their work; instead, at the end of the treatment, they would each pick their favorite composition to record onto a CD, and each student in the class would receive a copy. Recording one composition was a requirement of both treatment groups, but students could choose whether or not recordings would be included on the CD. Compositions were recorded using a MacBook Air laptop and a Zoom Audio H4 recorder. The purpose of these recordings was to give students a goal to work toward with the compositions that was not a grade or rating. Previous research has revealed that the goal of recording is one that is enjoyable and motivating to students (Schwartz, 2012).

Measurement Instruments

Four instruments were used to collect data in this study: Composing Diaries, two versions of the Music Attribution Survey (one worded for success, the other worded for failure), the Future Success Survey, and the Out-of-Class Engagement Letter. Three of the four instruments were used in previous studies: Composing Diaries (Burnard, 1995; Schwartz, 2012), Music Attribution Survey (Austin & Vispoel, 1998) and the Out-of-Class Engagement Letter (Kaschub, 1999). The fourth instrument, the Future Success Survey, is a researcher-designed instrument created specifically for this study. To preserve anonymity of the students, they were asked to not put their names on any of the instruments. Instead, each student was assigned a number based on his or her spot in the teacher's seating chart, and that number was notated as data were collected. These instruments are described below.

Composing Diaries

Students filled out a brief "Composing Diary" at the end of each session. In the Diary, students reported what they did, how they felt about their work, and anything else

they wished to share in a free response format. This diary consisted of a new, single sheet of paper filled out each week and collected at the end of the session (Appendix E). Composing Diaries have been used in previous studies as a way to stimulate reflective thinking among student composers (Burnard, 1995; Schwartz, 2012). In her study of composition task design in a high school music classroom, Burnard (1995) used Composing Diaries to gather information about students' composing process as well as their reflection on their completed work. In my study of young band composers (Schwartz, 2012), I used Composing Diaries as a means for students to report their weekly composing progress and document their successes and struggles. In both of these qualitative studies, Composing Diaries were an effective means of gathering reflections from students. In the present quantitative study, student responses were coded for feelings of success and failure as well as evidence of out-of-class engagement as defined in the data analysis section.

This method of data collection was chosen instead of asking students to rate their daily feelings of success and failure on a Likert-type scale. Making students aware of the success and failure component of this study early on could produce a Hawthorne Effect in which students report feeling successful because they want to give the "right" answer for the study. Also, asking students to reflect on their success and failure could be seen as a type of evaluation. The point of the Composing Diaries was to allow students to focus on their compositions and their experience without the added pressure of working toward what could be perceived as a grade. Coding and analysis procedures will be discusses in the data analysis section.

Music Attribution Survey

At the end of the treatment period, students were given two attribution surveys in the same packet of information, one worded for success and one worded for failure, and they self-selected which one to fill out. Attribution researchers have used three different broad methodological approaches: situational, dispositional, and critical incident (Austin & Vispoel, 1995). In a situational approach, students are asked to state their attribution beliefs when given a hypothetical situation. Previous research has revealed that students often make different attributions for themselves than they do for others (Austin & Vispoel, 1992, 1995). In the dispositional approach, students are asked to make general attributions for an achievement domain, such as reasons they succeed or fail in music as a whole. The results of this approach can be limited in that students are not asked to recall a specific, real-life event (Austin & Vispoel, 1995). This study employed a critical incident approach in which students were asked to make attributions for a specific experience they encountered recently. In this case, the "critical incident" students were asked to recall was their experience composing over the course of the eight-week treatment period.

For the purposes of this study, I adapted the Music Attribution Survey used by Austin and Vispoel in their 1998 study of the attributions of seventh-grade music students. Their survey consisted of a series of 52 six-point Likert-type questions with 11 subscales measuring the attributions of ability, effort, strategy, interest, task difficulty, luck, family influence, teacher influence, metacognition, peer influence, and persistence. According to Austin and Vispoel (1998), "Alpha reliability estimates for the 22

attribution subscale scores (11 attributions by 2 outcomes) ranged from .58 to .94

(mdn=.83)" (p. 34). See Table 3.2.

Table 3.2

Austin and Vispoel's Reliability Data: Attribution scale means, standard deviation, sample sizes and reliabilities

	M	SD	N	α
Success Attribution Scale				
Ability	4.26	1.14	76	.89
Effort	4.03	.98	76	.80
Persistence	4.07	.80	76	.63
Strategy	3.87	.82	76	.71
Metacognition	4.25	.79	76	.73
Interest	3.66	.99	76	.86
Luck	4.41	1.00	76	.86
Task Difficulty	3.64	.85	76	.78
Family Influence	4.46	1.31	76	.94
Teacher Influence	5.05	.69	76	.75
Peer Influence	4.78	.77	76	.58
Failure Attribution Scale				
Ability	3.65	1.31	77	.91
Effort	2.30	.85	77	.84
Persistence	3.17	1.07	77	.83
Strategy	3.05	.98	77	.86
Metacognition	2.88	.96	77	.86
Interest	2.70	1.12	77	.93
Luck	3.52	.87	77	.71
Task Difficulty	2.96	.84	77	.74
Family Influence	3.92	1.42	77	.94
Teacher Influence	2.43	.98	77	.83
Peer Influence	2.91	.95	77	.65

Source: Austin, J. R. and Vispoel, W. P. (1998). How American adolescents interpret success and failure in classroom music: Relationships among attributional beliefs, self-concept, and achievement. *Psychology of Music, 26*, 26-45.

To adapt their survey from a dispositional approach to a critical incident

approach, I changed the wording of the survey items to reflect the students' composing

experiences during the treatment period, rather than their musical experiences as a whole.

For example, Austin and Vispoel's survey reads: "When I do well on a music-related

activity in school it is usually because…I try hard." The same question on the adapted survey reads: "I did well on these composing activities because…I tried hard." A Chronbach's Alpha test for the adapted version of the survey revealed alpha reliability values similar to those found for Austin and Vispoel's original survey, therefore the adapted version is also considered reliable. Results of the reliability test are reported in Chapter 4.

The adapted survey presents students with 52 statements about 11 possible attributions, and asks students to indicate to what extent they agree or disagree that they attribute their success or failure to that factor. For example, "I did well on these composition activities because I have strong music skills" is a success statement that addresses the Ability attribution. "I did not succeed on these composition activities because my classmates didn't encourage me" is a failure statement that addresses the Peer Influence attribution. Students responded using a six-point Likert-type scale. A six-point scale was chosen for two reasons. First, this was the type of scale used in Austin and Vispoel's original study. Secondly, when asked if a factor influenced a student's success, it either did or it did not. A neutral response would be inappropriate for the question asked and could skew the data.

In addition to the wording of the items, I adapted the method in which success and failure was determined. In other words, I devised a means by which students self-selected whether they completed the success version or failure version without being aware that they had made that selection. Previous studies have shown that students have different attribution beliefs for success and failure in music, and those beliefs should be measured separately (Austin & Vispoel, 1992, 1995, 1998). In Austin and Vispoel's (1998) study,

some surveys were worded to address successful experiences and others were worded to address unsuccessful experiences. The researchers produced an equal number of success and failure surveys and randomly distributed them to students. In other words, the students were asked about either success or failure in music at random, not because they succeeded or failed at a given musical task.

In the present study, the students answered questions about success or failure not at random, but instead based on their self-report of whether they succeeded or failed at the composition tasks they had just experienced. In other words, rather than creating an arbitrary metric by which students could be sorted into those who succeeded and those who failed, students decided for themselves if they had succeeded or failed, as follows. Each student was given a packet with a cover sheet and two surveys stapled together, one worded for success (printed on blue pages) and one worded for failure (printed on green pages). In order for students to self-select the appropriate success or failure survey, the cover page contained one question asking students to rate how successful or unsuccessful they were in their composition experiences on a six- point Likert-type scale with 1 being "extremely unsuccessful" and 6 being "extremely successful." If their responses fell below the midpoint of the scale, they were instructed to fill out the set of questions printed on green paper, which were specifically worded to address failure. If their responses fell above the midpoint of the scale, they were asked to fill out the set of questions printed on blue paper specifically worded for success. The words "success questions" and "failure questions" did not appear on the blue or green papers. For the complete Music Attribution Survey used in this study, see Appendix F. Analysis procedures for the results of this survey will be discussed in the data analysis section.

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The method of asking students to self-select success or failure and then proceed to the success questions or the failure questions was piloted with 21 seventh-grade band students at a junior high school in the southwestern United States. Students were asked to reflect on their recent band concert and indicate the degree of success they felt afterwards. Based on that response, they were asked to fill out either a set of success questions or a set of failure questions printed on blue or green paper, respectively. All students filled out the set of questions that correctly corresponded to their answer to the first question regarding their perceptions of their own success at the concert. No confusion about which set of questions to answer seemed evident. In addition, students did not seem to be looking around the class to see which set of questions their neighbors were answering and no students attempted to answer both sets of questions (success and failure). Based on this pilot, the method of students' self-selection of success or failure was adapted for this study.

Future Success Survey

At the end of the treatment period, in addition to the Music Attribution Survey, students in both treatment groups were given a Future Success Survey. This researcher-designed survey consisted of three six-point Likert-type questions.

1. Pretend that your band teacher gives you another opportunity to compose next quarter. How successful do you think you are likely to be at composing?

2. How motivated would you be to compose music?

3. If you had the opportunity to sign up for an afterschool club called "Composing in Band" how likely would you be to sign up?

Analysis procedures will be explained in the data analysis section. For the complete

questionnaire, see Appendix G.

Out of Class Engagement Letter

In addition to the survey instruments, students in both treatment groups were

given a brief, open-ended assignment upon completion of the treatment period. They

were asked to write a letter to a friend describing their experience with composing. They

were asked to describe what they did during the treatment, describe their compositions,

describe any work they needed to do at home, and describe any compositions they had

created since finishing the treatment (Appendix H). This method of data collection was

adapted from Kaschub's (1999) study of sixth-grade composers. Other researchers who

have used this method of data collection have observed that students write "more detailed

and personalized descriptions of their experiences" when given the opportunity to record

data in this narrative way rather than with a Likert-type scale (Cose-Giallella, 2010, p.

44). Students' responses were coded for evidence of out-of-class engagement in

composition. Coding and analysis procedures will be described in the data analysis

section.

<div align="center">Null Hypotheses</div>

The following chart (Table 3.3) shows the relationship of research questions,

hypotheses, and research instrument. Research questions 1, 2 and 4 are stated in A and B

forms to reflect how instruments were used in the study. The data analysis section will

explain the coding and analysis procedures used to address the research questions.

Table 3.3

Research Questions and Corresponding Measurement Instrument

Research Question	Null Hypothesis	Instrument
1A. What is the difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by Composing Diaries?	There is no difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by Composing Diaries.	Composing Diaries.
1B. What is the difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by the first question of the Music Attribution Survey?	There is no difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by the first question of the Music Attribution Survey.	The first question of the Music Attribution Survey (The Likert-type scale in which students initially self-select whether they felt successful or unsuccessful over the course of the 8-week treatment).
2A. What is the difference in attributions of success between students who self-report feeling successful in open task groups and students who self-reported feeling successful in closed task groups?	There is no difference in attributions of success between students who self-report feeling successful in open task groups and students who self-reported feeling successful in closed task groups.	The 11 subscales of the Music Attribution Survey worded for success.
2B. What is the difference in attributions of failure between students who self-report feeling unsuccessful in open task groups and students who self-reported feeling unsuccessful in closed task groups?	There is no difference in attributions of failure between students who self-report feeling unsuccessful in open task groups and students who self-reported feeling unsuccessful in closed task groups.	The 11 subscales of the Music Attribution Survey worded for failure.
3. What is the difference in predictions of future success between students in open task groups and students in closed task groups?	There is no difference in predictions of future success between students in open task groups and students in closed task groups.	The Future Success Survey.
4A. What is the difference in proportion of students who report composing outside of class in open task groups and closed task groups as measured by Composing Diaries?	There is no difference in proportion of students who report composing outside of class in open task groups and closed task groups.	Composing Diaries.
4B. What is the difference in the proportion of students who report composing outside-of-class between students in open task groups and students in closed task groups as measured by the Out of Class Engagement Letter?	There is no difference in the proportion of students who report composing outside-of-class between students in open task groups and students in closed task groups as measured by the Out of Class Engagement Letter.	The Out of Class Engagement Letter.

Data Analysis

The independent variable in this study is the composing treatment. There were two levels of this independent variable: Treatment A (open task) and Treatment B (closed tasks). The dependent variables are the results of the four instruments: Composing Diaries, Music Attribution Survey, Future Success Survey, and the Out-of-Class Engagement Letter. This section provides an overview of how the results of these research instruments were coded, scored, and analyzed to address the four research questions. Further details about data obtained during the study, the scoring procedure, the statistical analyses used, and reliability and validity information when appropriate, are provided in Chapter 4. A level of significance of .05 was used in this study.

Research Question 1A: What is the difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by Composing Diaries?

Null Hypothesis: There is no difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by Composing Diaries.

Instrument: Composing Diaries.

Data Analysis

At the end of each session, the Composing Diaries were collected and student responses were coded as either successful, neutral, or failure. Responses such as "I had fun!" or "I love my piece" were coded as successful. Responses such as "I didn't really know what to do today" or "My piece sucks" were coded as failure. Responses such as, "I decided to work with my friend today" or "Today we recorded in the studio" were coded

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as neutral. Success responses received three points, neutral responses received two points, and failure statements received one point. The coded responses for each of the three questions were added together to obtain a "success score" between three and nine for each student each week. To protect against researcher bias, two additional judges coded 30% of the Composing Diaries. Interjudge reliability is reported in Chapter 4.

After each session, the student success scores were summed for each treatment group, and a mean success score for each treatment was calculated. This produced eight pairs of means by the end of the eight sessions. The multiple observations of the same people over time are related, not independent. Therefore, a repeated measures ANOVA was used to analyze this data. Results are reported in Chapter 4.

Research Question 1B: What is the difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by the first question of the Music Attribution Survey?

Null Hypothesis: There is no difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by the first question of the Music Attribution Survey.

Instrument: The first question of the Music Attribution Survey ("On a scale of 1-6, how successful did you feel during the past 8 weeks of composing?")

Analysis

The number of students who indicated either success or failure as a composer on the initial question of the Music Attribution Survey was summed for both Treatment A and Treatment B. The degree to which they felt successful was compared using a Wilcoxon Mann Whitney test. These results are reported in Chapter 4.

Research Questions 2A and 2B

Students completed the Music Attribution Survey at the end of the study. Completed Music Attribution Surveys were divided into two groups: those from students who self-selected to fill out the survey worded for success, and those from students who self-selected to fill out the surveys worded for failure. Question 2A refers to the success surveys, and Question 2B refers to the failure surveys.

Research Question 2A: What is the difference in attributions of success between students who self-reported feeling successful in open task groups and students who self-reported feeling successful in closed task groups?

Null Hypothesis: There is no difference in attributions of success between students who self-reported feeling successful in open task groups and students who self-reported feeling successful in closed task groups.

Instrument: The Music Attribution Survey worded for success

Analysis

Students' responses were converted to numbers using the following scale:

Strongly Disagree = 1

Disagree = 2

Sort of Disagree = 3

Sort of Agree = 4

Agree = 5

Strongly Agree = 6

Then, students' responses were summed and a mean score was calculated for the successful students in both treatment groups for each of the 11 subscales of the attribution test.

Austin and Vispoel (1998) used a 2x11 ANOVA to analyze the data collected with this instrument. Austin and Vispoel randomly selected an equal number of students to fill out responses for success and failure related to attribution dispositions in music. The present study differs from Austin and Vispoel's in several ways. First, Austin and Vispoel did not have treatment groups because they were looking at overall attribution disposition related to music in general. This study includes two treatment groups comprised of intact classes, which were randomly assigned to either Treatment A or Treatment B. Second, Austin and Vispoel randomly assigned students to success or failure groups. In this study, students self-selected whether they filled out the success version of the instrument or the failure version of the instrument based on their experiences during the treatment period. Austin and Vispoel analyzed their original survey with a 2x11 ANOVA because they analyzed two independent variables, outcome (success or failure) and attribution (11 subscales). The current study only compares the successful students to successful students, and unsuccessful students to unsuccessful students. Therefore, the means of the questions in each subscale were summed and compared using 11 separate *t*-tests. Any findings of significance were compared to a Bonferroni correction to control for a Type 1 familywise error caused by multiple tests.

Research Question 2B: What is the difference in attributions of failure between students who self-report feeling unsuccessful in open task groups and students who self-report feeling unsuccessful in closed task groups?

Null Hypothesis: There is no difference in attributions of failure between students who self-report feeling unsuccessful in open task groups and students who self-report feeling unsuccessful in closed task groups.

Instrument: The 11 subscales of the Music Attribution Survey worded for failure

Analysis

The same procedure was used for research question 2B that was used for 2A. Students' responses were summed and a mean score was calculated for the unsuccessful students in both treatment groups for each of the 11 subscales of the attribution survey. However, the small number of students identifying as unsuccessful (four in Treatment A and five in Treatment B) precluded the use of parametric statistics. Therefore, while the successful students were compared using a *t*-test, the unsuccessful students were compared using a Wilcoxon Mann Whitney test. The results are reported in Chapter 4.

Research Question 3: What is the difference in predictions of future success between students in open task groups and students in closed task groups?

Null Hypothesis: There is no difference in predictions of future success between students in open task groups and students in closed task groups.

Instrument: Future Success Survey

Analysis

This survey was administered at the end of the treatment period and consisted of three six-point Likert-type questions. Responses to the three questions of the Future Success Survey were assigned a number, 1-6

Extremely Unsuccessful- 1

Very Unsuccessful -2

Unsuccessful- 3

Successful- 4

Very Successful- 5

Extremely Successful- 6

The means, medians, and standard deviations for each treatment group were calculated for each question, and compared using a Wilcoxon Mann Whitney test. Without a true neutral in the six-point Likert-type scale, and because the intervals between each point may not be equal, the non-parametric statistic is appropriate.

Research Question 4A: What is the difference in proportion of students who report composing outside of class in open task groups and closed task groups as measured by Composing Diaries?

Null Hypothesis: There is no difference in proportion of students who report composing outside of class in open task groups and closed task groups.

Instrument: Composing Diaries

Analysis

Students' Composing Diaries were also coded for evidence of any out-of-school engagement by looking for phrases such as "I finished this at home" or "I composed another piece like this at my friend's house." Again, this method of data collection was chosen instead of directly asking students if they have composed outside of classroom to control for the Hawthorne Effect. If students knew that at-home engagement was part of the study, they might have pretended that they composed at home in order to please their teacher or because they thought it was part of the composition assignment. If during the course of the eight-week treatment period students mentioned to their teacher that they

composed something at home, the teacher told them that they should put that information in their next Composing Diary.

Composing Diaries displaying evidence of at-home engagement were labeled "Yes" while Composing Diaries without evidence of at-home engagement were labeled "No." I planned to compare proportions of "Yes" and "No" using a repeated measures binomial test, but the small number of responses made statistical analysis impractical. Descriptive data are provided in Chapter 4.

Research Question 4B What is the difference in proportion of students who report composing outside-of-class between students in open task groups and students in closed task groups as measured by the Out-of-Class Engagement Letter?

Null Hypothesis: There is no difference in proportion of students who report composing outside-of-class between students in open task groups and students in closed task groups as measured by the Out-of-Class Engagement Letter.

Instrument: Out-of-Class Engagement Letter

Analysis

Students' responses were coded for evidence of out-of-class engagement in composition. Letters that referenced composing outside of the classroom were labeled "Yes" and letters that did not reference composing outside of the classroom were labeled "No." Yes and No responses were summed for each treatment group. I planned to compare the proportion of students who reported out-of-class engagement in groups A and B using a test of difference of proportion, but the small number of responses made further analysis impractical. Descriptive statistics are provided in Chapter 4.

Reliability and Validity of Instruments

Three of the four instruments used in this study have been used in other studies: the Music Attribution Survey (Austin & Vispoel, 1998), Composing Diaries (Burnard, 1995; Schwartz, 2012), and the Out-of-Class Engagement letter (Kaschub, 1999). The fourth instrument, The Future Success Survey, was a researcher-designed survey designed specifically for this study. Instruments containing subscales (the Music Attribution Survey) have been investigated for reliability and validity as described above. According to Campbell and Stanley (1963), instrumentation validity comes into question when the calibration of an instrument changes or when different scorers or observers are used. As described above, I was the only coder of data in this study and for measures in which coding was used, my judgments were assessed by external evaluators as described in Chapter 4. Reliability estimates for the adapted survey (reported in Chapter 4) are similar to the reliability estimates reported by Austin and Vispoel (1998), indicating that the slight change in wording did not affect the reliability of the instrument.

Internal and External Validity Threats

Although this is a quasi-experimental design, internal and external validity is still of interest. According to Campbell and Stanley (1963), "*internal validity* is the basic minimum without which any experiment is interpretable: Did in fact the experiment treatments make a difference in this specific experimental instance?" (p. 5, italics theirs). In this quasi-experimental design, all subjects were equally affected by maturation since all participated for the same length of time. All students in both classes participated, therefore selection bias was not a concern. Given that this is a posttest only study, the effects of testing, particularly for the Music Attribution Survey, are not a concern.

According to Campbell and Stanley (1963), "*external validity* asks the question of *generalizability:* To what populations, settings, treatment variables, and measurement variables can this effect be generalized?" (p. 5, italics theirs). Given that this is a quasi-experimental design, generalizability is limited and reported as such in Chapter 5 of this document.

Organization of the Following Chapters

Chapter 4 presents the data collected during the eight-week treatment period organized by research question, as well as a summary of the analysis procedures and results. Chapter 5 presents a discussion of those results as well as suggestions for future research and implications for practicing teachers.

CHAPTER 4

RESULTS

In this chapter, results of analyses of data collected during this study are reported.

Data collecting instruments included: Composing Diaries, The Music Attribution Survey,

The Future Success Survey, and the Out-of-Class Engagement Letter. These instruments

were used to collect data for the four research questions. The Composing Diaries were

administered weekly over the course of the eight-week treatment period. All of the other

measures were administered as posttests. The alpha level used for all tests in the study

was .05.

Perceptions of Success and Failure

Research question 1A and 1B addressed students' perceptions of both success and

failure during their composition experiences over the eight-week treatment. Students'

perceptions of success and failure were measured using the weekly Composing Diaries

that each student filled out at the end of each session, as well as the responses to the first

question of the Music Attribution Survey administered as a posttest.

Research Question 1A

What is the difference in perceptions of success and failure as a composer

between students in open task groups and students in closed task groups as measured by

Composing Diaries?

At the end of each weekly treatment session, each student in Treatment A (open

task) and Treatment B (closed tasks) filled out a brief Composing Diary. Filling out the

diary took about two or three minutes. There were 32 students in Treatment A, 31

students in Treatment B. Absence was the only reason students didn't fill out Composing

Diaries, and as shown in Table 4.1, no more than two students were absent during each of the eight treatment sessions.

Table 4.1

Number of Students Who Filled Out Composing Diaries

Week	Treatment A $n = 32$	Treatment B $n = 31$
1	32	31
2	32	31
3	31	30
4	32	30
5	31	31
6	30	30
7	32	31
8	31	30

Each Composing Diary included three questions: 1. What did you do today? 2. How did you feel about your work? 3. Is there anything else you'd like me to know? Diaries were collected at the end of each treatment session, and each response was coded by the researcher as either a success statement, failure statement, or neutral statement. Success statements included responses such as "I loved writing my piece today!" or "I feel extremely proud of my work." Failure statements included responses such as "I failed epically" or "There is no way we are ever going to finish." Neutral statements included responses such as "I wrote music today" or "I worked with a friend." Success statements were coded as 3, neutral statements as 2, and failure statements as 1.

To ensure reliability of the coding procedure, two additional researchers with K-12 music teaching experience were given 187 (three weeks' worth) of the 495 Composing Diaries collected during the study and asked to code for success, failure, and neutral statements. The researchers were not told which Diaries came from which

treatment group. For a complete list of researcher coding instructions, see Appendix I. To check for reliability, the Kendall's Coefficient of Concordance (w) was calculated for the data coded by the researcher and the two additional evaluators. Kendall's Coefficient was chosen instead of a Pearson product moment correlation because the coding of 3, 2 or 1 for success, neutral, or failure was treated as ordinal data rather than continuous interval or ratio data (Huck, 2012). The w values for each week are reported in Table 4.2

Table 4.2

Interrater Reliability for Composing Diaries Weeks 1-3 Among Three Researchers

Week	Question 1	Question 2	Question 3
1	.96	.99	.95
2	.78	.85	.86
3	.98	1.00	.97

The range of coefficients is 0 to 1 with 0 representing no agreement and 1 representing perfect agreement. Table 4.2 above shows the range of correlation from .78 to 1, with most of the w values falling in the upper .90s and a perfect correlation occurring for the ratings of Question 2 in week three. These coefficients indicate a reliable coding procedure. The lower w values in week two can be explained by a specific disagreement among the raters. Week two was early in the treatment process and several students forgot their materials at home and expressed their frustration and need to start over in their Composing Diaries. Two raters considered these to be neutral statements, while another considered them to be failure statements. After week two, students did not frequently reference leaving materials at home, thus there was more agreement among the raters.

To prepare data from the eight-week treatment period for analysis, the three coded responses for each student each week were added together creating a "success score" between three and nine. Students' scores for each treatment group were then used to generate a grand mean success score for each week of the treatment period as shown in Table 4.3.

Table 4.3

Means and Standard Deviations for Coded Composing Diary Responses by Treatment Group

Week	Treatment A		Treatment B	
	M	*SD*	*M*	*SD*
1	6.56	(1.13)	6.77	(1.02)
2	6.68	(.64)	6.90	(.76)
3	6.68	(.79)	6.57	(1.14)
4	6.69	(.86)	6.83	(.83)
5	6.35	(1.08)	6.35	(1.08)
6	6.70	(.75)	6.63	(.96)
7	6.34	(1.04)	6.77	(1.12)
8	6.51	(.89)	6.77	(.73)

While the mean success scores for Treatment A and B remained fairly similar and stable throughout the eight-week treatment period, the mean of Treatment B was higher than the mean of Treatment A in weeks one, two, four, seven and eight. The mean of Treatment A was higher than the mean of Treatment B in weeks three and six. The means of both treatment groups were the same for week five. Treatment A contained the lowest mean at 6.34, occurring in week seven, while Treatment B contained the highest mean at 6.90, occurring in week two. The means for Treatment A ranged from 6.34 to 6.70 (a range of .36) while the means for Treatment B ranged from 6.35 to 6.90 (a range of .55).

The null hypothesis for research question 1A was: There is no difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by Composing Diaries. This hypothesis was tested using a repeated measures ANOVA on the eight pairs of means generated from the coded Composing Diaries for both treatment groups during the eight-week treatment period. For this test, the eight observations (pairs of means) for each student were treated as related since they were repeated observations from the same group of students ($N = 63$). The repeated measures ANOVA generated a p value of .25. Because the p value was higher than the level of significance of .05, there is no significant difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by Composing Diaries.

To examine the Composing Diary data further, the mean score for each question was calculated for each treatment group to see which question was most likely to generate a success or failure response (see Tables 4.4 and 4.5)

Table 4.4

Mean Score and Standard Deviation for Each Composing Diary Question, Treatment A

Week	Question 1		Question 2		Question 3	
	M	*SD*	*M*	*SD*	*M*	*SD*
1	2.00	(.36)	2.50	(.80)	2.06	(.35)
2	2.00	(.00)	2.69	(.53)	2.00	(.25)
3	1.94	(.44)	2.74	(.56)	2.00	(.00)
4	1.96	(.47)	2.66	(.60)	2.06	(.25)
5	1.87	(.34)	2.45	(.81)	2.03	(.18)
6	1.93	(.25)	2.73	(.58)	2.03	(.18)
7	1.84	(.37)	2.50	(.76)	2.00	(.25)
8	1.90	(.40)	2.61	(.71)	2.00	(.26)

Table 4.5

Mean Score and Standard Deviation for Each Composing Diary Question, Treatment B

Week	Question 1		Question 2		Question 3	
	M	SD	M	SD	M	SD
1	2.06	(.25)	2.68	(.70)	2.03	(.41)
2	2.06	(.25)	2.74	(.63)	2.06	(.25)
3	2.03	(.32)	2.43	(.90)	2.10	(.40)
4	2.03	(.32)	2.73	(.59)	2.07	(.37)
5	1.91	(.39)	2.42	(.81)	2.03	(.18)
6	1.90	(.40)	2.67	(.61)	2.07	(.25)
7	2.06	(.57)	2.68	(.70)	2.03	(.18)
8	1.90	(.40)	2.77	(.57)	2.10	(.31)

In both Treatment A and Treatment B, Question 1 of the Composing Diaries (What did you do today?) had the lowest mean score nearly every week. A review of the data reveals that this could be due to the fact that students who felt productive or successful gave descriptive responses for Question 1 such as "I wrote three measures today" or "Today, I worked with my group" which were coded as neutral responses. Students who were frustrated, however, answered, "What did you do today?" with more negative statements such as, "We got nowhere" or "Today was a waste of time." This might account for the larger number of failure and neutral responses for Question 1. Question 2 (How did you feel about your work today?) had the highest mean and largest standard of deviation for both treatment groups, meaning the responses to this question were more varied. Finally, Question 3 (Is there anything else you'd like me to know?) received the least varied responses. This is perhaps due to the fact that many students left this question blank, and blank responses were coded with a 2 for neutral.

Research Question 1B

What is the difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by the first question of the Music Attribution Survey?

At the end of the eight-week treatment period, all 32 students in Treatment A and 31 students in Treatment B were given a Music Attribution Survey adapted from Austin and Vispoel's 1998 study. The survey packet consisted of a cover sheet and two separate surveys stapled together: one worded for success (blue pages) and one worded for failure (green pages.) Students self-determined whether they succeeded or failed by answering a question on the cover sheet of the survey packet: "On a scale of 1-6, how successful did you feel during the last eight weeks of composing?" They responded using a Likert-type scale from 1 to 6 anchored with "Unsuccessful" at 1 and "Successful" at 6. Students who circled 1, 2 or 3 were directed to fill out the green (failure) survey. Students who circled 4, 5 or 6 were directed to fill out the blue (success) survey. The responses to this first question were tabulated to compare students' perceptions of success or failure as a composer in Treatment A and Treatment B.

The null hypothesis for research question 1B was: There is no difference in perceptions of success and failure as a composer between students in open task groups and students in closed task groups as measured by the first question of the Music Attribution Survey. Table 4.6 shows how many students in Treatments A and B self-selected success (ratings 4, 5, or 6) and failure (ratings 1, 2, or 3). Most students in both treatment groups reported that they succeeded at the composing activities, however, more students self-selected failure in Treatment B (5) than in Treatment A (4).

Table 4.6

Students Who Self-Reported Success and Failure on the Music Attribution Survey

	n	*Success Students*	*Percentage Success*	*Failure Students*	*Percentage Failure*
Treatment A	32	28	88%	4	12%
Treatment B	31	26	84%	5	16%

To compare students' responses to the six-point Likert-type scale, a mean score was calculated for each treatment group. Table 4.7 shows the mean scores and standard deviation for both treatment groups.

Table 4.7

Mean Scores and Standard Deviations of Responses to Question 1 of the Music Attribution Survey for Treatments A and B

	Mean	SD
Treatment A (*n* = 32)	4.46	1.11
Treatment B (*n* = 31)	4.32	.98

The mean of both Treatment A and Treatment B fell above the midpoint of the six-point Likert-type scale for the question "How successful did you feel during the last eight weeks of composing?" The students in Treatment A had a mean score of 4.46 while the students in Treatment B had a mean score of 4.32. The medians were compared using a Wilcoxon Mann Whitney test, since the data for this instrument were treated as ordinal. The resulting *p* value was .37. Because the *p* value was higher than the level of significance of .05, there is no significant difference in perceptions of success and failure

as a composer between students in open task groups and students in closed task groups as measured by the first question of the Music Attribution Survey.

Summary

Neither the Composing Diaries nor the first question of the Music Attribution Survey revealed a significant difference in perceptions of success and failure as composers between the students in Treatment A (open composing tasks) and the students in Treatment B (closed composing tasks). These findings may indicate that these two instruments did not stimulate enough reflection to adequately report students' self-perceptions. The results for research questions 1A and 1B will be discussed further in Chapter 5.

<center>Attributions of Success and Failure</center>

Research questions 2A and 2B addressed the factors to which students attribute either their success or failure as composers. Success and failure attributions were measured separately using two different versions of the Music Attribution Survey.

Research Question 2A

What is the difference in attributions of success between students who self-report feeling successful in open task groups and students who self-reported feeling successful in closed task groups?

After the eight-week treatment period, students who self-reported success on the composing activities (28 students in Treatment A and 26 students in Treatment B) filled out the portion of the Music Attribution Survey specifically worded for success. This survey took most students 25 or 30 minutes to complete. Based on the instrument used by Austin and Vispoel in their 1998 study, these 52 Likert-type questions were designed to

<center>82</center>

measure 11 possible attributions of success: Ability, Effort, Persistence, Strategy, Metacognition, Interest, Luck, Task Difficulty, Family Influence, Teacher Influence, and Peer Influence. Students were presented with statements such as, "I did well on these composition activities because I am talented in music" (Ability), and "I did well on these composition activities because they were simple" (Task Difficulty). Students were then asked to rate each statement on a six-point Likert-type scale ranging from Strongly Disagree to Strongly Agree. Each response was then converted to a number using the following scale:

Strongly Disagree =1

Disagree = 2

Sort of Disagree = 3

Sort of Agree = 4

Agree = 5

Strongly Agree = 6

Austin and Vispoel report alpha reliability estimates ranging from .58 to .94 for the subscales of their original survey. These reliability estimates account for both the success and failure versions of their survey. In the present study, the small number of students who self-reported failure made it impractical to run reliability estimates for the failure portion of the adapted survey. However, reliability estimates for the success subscales were similar to those found by Austin and Vispoel, indicating that the slight change of wording in the survey did not change the reliability of the instrument (Table 4.8).

Table 4.8

Means, Standard Deviation, and Alpha Reliability Estimates for the Success Subscales of the Adapted Music Attribution Survey

	M	*SD*	*N*	*α*	*Austin and Vispoel's Reliability Estimates*
Ability	21.80	5.14	54	.90	.89
Effort	24.06	3.58	54	.84	.80
Persistence	18.61	2.91	54	.78	.63
Strategy	20.87	3.69	54	.68	.71
Metacognition	18.56	2.76	54	.70	.73
Interest	23.02	3.84	54	.86	.86
Luck	20.59	3.79	54	.67	.86
Task Difficulty	21.67	3.34	54	.67	.78
Family Influence	20.04	6.19	54	.87	.94
Teacher Influence	25.76	3.56	54	.89	.75
Peer Influence	17.69	3.83	54	.85	.58

Mean scores for each subscale of the Music Attribution Survey were then calculated for the students in both treatment groups. Each subscale contained either four or five questions. The means, standard deviations and number of questions in each subscale are reported in Table 4.9.

Table 4.9

Mean and Standard Distribution for Success Attributions

	Number of Questions	Treatment A n = 28			Treatment B n = 26		
		M	*SD*	*Rank*	*M*	*SD*	*Rank*
Ability	5	22.36	(4.80)	4	21.19	(5.51)	7
Effort	5	23.68	(3.60)	2	24.46	(3.59)	2
Persistence	4	18.29	(3.45)	9	18.96	(2.20)	10
Strategy	5	20.75	(4.48)	6	21.00	(2.68)	8
Metacognition	4	18.18	(2.64)	10	18.96	(2.88)	11
Interest	5	23.57	(3.36)	3	22.42	(4.28)	3
Luck	5	20.00	(4.02)	7	21.23	(3.49)	6
Task Difficulty	5	21.82	(3.60)	5	21.50	(3.10)	4
Family Influence	5	18.86	(6.65)	8	21.31	(5.48)	5
Teacher Influence	5	25.36	(4.14)	1	26.19	(2.81)	1
Peer Influence	4	16.00	(4.23)	11	19.31	(2.56)	9

The means for the students in Treatment B were higher than the means in Treatment A for 8 of the 11 subscales with Ability, Interest, and Task Difficulty being the exceptions. In both Treatment A and Treatment B, the three subscales with the highest means were Teacher Influence, Effort, and Interest and the subscales with the lowest means were Metacognition, Persistence, and Peer Influence. The subscale with the largest difference between treatment groups was Peer Influence. The mean for the Peer Influence subscale in Treatment B was 3.31 higher than the mean for Treatment A. The means for Family Influence and Luck were also higher in Treatment B (by 2.44 and 1.23 respectively). The means for Ability and Interest were higher in Treatment A (by 1.17 and 1.15 respectively).

The null hypothesis for research questions 2A was: There is no difference in attributions of success between students who self-report feeling successful in open task

groups and students who self-report feeling successful in closed task groups. This

hypothesis was tested by comparing each subscale for the two treatment groups using

separate *t*-tests. Austin and Vispoel (1998) analyzed their original survey with a 2x11

ANOVA because they analyzed two independent variables, outcome (success or failure)

and attribution (11 subscales). The current study only compares self-reported successful

students to successful students, and self-reported unsuccessful students to unsuccessful

students. Therefore, the *t*-test is appropriate. Any findings of significance were compared

to a Bonferroni correction to control for a Type 1 familywise error caused by multiple

tests. The results of the *t*-tests are reported below in ANOVA Tables 4.10-4.20

Table 4.10

Ability Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	*df*	MS	F	*p*
Treatment	18.29	1	18.29	.69	.41

Table 4.11

Effort Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	*df*	MS	F	*p*
Treatment	8.26	1	8.26	.64	.43

Table 4.12

Persistence Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	6.16	1	6.16	.72	.40

Table 4.13

Strategy Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	.84	1	.84	.06	.81

Table 4.14

Metacognition Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	8.26	1	8.26	1.09	.30

Table 4.15

Interest Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	17.79	1	17.79	1.21	.28

Table 4.16

Difficulty Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	1.39	1	1.39	.12	.73

Table 4.17

Luck Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	20.42	1	20.42	1.43	.24

Table 4.18

Family Influence Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	80.96	1	80.96	2.15	.15

Table 4.19

Peer Influence Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	df	MS	F	p
Treatment	132.00	1	132.00	10.60	.002*

*$p < .05$

Table 4.20

Teacher Influence Subscale: Mean Scores for Successful Students in Treatment A and Treatment B

Source	SS	*df*	MS	F	*p*
Treatment	9.40	1	9.40	.74	.39

The results of the *t*-tests for the subscales of Ability, Effort, Persistence, Strategy, Metacognition, Interest, Task Difficulty, Luck, Family Influence, and Teacher Influence, showed no significance. However, the *t*-test for the subscale of Peer Influence (p = .002), showed a significant difference between the two treatment groups. Because 11 separate *t*-tests were run on the Music Attribution Survey data, a Bonferroni correction for multiple comparisons was used to ensure a Type I familywise error for all tests combined did not exceed the desired .05 level of significance. Therefore, I divided .05 by 11 (the number of tests) to receive the corrected level of significance of .004. Because the *p* value for Peer Influence (.002) was still less than the corrected level of significance, there is a significant difference in attributions of success on the Peer Influence subscale between students who self-report feeling successful in open task groups and students who self-reported feeling successful in closed task groups. Peer Influence was more highly rated as a reason for their success by students in Treatment B (closed tasks) than students in Treatment A (open tasks).

Research Question 2B

What is the difference in attributions of failure between students who self-report feeling unsuccessful in open task groups and students who self-report feeling unsuccessful in closed task groups?

The same procedure used for comparing students who self-reported success in question 2A was used to compare students who self-reported failure in question 2B. Students who self-selected failure on the first page of the Music Attribution Survey filled out the questions specifically worded for failure to measure the 11 possible attributions. These 52 six-point Likert-type questions featured such statements as "I did not succeed on these composition activities because I am not talented in music" (Ability), and "I did not succeed on these composition activities because they were difficult" (Task Difficulty). Again, students were asked to rate the degree to which they agreed with the attribution on a six-point Likert-type scale ranging from Strongly Disagree to Strongly Agree. Each response was then converted to a number using the following scale:

Strongly Disagree =1

Disagree = 2

Sort of Disagree = 3

Sort of Agree = 4

Agree = 5

Strongly Agree = 6

As stated previously, because of the small number of students reporting failure as compared to success, it is not practical to report reliability estimates for the adapted

version of the failure subscales. However, alpha reliability estimates for the adapted

version of the success survey suggest that the subscales remain reliable.

Mean scores for each subscale of the Music Attribution Survey were calculated

for the students who self-selected failure in both treatment groups. Each subscale

contained either four or five questions. The means, medians, and standard deviations for

all questions in each subscale are reported below in Table 4.21. The medians are used in

the statistical analysis; the means are reported for reference.

Table 4.21

Mean, Median, and Standard Distribution for Failure Attributions

	Treatment A n = 4				Treatment B n = 5			
	M	*SD*	*Mdn*	*Rank*	*M*	*SD*	*Mdn*	*Rank*
Ability	16.00	(4.76)	16.00	5	14.00	(7.68)	10	4
Effort	12.00	(4.40)	12.00	8	18.80	(4.21)	17	1
Persistence	9.00	(1.41)	8.50	11	11.40	(2.51)	11	8
Strategy	17.50	(3.87)	18.50	2	18.20	(1.79)	18	2
Metacognition	9.25	(3.60)	10.50	10	10.20	(3.27)	10	9
Interest	17.50	(6.76)	17.50	3	16.20	(5.59)	16	3
Luck	18.75	(5.50)	16.00	1	13.40	(1.82)	14	6
Task Difficulty	16.25	(7.80)	14.00	4	11.80	(3.70)	13	7
Family Influence	14.00	(4.08)	14.00	7	13.80	(5.36)	14	5
Teacher Influence	9.75	(.96)	9.50	9	8.60	(2.61)	9	11
Peer Influence	14.75	(.96)	14.50	6	8.80	(2.68)	10	10

For the students self-reporting failure in Treatment A, the subscales with the

highest means were Luck (18.75), Strategy (17.50), and Interest (17.50). In Treatment B,

the subscales with the highest means were Effort (18.80), Strategy (18.20), and Interest

(16.20.) The subscale with the largest difference between treatment groups was Effort.

The mean for the Effort subscale in Treatment B was 6.80 higher than the mean for

Treatment A. The means for Peer Influence, Luck, and Task Difficulty were much higher in Treatment A than in Treatment B (by 5.95, 5.35 and 4.45 respectively).

The null hypothesis for question 2B was: There is no significant difference in attributions of failure between students who self-report feeling unsuccessful in open task groups and students who self-reported feeling unsuccessful in closed task groups. Due to the small number of students self-identifying as unsuccessful (4 in Treatment A and 5 in Treatment B), a non-parametric test was required to analyze the data. Subscales of the unsuccessful students in both treatment groups were compared using a Wilcoxon Mann Whitney test. The p values generated by the 11 individual tests, one for each subscale, are reported below in Table 4.22.

Table 4.22

p Values for the Wilcoxon Test of Each Subscale for the Unsuccessful Students in Treatment A and Treatment B

Subscale	p
Ability	.39
Effort	.08
Persistence	.16
Strategy	1.00
Interest	.81
Metacognition	1.00
Difficulty	.62
Luck	.05
Family Influence	.71
Peer Influence	.02*
Teacher Influence	.62

$p < .05$

The results of the *t*-tests for the subscales of Ability, Effort, Persistence, Strategy, Metacognition, Interest, Task Difficulty, Luck, Family Influence, and Teacher Influence showed no significance. The *t*-test for the subscale of Peer Influence ($p = .02$) showed a

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significant difference between treatment groups, however, when compared to the Bonferroni adjustment of .004, to control for a Type 1 familywise error, it was not significant. There is no significant difference in attributions between students who self-report feeling unsuccessful in open task groups and students who self-reported feeling unsuccessful in closed task groups.

Summary

Research questions 2A and 2B addressed the factors to which students attribute either their success or failure as composers. These attributions were measured by the 11 subscales of the Music Attribution Survey and the two treatment groups were compared using *t*-tests for students who self-selected success, and a Wilcoxon Mann Whitney test for students who self-selected failure. Results of the tests showed no significant difference in all 11 subscales for failure attributions, and 10 of the 11 subscales for success attributions. The Peer Influence subscale for successful students was the exception. The self-identified successful students in Treatment B (closed) rated the attribution of Peer Influence significantly higher than the self-identified successful students in Treatment A. No significant difference was found for the subscale of Peer Influence among the students self-identifying as unsuccessful. The self-identified successful students in both treatment groups rated the same three factors as their strongest attributions: Teacher Influence, Effort, and Interest. The self-identified unsuccessful students rated different attributions as strongest. The unsuccessful students in Treatment A (open) most highly rated Luck, while the unsuccessful students in Treatment B (closed) most highly rated Effort. These results will be further discussed in Chapter 5.

Predictions of Future Success

Research question 3 had to do with students' predictions of future success on similar composition activities. These predictions were measured using the researcher-designed Future Success Survey.

Research Question 3

What is the difference in predictions of future success between students in open task groups and students in closed task groups?

After the eight-week treatment period, and after filling out the Music Attribution Survey, all students in both treatment groups were given an addition short survey called the Future Success Survey. This instrument took students approximately two minutes to complete and consisted of three questions designed to measure their predicted success on future composition activities:

1. Pretend that your band teacher gives you another opportunity to compose. How successful do you think you're likely to be at composing?

2. How motivated would you be to start composing?

3. If you had the opportunity to sign up for an afterschool club called "Composing in Band" how likely would you be to sign up?

Students responded using a six-point Likert-type scale. The means, medians, and standard deviations for each treatment group are reported below in Table 4.23. While the means are reported for reference, the medians were used in the statistical analysis.

Table 4.23

Future Success Survey Means, Medians, and Standard Deviations

	Treatment A			Treatment B		
	M	*SD*	*Mdn*	*M*	*SD*	*Mdn*
Question 1	4.44	(.91)	4	4.10	(.98)	4
Question 2	4.01	(.93)	4	3.84	(1.21)	4
Question 3	3.53	(1.29)	3	2.87	(1.15)	3

The means for each of the three questions were higher in Treatment A than Treatment B. The means for the students in Treatment A and B both fell above the midpoint of the scale for questions one and two: "Pretend that your band teacher gives you another opportunity to compose. How successful do you think you're likely to be at composing?" and, "How motivated would you be to start composing?" The means for question 3, "If you had an opportunity to sign up for an afterschool club called Composing in Band, how likely would you be to sign up?" were the lowest means of all three questions for both treatment groups. The mean for the third question in Treatment B (2.87) fell below the midpoint of the scale, while the mean for Treatment A (3.53) fell just above it.

The null hypothesis for Research Question 3 was: There is no difference in predictions of future success between students in open task groups and students in closed tasks groups. This hypothesis was tested by comparing the total responses of Treatment A and Treatment B using a Wilcoxon Mann Whitney test. The non-parametric test is appropriate because the Likert-type data were treated as rank data rather than interval

data, since the distance between points on the 6-point scale cannot be demonstrated as equal.

The *p* value *(p = .21)* was not found to be significant *(α < .05)*. There is no significant different in predictions of future success between students in open task groups and students in closed task groups.

<div align="center">Out-of-Class Engagement</div>

Research questions 4A and 4B had to do with students' engagement with music composition outside of their regular band class. Engagement was measured using student-reported data collected using the weekly Composing Diaries, as well as the Out-of-Class Engagement Letter that students completed at the end of the treatment period.

Research Question 4A

What is the difference in proportion of students who report composing outside-of-class in open task groups and closed task groups as measured by Composing Diaries?

During the study, students were not asked directly if they composed during non-class time in order to minimize the Hawthorne Effect. If students felt that composing outside of class was part of the study, they might report doing so in order to please their teacher, even if this behavior was not something they would have done otherwise. Instead of asking students directly about composing at home, students' weekly Composing Diaries were coded for any evidence of out-of-class composition engagement. Phrases such as "I finished this at home," or "We're going to finish this at Jade's house," were considered examples of out-of-class engagement. Composing Diaries showing any evidence of out-of-class engagement were coded as "Yes." Composing Diaries showing no evidence of out-of-class engagement were coded as "No." The number of Composing

Diaries showing evidence of out-of-class engagement in both Treatments A and B over

the eight treatment sessions is shown below in Table 4.24.

Table 4.24

Out-of-Class Engagement Raw Data Based on Coded Composing Diaries

| | Treatment A | | Treatment B | |
	Yes	No	Yes	No
Week 1	1	31	0	31
Week 2	1	31	3	28
Week 3	1	30	1	29
Week 4	0	31	2	28
Week 5	0	31	0	31
Week 6	0	30	0	30
Week 7	0	32	0	31
Week 8	0	31	0	30

Few students mentioned out-of-class engagement with composing in their weekly

Composing Diaries. In Treatment A, students mentioned composing outside of class three

times during the eight weeks compared to six times in Treatment B. In Treatment A, one

student mentioned composing outside of class for each of the first three weeks, and then

no one mentioned composing outside of class for the remaining five weeks. In weeks one

and two, the same Treatment A student mentioned composing at home in the context of

not feeling able to finish without composing after school. In week three, a different

student mentioned that the members of her group each worked on their parts at home and

then brought them to school to work together. One student wrote, "I feel like we made a

good step forward because before we just worked on our own part at home for the most

part, and now we have a part in which they come together."

In Treatment B, all six of the references to out-of-class engagement were made by

three students. One student mentioned out-of-class engagement three weeks in a row

(weeks two, three, and four) in the context of needing to go home to make the piece sound better. This student wrote, "I should go home and work on it more to make it sound better, and I think it is good. I got good work done." In weeks two and four, another student mentioned starting a piece in class, but going home to finish it. This student wrote, "I want to finish it on my own time though." A third student mentioned getting the idea for his piece at his friend's house after school in week two.

The null hypothesis for research question 4A was: There is no difference in proportion of students who report composing outside of class in open task groups and closed task groups as measured by Composing Diaries. I planned to compare the proportion of students reporting out-of-class engagement in their Composing Diaries in Treatment A and Treatment B using a repeated measures binomial test. However, because few students reported out-of-class engagement, the lack of data precluded further statistical analysis. Therefore, no conclusion can be made.

Research Question 4B

What is the difference in the proportion of students who report composing out-of-class between students in open task groups and students in closed task groups as measured by the Out-of-Class Engagement Letter?

After students took the Music Attribution Survey and Future Success Survey, they were given one final assignment. They were asked to write a letter to a hypothetical friend at another school who was about to participate in the same composing activities they just completed. In that letter, they were asked to explain to the friend what to expect from the activities. They were told they could include information such as:

- What composing was like

- Your favorite piece and why you liked it
- What (if any) composing you did or do at home
- Any compositions you've written since the composing project finished
- Anything else you think you friend would like to know about composing

Most students took about 10 minutes to complete their letters. The letters were then coded for evidence of out-of-class engagement. Letters referencing out-of-class engagement were labeled "Yes," while letters not referencing out-of-class engagement were labeled "No." The number of letters labeled Yes and No is reported in Table 4.25.

Table 4.25

Out-of-Class Engagement Letter Responses

	N	Total Yes Responses	Percentage	Total No Responses	Percentage
Treatment A	32	1	3.13%	31	96.87%
Treatment B	31	3	9.68%	28	90.32%

As with the Composing Diaries, few students referenced out-of-class engagement in their letters to a hypothetical friend at another school. One student in Treatment A and three students in Treatment B made some kind of reference to composing outside of the classroom. None of these students had previously mentioned composing outside of class in their weekly Composing Diaries. The one student in Treatment A wrote, "I did some composing at home and I wrote another composition at home too." The three students in Treatment B mentioned either composing whole pieces at home, or finishing a piece they started in class. One student wrote, "I've toyed around with notes at home too." Another wrote, "I sometimes had to work at home," and the third wrote, "It's best to compose at home."

The null hypothesis for Research Question 4B was: There is no difference in the proportion of students who report composing outside-of-class between students in open task groups and students in closed tasks groups as measured by the Out of Class Engagement Letter. Because very few students referenced out-of-class engagement in their letters, the lack of data precludes the further use of statistical analysis. While more students referenced out-of-class in Treatment B than Treatment A, no conclusions about significant differences can be made.

Summary

In both the Composing Diaries and the Out-of-Class Engagement Letter, the students in Treatment B referenced composing outside the classroom more frequently than the students in Treatment A. However, because of the very few references overall, statistical tests could not be used to determine whether or not these differences were significant. The lack of out-of-class composition references could be due in part to the manner in which data were collected. These data will be further discussed in Chapter 5.

Researcher Journal

In addition to the instruments described above, I kept a researcher journal to record anecdotal information during each of the 16 treatment sessions over eight weeks. I recorded, anecdotal evidence such as how many compositions students completed, how many tasks students were given (Treatment B only), and what kinds of questions and comments students made.

Compositions

The compositions created by students in Treatment A and Treatment B were relatively similar. One group of compositions did not appear to be particularly longer or

more complex than the other, although the number of compositions differed. While more pieces were turned in for Treatment B (23) than for Treatment A (12) more students recorded their pieces in Treatment A (8) than in Treatment B (6). In Treatment A, individual students or groups of students turned in 12 totals pieces over the course of the eight weeks. Eight of the twelve pieces turned in for Treatment A were recorded and appear on the CD given to participants at the end of the eight weeks. Three students decided not to title their pieces. Seven of the pieces were written for solo instruments, while five of the pieces were written for two or more instruments. Some students worked in a small group, but only wrote a composition for one of the group members to perform as a solo. Other groups never finished their compositions, and some students changed groups frequently. The descriptions of Treatment A pieces are shown in Table 4.26.

Table 4.26

Compositions Turned in and Recorded by the Students in Treatment A

Week Turned in	Week Recorded	Print or Memorized	Title	Instrument
2	NA	Print	Come My Children	Trumpet
4	NA	Print	There it is!	Trumpet
4	4	Print	NA	2 Flutes
4	5	Print	Awesome Piece of Music	2 Altos, 1 Tenor, 1 Trombone
6	6	Print	NA	Flute
5	6	Print	Jeffrey the Ghost	Trumpet
6	6	Print	NA	Marimba
6	NA	Print	Forte!	Clarinet
6	NA	Print	Ronen	Clarinet
7	7	Print	Variations on a B-flat Scale	2 Flutes, 1 Clarinet
7	7	Memorized	Nocturnal Unicorns	2 Marimbas
8	8	Print	Fairy's Storm	Flute and Trombone

In Treatment B, individuals or groups of students turned in 23 total pieces over the course of the eight weeks. Eighteen of the 23 pieces were written for a solo instrument, while five of the pieces were written for two or more people. Six of the 23 total pieces were recorded for the CD given to the participants. The instrumentation, week turned in, and titles of Treatment B pieces are shown in Table 4.27.

Table 4.27

Compositions Turned in and Recorded by the Students in Treatment B

Task	Week Turned in	Week Recorded	Print or Memorized	Title	Instrument
1	7	7	Print	NA	Marimba
1	3	3	Print	Anonymously Titled	Oboe, Flute, Bass Clarinet
1	2	NA	Print	NA	Trumpet
1	3	NA	Print	Four Note Song That the Teacher made us made	Marimba
1	2	NA	Print	NA	Trumpet
1	2	NA	Print	NA	Saxophone
1	2	4	Print	Seasons	2 Flutes
1	4	NA	Print	Good Morning Sun	Trumpet
1	4	NA	Print	D of the T	Saxophone
1	4	NA	Print	Domination of the Jaguars	Marimba
1	4	NA	Print	NA	Saxophone
1	4	5	Print	NA	3 Marimbas
2	2	NA	Print	Slow Note Song That the Teacher Made us Made Again	Bass Drum
2	4	NA	Print	NA	Clarinet
2	4	NA	Print	NA	Flute
2	6	NA	Print	NA	Marimba and Piano
3	7	7	Print	Criss Cross	2 Trumpets
3	4	NA	Print	NA	Flute
3	4	NA	Print	NA	Clarinet
3	5	NA	Print	NA	Clarinet
4	4	NA	Print	Rain	Trumpet
4	7	7	Memorized	The Wind	Flute
5	8	NA	Print	NA	Trumpet

In Treatment B, 12 students turned in compositions for Task #1, which used only the notes in the B-flat scale. Four compositions were turned in for Task #2, write a piece that is slow and solemn, four compositions were turned in for Task #3, finish a given

phrase, two compositions were turned in for Task #4, using a poem for inspiration, and one piece was turned in for Task #5, write a scary piece. No pieces were turned in for Task #6, use only three notes, Task #7, write a variation of Mary Had A Little Lamb, or Task #8, write a fast and energetic piece.

While there were eight different tasks possible for students in Treatment B to complete, all students took more than one week to finish at least one of the tasks, and no students worked fast enough to receive task seven or eight (see Table 4.28)

Table 4.28

Tasks Received by Students in Treatment B

Task	Number of Students Who Received It
1	31
2	12
3	4
4	4
5	2
6	1
7	0
8	0

Questions and Comments

In general, students in both Treatment groups had more questions in weeks 1-4 than in weeks 5-8. For example, the first week, students in Treatment B asked, "When are these due?" In Treatment B, most of the questions centered around the instructions of the tasks themselves such as "Can we use notes other than B-flat?" or "Does the poem piece have to use the words as lyrics?" The teacher and researcher answered questions like this with responses such as, "That's what the directions say," or "That might be one way to

approach it." In Treatment A, most of the questions centered around the pieces themselves such as "Is this too short?" or "How do you draw a treble clef?"

After the second week, students in Treatment B started asking, "What happens if we don't follow the rules (for the tasks)?" Since there were no grades assigned for these compositions, there were also no "consequences" for not following the directions on the tasks. Some students in Treatment B turned in pieces that didn't follow the instructions exactly. For example, some students turned in pieces that used notes other than those in the B-flat scale for the first task.

General Observations

Most students in both treatment groups chose to work in partners or small groups, even if the pieces they eventually turned in were for only one instrument. These groups did not necessarily stay the same from one piece to the next. Students in both treatment groups were the most on-task in weeks one through six. In weeks seven and eight, several students had to be reminded that they were to use this time to compose music, not do homework for other classes. This mostly came up with students who had finished recording one of their pieces, and didn't want to write another one.

Organization of the Follow Chapter

Chapter 5 will present a summary and discussion of the findings, as well as implications for music teachers, limitations of this study, and recommendations for future research.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

Summary

This study compared perceptions of success and failure, attributions of success and failure, predictions of future success, and reports of out-of-class engagement between middle school band students in an open task composition group and middle school band students in a closed task composition group. Although the students in each treatment group received different sets of composition activities and instructions, the differences between groups as determined by the four measures used in the study appeared to be minimal. There was no significant difference between treatment groups in students' perceptions of success and failure, predictions of future success, or reports of out-of-class engagement. The students in both groups who self-reported failure at the composition activities made similar attributions for their failure, and the students who self-reported success in both groups made similar attributions for their success. The only exception was on the Peer Influence subscale. The successful students in the closed task group rated the attribution of Peer Influence significantly higher than the successful students in the open task group rated the same attribution. The results of this study are discussed below.

Perceptions of Success and Failure

One of the questions that guided this study was how the students in Treatment A (open tasks) and Treatment B (closed tasks) perceived their success and failure on the composing activities both during the eight-week treatment period (as measured by the weekly Composing Diaries) and at the end of the eight-week treatment period (as measured by the first question of the Music Attribution Survey). The students in both

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treatment groups reported similar feelings of success and failure in both their Composing Diaries and their Attribution Surveys. The weekly mean success scores of each treatment group, as generated by the coded responses to the weekly Composing Diaries, indicated that the feelings of success remained fairly consistent throughout the eight-week treatment period. Success scores in Treatment B were slightly higher than the success scores in Treatment A for several weeks, but not significantly so. These results suggest that for these 63 students, treatment group (open or closed) seemed to have little impact on whether or not they felt successful as composers from week to week and at the end of the eight-week treatment period.

These findings may be related to previous research. Previous researchers suggest that perceptions of the composition task and associated parameters (e.g., open and closed tasks) vary from student to student and may be based on working style or musical background (Burnard, 1995; Hickey, 1997). In the present study, there was no significant difference between treatment groups in terms of students' success as composers; however, background and perception of task were not studied in relation to those parameters. A background survey given to students at the beginning of the study revealed that students' previous experience with composition, background in music, and engagement with music outside the music classroom varied. While analyzing these surveys was beyond the scope of the present study, further research could reveal whether students' musical backgrounds were related to their feelings of success and failure in composing, as suggested by previous researchers.

Attributions of Success and Failure

Another question that guided this study was how students' attributions of success and failure were related to treatment group (open and closed composition tasks). According to Attribution Theory, an attribution is a factor to which individuals attribute their success or failure, which in turn affects their predictions of future success on a similar task (Weiner, 1979). The four most commonly studied attributions are Ability, Effort, Luck, and Task Difficulty, which are classified as either being stable or unstable, and internal or external (Weiner, 1979). In this study, students were asked to rate to what degree they felt successful or unsuccessful on the composing activities. Then, they filled out one of two versions of a survey measuring 11 different attributions that they might endorse as reasons for their success or failure. This survey was adapted from Austin and Vispoel's 1998 study of middle school music students and measured the attributions of Ability, Effort, Persistence, Strategy, Metacognition, Interest, Task Difficulty, Luck, Family Influence, Teacher Influence, and Peer Influence.

Success Students

Most students in both treatment groups self-selected success on the composition activities (*n* = 28 in Treatment A and *n* = 26 in Treatment B). The students who self-selected success in Treatment A (open) and Treatment B (closed) made similar attributions for their success as composers on the success version of the Music Attribution Survey.

As the eight weeks progressed, the students in both treatment groups started behaving similarly. The students in Treatment B, (closed tasks) realized there was no consequence for breaking the "rules," so they bent them as they wished. For example,

one of the tasks in Treatment B was for students to write a piece using only the notes of the B-flat scale, but students quickly realized there was nothing to stop them from using notes outside of the scale if they wished. Because the students in Treatment B did not always follow the parameters of the assignments, the treatments became less and less different over time, which could explain the fact that there was only one significant difference (the Peer Attribution subscale) between the treatment groups in terms of success attributions.

Previous research suggests that students are more likely to rate their attributions of success higher than their attributions of failure (Austin & Vispoel, 1995). While the present study did not require students to make attributions for *both* success and failure, the means of the success subscales were higher in both treatment groups than the means of the failure subscales. Successful students from both treatment groups attributed their success most to Teacher Influence, Effort, and Interest. These were also the three highest rated success attributions found in Austin and Vispoel's 1995 study of student success and failure.

Of the 11 attributions subscales, only one appeared to be significantly different between the students who self-identified as successful in Treatment A and Treatment B. The students in Treatment B (closed tasks) rated the attribution of Peer Influence significantly higher than the students in Treatment A (open tasks) rated the same attribution. There could be several reasons for this. Each treatment group consisted of an intact class at this middle school, and social dynamics can vary considerably from class to class. While I did not observe any specific differences in the social dynamics between classes, and social dynamics was not a factor measured in this study, social dynamics

could be related to the attribution of Peer Influence. More in-depth interviews and further student reflection would be needed to determine reasons for the difference in Peer Influence attributions. Another reason for the Peer Influence difference, could be that the students in Treatment A and Treatment B interpreted the Peer Influence subscale questions differently. The Peer Influence subscale questions included statements such as "I liked the other students in class" and "I got along with other students in the class." Perhaps some students interpreted these statements as being related to their overall relationships with their classmates, and not the ways in which those relationships either contributed or didn't contribute to their success on the composition activities. Finally, perhaps the closed nature of the Treatment B tasks caused students to rely more on their peers to work together than the open nature of the Treatment A tasks, which might have been viewed as more of an individual effort (even though students in both treatments chose to work in groups).

In this study, students who self-identified as successful in composition rated the attributions of Effort, Interest, and Teacher Influence higher than the other attribution subscales. Previous research suggests that music students tend to make more internal attributions than external ones (Asmus, 1986; Legette, 2003). While Effort and Interest are internal attributions, Teacher Influence, the most highly rated attribution for success in the present study, is an external attribution. Austin and Vispoel (1995, 1998) similarly found that Teacher Influence was a highly rated external attribution amidst the other highly rated internal attributions. The high Teacher Influence attribution in this study may be due to the Hawthorne Effect in which students in both treatment groups want to please the teacher and say the "right" thing because they were aware that they were being

studied since the researcher was present for all composing sessions. Also, students in this study know and like their band director and their answers may have more to do with wanting to say positive things about her than attributing their success to her help.

While the present study measured 11 different attributions, the four most commonly studied attributions are those of Ability, Effort, Luck, and Task Difficulty (Weiner, 1979). Weiner classified these four attributions as being either internal or external, and stable or unstable (Weiner, 1979). In an academic context, students who attribute success or failure to an attribution that is internal and changeable (Effort) are more likely to predict success in the future than students who make attributions which are external (Luck and Task Difficulty) or unchangeable (Ability) (Austin & Vispoel, 1992). Given these attribution dimensions, the Effort attribution of the successful students in both treatment groups is encouraging because effort is both internal and changeable, meaning the students in both treatment groups recognize that they have control over their success.

Failure Students

Few students in this study self-identified as being unsuccessful in both treatment groups ($n = 4$ in Treatment A and $n = 5$ in Treatment B). The students in Treatment A rated Luck as their highest attribution for failure while the students in Treatment B rated Effort as their highest attribution for failure. Since Luck is an external and uncontrollable attribution, while Effort is an internal and controllable attribution, this indicates that the students in Treatment A (open tasks) may have felt as though they had less control over their success than the students in Treatment B (closed tasks). This possibility is supported by the fact that the students in Treatment A also cited Task Difficulty as a reason for their

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failure more highly than the students in Treatment B. Basically, the students in Treatment A may have felt the open task was difficult, they were failing, and there was little they could do about it, while the students in Treatment B (closed task group) felt they weren't trying hard enough.

While the treatment groups behaved more similarly over time, perhaps several students in Treatment A found the lack of directions overwhelming, making it difficult to get started. It is possible that these Treatment A students gave up early on and decided the activity was too difficult (Task Difficulty) or they weren't having a good day (Luck). Perhaps the students in Treatment B did not experience the same frustration getting started since they had more direction and parameters in the closed task condition. They couldn't cite "Task Difficulty" as a reason for not succeeding, since they knew what to do to get started, and instead decided they weren't trying hard enough (Effort).

The findings of the present study differ from previous researchers who reported that Effort was not a highly rated failure attribution among middle school music students (Austin & Vispoel, 1998). In the present study, the students in Treatment B rated Effort as their highest attribution for failure. The difference in findings could be due to the fact that Austin and Vispoel used a disposition approach while the present students employed a critical incident approach to measure attributions. Perhaps students make different attributions when thinking of music as a whole (disposition) than they do when thinking of a specific musical incident (critical incident). Or, the finding in this study (high failure Attribution for effort) could be related to messages students might receive in school outside of this study. Perhaps students in this study have teachers or families who heavily emphasize effort as a reason for not meeting goals.

Previous research (Austin & Vispoel, 1992) suggests that the students who attribute their failure to Effort, an internal and changeable attribution, (like the students in Treatment B), will be more likely to predict future success in composition, despite their failures, than students who attributed their failure to Luck and Task Difficult, which are both out of their control (like the students in Treatment A).

Predictions of Future Success

In this study, students were not only asked questions about their perceptions of success or failure on the recent composing activities, they were also asked to think about how they might feel about composing activities in the future. These data were gathered using the Future Success Survey.

While the scores of the Future Success survey for the students in Treatment A were slightly higher than the scores for the students in Treatment B, they were not significantly so. The students' scores for both Treatment groups hovered at or below the mid-point of the scale for the third question: If you had the opportunity to sign up for an afterschool club called "Composing in Band" how likely would you be to sign up? This is surprising given that a majority of students in both treatment groups reported feeling successful. Further, Interest was the third highest rated attribution of success among students who self-identified as successful, so students presumably enjoyed the composing activities. Perhaps students in both treatment groups liked composing, but viewed it as an enjoyable school assignment rather than an enjoyable activity they would choose to pursue on their own time, resulting in the low responses to the question about an after-school composing club. It is possible that the slightly higher ratings among Treatment A students are due to the open tasks that Treatment A's students were assigned. Treatment

A students maybe have viewed the open task condition as more ongoing and as one big project, while the students in Treatment B viewed the closed task activities as a series of shorter assignments. In the researcher journal, students in Treatment B were reported as frequently asking, "When is this assignment due?" while such questions were not present in Treatment A. If the students in Treatment B viewed the closed activities as shorter assignments than the students in Treatment A, that might also explain why the students in Treatment B completed nearly twice the number of compositions than the students in Treatment A.

The results of the present study differ from those in previous research. In McCoy's 1999 study, students who were given closed composition tasks reported being less likely to look forward to composing again than students who were given open composition tasks. In the present study, the students in the open task group (Treatment A) were not significantly more likely to report looking forward to composing again than the students in the closed task group (Treatment B). Perhaps if the students in the present study were asked about their motivations to keep composing through the process of deep and ongoing reflection (as was the case in the McCoy study) rather than in a survey at the end of the treatment period, other findings may have become evident.

Reports of Out-of-Class Engagement

The final question that guided this study was which treatment elicited more student reports of out-of-class engagement with music composition. Few students in either treatment group mentioned composing outside of the classroom in either their weekly Composing Diaries or in the Out-of-Class Engagement Letter. This could be an indication that students did not feel the need or desire to compose music at home,

regardless of treatment. The low number of students composing outside of the classroom could also be skewed by the method in which data were collected. It is also possible that more students were composing at home, but never reported doing so because they were never directly asked. The methodology of this study was designed to avoid asking students directly if they composed at home, to avoid a Hawthorne Effect of students reporting composing at home only because they thought it was the "right" thing to say. Finally, it is possible that students do make up music at outside of school, but they do not consider their actions to be "composing" and therefore did not report them as such.

The results of the present study related to out-of-class engagement are different from those in previous research. In her study of four high school composers, Kennedy (2002) observed that the students enjoyed working on compositions outside of class time and that while these compositions were started in class, outside of class work afforded them more time to explore their ideas. In the present study, few students reported composing outside of the classroom. This could be because the students in Kennedy's study worked independently, while most students in the present study elected to work in small groups and did not experience working on their own and felt less of a personal investment in the work. The age of the students could also be a factor. Older students may be more likely to bring work home than younger students.

Discovering ways in which students choose to engage in music composition outside of the music classroom is important if we hope to find ways in which classroom music instruction impacts the lives of students beyond the grades they receive on their report cards. In his book, *Teaching Eternity: The Enduring Outcomes of Teaching*, Barone (2001) discusses the ways in which teachers impact their students years after they

leave the classroom. It is possible that a confidence and desire to make up their own music is an "enduring outcome" of including music composition as a regular part of the music curriculum. An enduring outcome is one that affects students years after they have left the classroom, so the eight-week duration of this study may be too narrow of a time frame to determine what effect composing will have on these students in the future.

Implications

This study highlights how important it is for music teachers to know about their students' attributions for success and failure and to give them choices when designing instructional plans. The students in Treatment B (closed tasks) were given fewer choices about composing and less decision making power than the students in Treatment A, but when they discovered there were no consequences to straying from the given guidelines, they made choices on their own. The guidelines set forth in the task instructions became not rules to follow, but rather examples of what a composition *could* be, but didn't necessarily have to be. Therefore, the difference between Treatment A and Treatment B in this study became less about "few rules versus many rules" and more about "no examples versus examples." While few significant differences were found between the treatment groups, the fact that the students in Treatment B made their own choices and strayed from the rules when given the opportunity indicates that educators need to be sensitive to that desire and plan for it in their lessons. Students in Treatment A who self-identified as unsuccessful cited Task Difficulty as a reason for their failure. They had no examples or guidelines to give them direction. Perhaps if they had been given examples or starting points to choose from, like the students in Treatment B, they would have found the tasks to be easier and more approachable.

It is clear from this study, and from previous research (Austin &Vispoel 1998; Burnard, 1995; Hickey, 1997), that individual students perceive parameters and guidelines differently and make different attributions for their success and failure as composers. Since music educators cannot expect every student in a class of 30 to make the same attributions for their successes and failures, teachers should consider asking if each student is feeling successful or unsuccessful and *why*. If a music teacher knows that a successful student feels successful only because he believes in his unchangeable music ability, then that teacher can respond by emphasizing the student's effort to show he has control over his own success. Knowing the attributions of students allows a music teacher to alter and refine feedback to keep individuals motivated to achieve.

Finally, when introducing composition to young music students, music educators should first determine what their goals are for their students. Is it to get students to compose on their own time later in life? Is it to stimulate creative thinking? Is it to help students identify as successful composers? To produce "high quality" compositions as defined by a pre-determined rubric? Being aware of these goals may help guide composition lesson planning *and* may help teachers become aware or why students feel successful. Since music composition can be such a different experience for different students, asking this question is important: What over-arching goal does composition in the classroom seek to achieve?

Limitations

The results of this study are limited to the students in both treatment groups and, due to the small sample size, are not generalizable to the population. Further, data were collected at a school in the southwestern United States in which the student population

was predominately middle class. These results cannot be generalized to schools in other regions of the country or to different student demographics. While previous research has shown the free response format used in the Composing Diaries to be an effective way to measure data (Burnard, 1995; Schwartz 2012), Composing Diaries did not appear to be an effective way of measuring student perceptions of success and failure in the present study. While students used the diaries to make procedural statements about what they did during the treatment sessions, they did not make many or varied responses about whether they felt successful or unsuccessful in their experiences in this study. Perhaps more extensive questions are needed to stimulate deeper reflection, or an interview format might be more effective at eliciting success and failure responses.

Great care was taken to not mention at-home composition to students, for fear that they would report doing so in an effort to please their teacher, when in fact composing outside of the classroom was not something they were doing or would have done on their own. However, the relatively few number of students who referenced at-home composition in their Composing Diaries or Out-of-Class-Engagement letter suggests that these methods might not have been the best ways to gather this data. Perhaps composing at home should have been presented to students as an option from the beginning of the treatment period. Or, perhaps student work could have been checked at the end and beginning of each session to see if any progress had been made in between.

Few significant differences were found between the two treatment groups (open and closed tasks). Anecdotal evidence suggests that the groups became increasingly similar as the eight weeks progressed, and students in Treatment B (closed task group) treated the tasks as more open when they realized there was no "punishment" for straying

outside the guidelines of the assignment. Perhaps in a future study, the closed tasks should be more closed and consist of even more parameters. For example, for Task 3, students were given a four-measure phrase and told to finish the phrase. A more closed version of that task could be to define *how* students were to finish the phrase. Perhaps they could finish the phrase using four more measures consisting of quarter, eighth, and half notes, ending on concert B-flat, and featuring only one instrument. Finally, establishing consequences for students that strayed outside of the guidelines could ensure the tasks stay closed. For example, maybe students would only be allowed to record their pieces if the guidelines were met.

The Attribution Survey was an effective way of measuring the success and failure attributions of students in both treatment groups, however, the results of this survey can only be discussed in terms of the critical incident (the eight-week treatment period) students were asked to reference. Inferences cannot be drawn about students' overall attribution disposition in music based on the results of this study.

<center>Future Research/Recommendations</center>

As more music teachers search for ways to include composition in their music classes, researchers have studied task design as it relates to music composition in the classroom in terms of students' composition process (DeLorenzo, 1989; Kaschub, 1997, 1999; Kennedy, 2002), the quality of students' final compositions (Brinkman, 1994; McCoy, 1999; Smith, 2004), students' perceptions of success (Burnard, 1995; Hickey, 1997) and attitude (Riley, 2006). The present study examined the differences between students composing in an open task environment (Treatment A) and students composing in a closed task environment (Treatment B) in terms of feelings of success, attributions of

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success and failure, predictions of future success, and out-of-class engagement. The results of this study reaffirm that students' perception of the task plays a role in their perceptions of success or failure. While the canon of composition research is growing, more research is still needed to help music teachers implement composition in their curriculum in a way that is effective and meets students' needs.

While the present study involved two treatment groups (open and closed tasks), anecdotal evidence from the researcher journal suggested that the students in Treatment B gradually started viewing their treatment condition as a choice task, rather than a prescriptive task, meaning they viewed the task at hand as an option rather than a requirement. Burnard (1995) used a choice task option for one of her three treatment groups, along with open and closed tasks. In further research, this "choice option" should be explored as a middle ground between open and closed task conditions.

Extensive research has been done using Attribution Theory in musical contexts (Asmus 1985, 1986; Austin & Vispoel, 1992, 1995, 1998; Chandler, Chiarella & Auria, 1998; Dick, 2006; Legette, 2003; Schatt, 2011; Schmidt, 1995). Further research is needed to help music teachers understand how to discover these attributions in the classroom and then address them in an effective way. Finally, taking demographic and musical background into consideration was beyond the scope of the present study; however, more research is needed to help music teachers understand how a student's background contributes to his or her work and motivation in composition.

In summary, this study helped to fill a gap in the literature that specifically addresses feelings of success and failure in terms of task design in young instrumental music students. While continuing to grow the body of research in music composition is

important, it is equally important to ensure that the results are communicated to practicing teachers so that they may use them to meaningfully affect change in their classrooms and in their students. It is important to show students that making music is not just reading notes from a page, but also creating and organizing sound in new ways through composition and exploration. During the last treatment period of my study, as I was organizing all the students' final compositions into my file, one of the students approached me and remarked, "Hey, that's kind of cool. None of that music existed before we started composing!" We must continue to explore new ways and methods of teaching composition so that all music students can have the experience of creating music that did not exist before.

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APPENDIX A

PERMISSION

September, 6th 2013

To Whom It May Concern,

Emily Schwartz has my permission to conduct her dissertation research on lesson design and motivation for Arizona State University with Tracy Werner in her 7th grade band classroom. Because the lessons do not deviate from normal instruction, and because individual student data is not reported, a parent permission form is not required. Please contact me with any questions.

Sincerely,

James Verrill

Mr. James Verrill, Principal
Kyrene Aprende Middle School
(480) 541-6200

To:	Sandra Stauffer
	MUSIC
From:	Mark Roosa, Chair
	Soc Beh IRB
Date:	09/06/2013
Committee Action:	**Exemption Granted**
IRB Action Date:	09/06/2013
IRB Protocol #:	1308009567
Study Title:	Student Motivation Under Two Instructional conditions in Middle School Band

The above-referenced protocol is considered exempt after review by the Institutional Review Board pursuant to Federal regulations, 45 CFR Part 46.101(b)(1) .

This part of the federal regulations requires that the information be recorded by investigators in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.   It is necessary that the information obtained not be such that if disclosed outside the research, it could reasonably place the subjects at risk of criminal or civil liability, or be damaging to the subjects' financial standing, employability, or reputation.

You should retain a copy of this letter for your records.

APPENDIX B

BACKGROUND QUESTIONNAIRE

Before we get started writing our own music, please tell me a little about yourself:

Age:_____

Grade in school: _____

Boy or Girl?_____

Instrument:_____

When did you start playing your band instrument?_____

Was that the first instrument you learned to play? (Yes or No)_____

If No, what was your first instrument and when did you learn to play?

_____

_____

Have you ever made up your own music before? (Yes or No)_____

If Yes, when, where, and for what instrument?

_____

_____

_____

Have you ever been in a music class other than band?
(Yes or No)_____

If Yes, what was that class?_____

Is there anything else you'd like me to know about you?

Thanks for that information!

APPENDIX C

TREATMENT A SCRIPT

Treatment A
Instructor Script

Hi, my name is Emily Schwartz and I'm going to be helping you with a music-making project for the next few weeks. Before I give you all the details, I just need to get a little bit of information from you first. I'm passing out a piece of paper that has a few questions on it about who you are and the type of musical things you've done before. This will just let me get to know you a little bit and help me make the next few weeks go smoothly.

(Pass out background survey)

Thanks for that information. So, let me tell you about this project. We are going to make a class CD and all of you will get a copy. The best part is, that *you* get to make up the music. Every Friday, for the next 8 weeks, you'll get the chance to work on your piece. How the piece sounds, how long it is, how fast it is, all of that is totally up to you. If you want to work together with your friends, that's fine, or you can choose to work by yourself. You might choose to spend all 8 weeks on one piece, or you might write as many different pieces as you have time for.

There are only three rules. The first rule is that you have to figure out a way to help you remember what you've done each week. You can write your piece on staff paper, write the letter names, draw a picture, write sentences to yourself, as long as you can look at it and remember what it was that you created the week before.

The second rule is that you have to use the time to create your own music. Think about how it's going to sound in this room when everyone is working on their music at the same time. What do you think it will sound like? So, do you think we can have people off task? Or will that just make it even harder to work?

The third rule is that you or someone in your group has to be able to play the piece. This is really important because at the end of the 8 weeks, everyone's going to pick their favorite piece they wrote to record onto the CD.

 While you're working, I'll be walking around for you to ask me any questions that might come up. Then at the end of class, I have one more piece of paper with three quick questions for you to fill out. OK? Are there any questions before we get started? Then go ahead and find a place to work.

With 5 minutes left of class
Thanks for all your hard work today, this CD is going to sound really great. If you finished a piece today, go ahead and write your name on it and turn it into me. I'm not going to keep it, I'm just going to make a photocopy of it and give it back to you next time. If you didn't finish today, go ahead and put what you did in your band folder.

While you're doing that, I'm going to pass out a Composing Diary to each of you. This is just a short form with three questions about what you did today. When you're finished turn it in to me.

APPENDIX D

TREATMENT B SCRIPT AND TASKS

Treatment B
Instructor Script

Hi, my name is Emily Schwartz and I'm going to be helping you with a music-writing project for the next few weeks. Before I give you all the details, I just need to get a little bit of information from you first. I'm passing out a piece of paper that has a few questions on it about who you are and the type of musical things you've done before. This will just let me get to know you a little bit and help me make the next few weeks go smoothly.

(Pass out background survey)

Thanks for that information. So, let me tell you about this project. We are going to make a class CD and all of you will get a copy. The best part is, that *you* get to write the music. Every Friday, for the next 8 weeks, you'll get the chance to work on your piece. If you want to work together with your friends, that's fine, or you can choose to work by yourself. You might choose to spend all 8 weeks on one piece, or you might write as many different pieces as you have time for. The first kind of piece you're going to write is one that uses only the notes from the B-flat concert scale, and starts and ends on B-flat. Whenever you finish, I have other ones for you too.

There are only three rules. The first rule is that you have to figure out a way to help you remember what you've done each week. You can write your piece on staff paper, write the letter names, draw a picture, write sentences to yourself, as long as you can look at it and remember what it was that you created the week before.

The second rule is that you have to use the time to create your own music. Think about how it's going to sound in this room when everyone is working on their music at the same time. What do you think it will sound like? So, do you think we can have people off task? Or will that just make it even harder to work?

The third rule is that you or someone in your group has to be able to play the piece. This is really important because at the end of the 8 weeks, everyone's going to pick their favorite piece they wrote to record onto the CD.

While you're working, I'll be walking around for you to ask me any questions that might come up. Then at the end of class, I have one more piece of paper with three quick questions for you to fill out. OK? Are there any questions before we get started? Then go ahead and find a place to work.

With 5 minutes left of class
Thanks for all your hard work today, this CD is going to sound really great. If you finished a piece today, go ahead and write your name on it and turn it into me. I'm not going to keep it, I'm just going to make a photo copy of it and give it back to you next time. If you didn't finish today, go ahead and put what you did in your band folder.

While you're doing that, I'm going to pass out a Composing Diary to each of you. This is just a short form with three questions about what you did today. When you're finished write your name on the top and turn it in to me.

Composing Task #1

<center>**B-Flat**</center>

Please write a piece that:

1. Uses the notes of the B-flat concert scale

2. Starts and ends on a B-flat

All other musical decisions are up to you. You may choose to work by yourself, or in a small group and can have as much time as you need. If you finish early, you may write another piece following these same instructions.

Composing Task #2

<p align="center">Slow it Down</p>

Please write a piece that is:

      1. Slow and solemn (serious sounding)
      2. Uses long notes

You have as much time as you need to finish this composition. If you finish early, you

may write another piece using the same directions.

Composing Task #3

Finish it Off

The composition below is only half written! Below, you'll see the beginning of a piece. It's your job to write the ending. You may choose to work by yourself or with a small group. You have as much time as you need to finish this composition. If you finish early, you may write another piece using the same directions.

Composing Task #4

Poetry

Pick your favorite poem from the options below. Write a piece to go along with the poem you chose. How you choose to represent your poem through music is up to you.
You have as much time as you need to finish this composition.

If you finish early, you may write another piece using either the same poem or a different poem.

Poem #1- By Christina Rosetti

Who has seen the wind?
Neither I nor you
But when leaves hand trembling
The wind is passing through

Who has seen the wind?
Neither you nor I
But when trees bow down their heads
The wind is passing through

Poem #2- By Robert Louis Stevenson

The rain is raining all around
It falls on field and tree
It rains on the umbrellas here
And on the ships at sea

Poem #3- By Christina Rosetti

Brown and furry
Caterpillar in a hurry
Take your walk
To the shady leaf or stalk
Or what not
Which may be the chosen spot
No toad spy you
Hovering bird of prey pass by you
Spin and die
To live again, a butterfly

Composing Task #5

Something Scary

Please write a piece that sounds *scary* to you.

You have as much time as you need to finish this composition. If you finish early, you

may write another piece using the same directions.

Composing Task #6

Just Three Notes

Please create a piece of music using *only* three notes.

You may repeat those notes in any order or as many times as you wish. You may use eighth notes, quarter notes, half notes, rests, or any other rhythm you'd like. The piece can be as long or short as you want and you may choose to work as an individual or as a small group.

You have as much time as you'd like to finish this assignment. If you finish early, you may composing another piece using the same directions.

Composing Task #7

Mary Had a Little Lamb (kind of)

For this composing task, you will write a piece of music that is similar to Mary Had a Little Lamb, but not exactly the same. This type of music is called a *variation*. Here are the notes to Mary Had a Little Lamb:

Please write a composition that uses the same *notes* as Mary Had a Little Lamb, but different *rhythms*. For example the first measure of Mary Had a Little Lamb is:

You could change the rhythm to be:

Composing Task #8

<center>**Speed it Up**</center>

Please write a piece that is:

       1. Fast and energetic
       2. Uses short notes

You have as much time as you need to finish this composition. If you finish early, you may write another piece using the same directions.

APPENDIX E

COMPOSING DIARY

Composing Diary

Date:_____

Think about your experience composing today and answer the following questions:

1. What did you do today?

2. How did you feel about your work today?

3. Is there anything else you'd like me to know?

APPENDIX F

MUSIC ATTRIBUTION SURVEY

On a scale of 1-6, how successful did you feel during the past 8 weeks of composing?

1
Unsuccessful

2

3

4

5

6
Successful

Look at the number you circled above.

If you circled a 4, 5 or 6, please fill out the **BLUE** pages only.
If you circled a 1, 2 or 3 please fill out the **GREEN** pages only.

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(Blue) Think back to your experiences with composing music over the past eight weeks. The following statements are possible reasons why you might have done well composing music. Read each statement carefully, and circle the extent to which you agree or disagree with the statement. Be sure to respond to all statements.

I did well on these composition activities because...

1. I made an honest and sincere effort

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

2. I focused on how to do the activity correctly

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

3. The activity was not difficult

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

4. I have natural music ability

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

5. The odds were in my favor

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

6. I worked effectively on my compositions

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

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7. I am more talented in music than other students

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

8. I was able to correct mistakes when mistakes occurred

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

9. I knew when to try a different approach

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

10. I had good luck

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

11. I could tell when I was making mistakes

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

12. The activity was enjoyable

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

13. I got along with the teacher

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

14. My classmates encouraged me

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

15. I was having a good day when we composed

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

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16. The composing activities went my way

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

17. My family members are talented in music

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

18. The teacher treated everyone fairly

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

19. My family members encouraged me

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

20. I tried hard

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

21. I knew the best ways to compose

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

22. My classmates were supportive

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

23. The composing activities were not complicated

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

24. Music ability runs in my family

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

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25. I stuck with the composing activities

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

26. I tried to do my best

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

27. I kept going even when I got frustrated

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

28. I am talented in music

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

29. My parents and relatives are musical

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

30. I knew when mistakes were occurring

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

31. The composing activities were fun

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

32. I made a strong effort

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

33. I was interested in the composing activities

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

34. I found the composing activities exciting

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

35. I liked the other students in class

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

36. I am a lucky person

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

37. The composing activities were easy

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

38. I worked hard

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

39. I have a history of success in music

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

40. I have strong music skills

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

41. The teacher was patient with me

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

42. I did not give up easily

Strongly Disagree — Disagree — Sort of Disagree — Sort of Agree — Agree — Strongly Agree

43. I kept going when things got difficult

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

44. I used the right composing strategies

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

45. My family supports me

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

46. I got along with other students in the class

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

47. I liked the teacher

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

48. I liked the composing activities

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

49. The composing activities were simple

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

50. I set goals for myself when working

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

51. All students did well composing

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

52. The teacher understood me

Strongly Disagree | Disagree | Sort of Disagree | Sort of Agree | Agree | Strongly Agree

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(Green) Think back to your experiences with composing over the past eight weeks. The following statements are possible reasons why you might not have succeeded. Read each statement carefully and circle the extent to which you agree or disagree with each statement. Be sure to respond to all statements.

I did not succeed on these composition activities because...

1. I didn't make an honest and sincere effort

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

2. I didn't focus on how to do the activity correctly

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

3. The composing activities were difficult

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

4. I don't have natural music ability

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

5. The odds were not in my favor

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

6. I didn't work effectively on my compositions

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

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7. I am less talented in music than other students

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

8. I was not able to correct mistakes when they occurred

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

9. I didn't know when to try a different approach

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

10. I had bad luck

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

11. I could not tell when I was making mistakes

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

12. The activity was not enjoyable

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

13. I didn't get along with the teacher

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

14. My classmates didn't encourage me

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

15. I was not having a good day when we composed

Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

Statement						
16. The composing activities didn't go my way	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
17. My family members are not talented in music	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
18. The teacher didn't treat everyone fairly	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
19. My family members didn't encourage me	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
20. I didn't try hard	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
21. I didn't know the best ways to compose	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
22. My classmates were not supportive	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
23. The composing activities were complicated	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree
24. Music ability doesn't run in my family	Strongly Disagree	Disagree	Sort of Disagree	Sort of Agree	Agree	Strongly Agree

25. I gave up on the composing activities

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

26. I didn't try to do my best

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

27. I didn't keep going when I got frustrated

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

28. I am not talented in music

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

29. My parents and relatives are not musical

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

30. I didn't know when mistakes were occurring

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

31. The composing activities were not fun

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

32. I didn't make a strong effort

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

33. I was not interested in the composing activities

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

34. I didn't find the composing activities exciting

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

35. I didn't like the other students in class

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

36. I am not a lucky person

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

37. The composing activities were difficult

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

38. I didn't work hard

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

39. I don't have a history of success in music

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

40. I don't have strong music skills

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

41. The teacher was not patient with me

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

42. I gave up easily

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

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43. I didn't keep going when things got difficult

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

44. I used the wrong composing strategies

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

45. My family doesn't support me

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

46. I don't get along with other students in the class

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

47. I don't like the teacher

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

48. I didn't like the composing activities

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

49. The composing activities were hard

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

50. I didn't set goals for myself when working

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

51. All students did poorly composing

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

52. The teacher didn't understand me

Strongly Disagree   Disagree   Sort of Disagree   Sort of Agree   Agree   Strongly Agree

The Music Attribution Survey contains 11 subscales

Ability Sub-Scale
Questions: 4, 7, 28, 39, 40

I have natural music ability
I am more talented in music than other students
I am talented in music
I have a history of success in music
I have strong music skills

Effort Sub-Scale
Questions: 1, 20, 26, 32, 38

I made an honest and sincere effort
I tried hard
I tried to do my best
I made a strong effort
I worked hard

Persistence Sub-Scale
Questions: 25, 27, 42, 43

I stuck with the composing activities
I kept going even when I got frustrated
I did not give up easily
I kept going when things got difficult

Strategy Sub-Scale
Questions: 2, 6, 21, 44, 50

I focused on how to do the activity correctly
I worked effectively on my compositions
I knew the best ways to compose
I set goals for myself when working

Metacognition Sub-Scale
Questions: 8, 9, 11, 30,

I was able to correct mistakes when mistakes occurred
I knew when to try a different approach
I could tell when I was making mistakes
I knew when mistakes were occurring

Interest Sub-Scale

Questions: 12, 31, 33, 34, 48

The activity was enjoyable
The composing activities were fun
I was interested in the composing activities
I found the composing activities exciting
I liked the composing activities

Difficulty Sub-Scale
Questions: 3, 23, 51, 37, 49

The activity was not difficult
The composing activities were not complicated
All students did well composing
The composing activities were easy
The composing activities were simple

Luck Sub-Scale
Questions: 5, 10, 15, 16, 36

The odds were in my favor
I had good luck
I was having a good day when we composed
The composing activities went my way
I am a lucky person

Family Influence Sub-Scale
Questions: 17, 19, 24, 29, 45

My family members are talented in music
My family members encouraged me
Music ability runs in my family
My parents and relatives are musical
My family supports me

Teacher Influence
13, 18, 41, 47, 52

I got along with the teacher
The teacher treated everyone fairly
The teacher was patient with me
I liked the teacher
The teacher understood me

Peer Influence

14, 22, 35, 46

My classmates encouraged me
My classmates were supportive
I liked the other students in class
I got along with other students in the class

APPENDIX G

FUTURE SUCCESS SURVEY

Please answer the following three questions by circling the response that is most true for you:

1. Pretend that your band teacher gives you another opportunity to compose next semester. How successful do you think you are likely to be at composing?

Extremely Unsuccessful   Very Unsuccessful   Unsuccessful   Successful   Very Successful   Extremely Successful

2. How motivated would you be to compose music?

Extremely Unmotivated   Very Unmotivated   Unmotivated   Motivated   Very Motivated   Extremely Motivated

3. If you had the opportunity to sign up for an afterschool club called "Composing in Band" how likely would you be to sign up?

Extremely Unlikely   Very Unlikely   Unlikely   Likely   Very Likely   Extremely Likely

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APPENDIX H

OUT-OF-CLASS-ENGAGEMENT LETTER

Think back to the composing you've done in the past few months. Pretend that you have a friend who is also in band and is about to start composing for the first time. Write a letter of advice to that friend so they know what to expect in the process. In your letter, you can explain:

- What the composing assignments in class were like
- The favorite piece you wrote for class and why it was your favorite
- What (if any) composing you did at home
- Any compositions you've written since the composing assignments were finished
- Anything else you think it'd be helpful for them to know

Use the space below and on the following page to write your letter

Dear_____,

APPENDIX I

RESEARCHER CODING INSTRUCTIONS

Coding Instructions

Please read the attached Composing Diary responses and rate each response as being either a success statement, neutral statement, or failure statement. Please mark a "3" for success, a "2" for neutral, and a "1" for failure.

The questions on the Composing Diaries are:

1. What did you do today?
2. How did you feel about your work today?
3. Is there anything else you'd like me to know?

Examples of *success* statements:

"I feel very productive" or "We got a lot done today."

Examples of *neutral* statements:

"We worked on our composition today," "It was okay" or "No, I have nothing else I'd like you to know."

(blank responses are coded as neutral responses)

Examples of *failure* statements:

"We failed," or "I feel awful"

Thank you for your help!

Emily Schwartz