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General music teachers' practices of cooperative learning in two elementary music classrooms

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BOSTON UNIVERSITY

COLLEGE OF FINE ARTS

Dissertation

GENERAL MUSIC TEACHERS' PRACTICES OF COOPERATIVE LEARNING IN

TWO ELEMENTARY MUSIC CLASSROOMS

by

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Submitted in partial fulfillment of the

requirements for the degree of

Doctor of Musical Arts

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DEDICATION

I would like to dedicate this study to my parents, Younghwan-Edmond Kim and Choungja-Alfreda Song. Thanks to your endless love, support, and inspiration, I have never given up on my dreams. I love you so much.

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GENERAL MUSIC TEACHERS' PRACTICES OF COOPERATIVE LEARNING IN TWO ELEMENTARY MUSIC CLASSROOMS JI HYUN KIM

Boston University College of Fine Arts, 2018

Major Professor: Kinh T. Vu, Ph.D., Assistant Professor of Music, Music Education ABSTRACT

The purpose of the study was to examine general music teachers' practices of cooperative learning in two elementary music classrooms. Using the intrinsic case study method, I examined elementary general music teachers' perspectives on cooperative learning, the utilization of cooperative learning in their general music classrooms, and the challenges the music educators faced in creating and implementing cooperative learning.

I selected one general music classroom in two elementary schools in Boston, Massachusetts—totaling two general music teachers from different schools. I conducted eight class observations and three interviews for each participant during the fall 2016 semester. From separate and cross-case analyses, I found the following: (1) the two teachers' instructions were linked to the characteristics of cooperative learning, (2) they believed that cooperative learning provided opportunities to improve students' academic development in music and promote positive interpersonal relationships, and (3) both teachers used their own strategies for cooperative learning in order to maximize students' learning. These findings provided evidence that cooperative learning engaged students in the process of learning music and, in addition, fostered positive interpersonal

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relationships. Moreover, this study suggested that music educators might undertake an effort to thoroughly understand students' cognitive development when they wish utilize cooperative learning. Although this study was subject to a number of limitations due to its scope, the findings may contribute to the body of research on cooperative learning in elementary music education.

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CHAPTER I

INTRODUCTION

Background

Alone we can do so little. Together we can do so much.—Helen Keller Working together can be an inspiring way to accomplish common goals. If teachers facilitate students in working together and sharing their opinions, students may enjoy the process of learning, as well as obtain the desired goals. Cooperative learning is

an instructional strategy in which students work together to maximize their own and each other's learning (Johnson & Johnson, 2005b). Since Deutsch's (1949) study demonstrated the power of cooperative learning, this strategy has been widely used throughout school systems in the United States (Johnson & Johnson, 2002); therefore, it is important for classroom teachers to learn this instructional strategy (Aubrey-Martinez, 2016).

In all levels of education from elementary school to the university, cooperative learning is used as an instructional practice to educate, motivate, and inspire learning (Johnson & Johnson, 2009). Educators acknowledge that utilizing an active learning approach, such as cooperative learning, is one of the most effective ways to engage the majority of students (Beetham & Sharpe, 2013). Since interest in student-centered pedagogical environments and cooperative learning has been growing, Kaplan and Stauffer investigated cooperative learning in music (Kaplan & Stauffer, 1994). Based on their research, other researchers have also investigated the influence or effects of cooperative learning in music on various dependent variables, such as rehearsal technique for high school band performance (Compton, 2015), Pop and world music in secondary

music education (Evelein, 2006), music achievement and learner engagement in the secondary large ensemble (Johnson, 2013), and music performance achievement, motivation, and attitudes among high school band students (Larson, 2010). Although these researches have focused on cooperative learning in music and music education, it is difficult to find research on elementary general music teachers' practices of cooperative learning.

In primary schools, foundational learning includes students' learning basic knowledge such as the spelling, arithmetic, and historical events. General music education in primary schools plays a crucial role of laying the foundation in which students are exposed to core musical concepts such as melody, harmony, rhythm, and other musical elements. In addition, general music is "not exclusively focused on a singular musical activity, role, or type of music" (Abril & Gault, 2016, p. 10). Such creative musical experiences are likely to end around the sixth grade (Campbell, 1991), however, and not extend into secondary school music classrooms. Studies conducted in secondary classrooms also indicate that students rarely experience cooperative learning (Kendall, 2011). Moreover, "when they do, classroom management often becomes a barrier to student academic engagement" (Kendall, 2011, p. vii).

Because of my own positive experiences with cooperative learning in classrooms, learning of the gradual decline in the use of cooperative learning as students advance to higher levels of education, as noted by Kendall (2011), intrigued me. In addition, I found out that some elementary music teachers considered the terms of cooperative learning and collaborative learning interchangeable because both strategies emphasize students'

cooperation and learning with peers. Cooperative learning, however, centers on grades kindergarten through twelve while collaborative learning focuses on college and university educational levels (Bruffee, 1999). Since this study was intended to focus on elementary general music teachers' practices in their classrooms, the term *cooperative learning* was more suitable to use here.

Before conducting this study, I assumed that cooperative learning, regardless of grades, could be modified and adapted to all learning environments with any curriculum. Furthermore, I thought that cooperative learning served as an effective strategy to introduce foundational musical concepts by increasing positive interaction among students and allowing them to engage actively with music. To verify my assumption, I chose to examine two music teachers' pedagogical practices of cooperative learning in a general music classroom (grades two and four) located in two different elementary schools.

Statement of the Problem

Educators have long investigated the diversity of learning strategies, such as cooperative learning (Siegel, 2005), integrating subject matters (Roehler, Fear, & Herrmann, 1998), problem-based learning (Watson & West, 1996), self-directed learning (McCauley & McClelland, 2004), and strategic e-learning (Tsai, 2009). Among these various strategies, cooperative learning has exerted influence on almost every academic field (Johnson & Johnson, 2016). It is not therefore surprising that cooperative learning features prominently in such core subjects as in English and language (Chen, 2007; Chen, M-L., 2005; Chiaravalloti, 2012; Collins, 2012; Fox, 2010; Khuvasanond, 2013; Lee,

2008; Lencioni, 2013; Queen, 2009), mathematics (Al-Halal, 2001; Dubois, 1990; Ekwuocha, 2012; Hecox, 2010; Kendall, 2011; Phillips, 2010; Quattrin, 2007; Rivera, 2013; Torchia, 2012; Williams, 2004), and science (Campbell, 2013; Ebrahim, 2012; Ransdell, 2001).

Despite the research in support of cooperative learning, traditional teachercentered instructions are still considered the primary mode of instruction for many inservice teachers (Campbell, 1991b). According to Campbell (1991b), due to their lack of training and experience, many music teachers are reluctant to teach using cooperative learning. Even when the teachers utilize cooperative learning, they require students to simply work together (Cangro, 2013). Nevertheless, cooperative learning entails more than just grouping students (Johnson, Johnson, & Smith, 1991; Ledlow, 1999). In order to realize the full potential of cooperative learning, elementary general music teachers need to go beyond simply organizing students into groups.

Teachers who engage students in a vibrant and diverse curriculum of musicianship, leadership, and sharing are able to encourage children to develop their intellectual and artistic capabilities (Regelski, 2004). Towards this goal, scholarship on cooperative learning suggests that if elementary general music teachers can facilitate students to work together, share their opinions, and achieve common goals, students may be better able to enjoy the process of learning music together. Such positive incremental contributions of cooperative learning may contribute to students' cultivating a longlasting interest in music. In addition, the students may also gain the crucial social benefits of learning how to work as a team.

Need for the Study

Cooperative learning encourages students to work with peers in the classroom to understand common goals, to cultivate accountability and responsibility, and to respect others through discussion (Johnson & Johnson, 1994; Slavin, 1990). Since it has been widely incorporated in the field of education in the 1960s (Johnson & Johnson, 2002), many scholars have supported the premise that cooperative learning promotes the positive outcome of academic development (Chen, 2007; Chiaravalloti, 2012; Kendall, 2011; Khuvasanond, 2013; Lee, 2008; Phillips, 2010; Quattrin, 2007; Queen, 2009; Rivera, 2013). For example, Campbell (2013) claimed cooperative learning promoted students' academic development in science. Hecox (2010) stated that cooperative learning was an effective instructional strategy for gifted students in elementary mathematics.

As an instructor of group piano classes at Boston University from 2008 until 2012, I applied cooperative learning such as Number Heads activity. For first five to seven minutes before the start of Number Heads activities, I gave handouts to my students, explained how to create chord progressions, and introduced common chord progressions for first five to seven minutes. During the short lecture, they learned how to use essential chords in a major or minor key and understood the common chord progressions, including I-IV-V and ii-V-I. I then broke them into small groups. I grouped my students one through four. Students who received the same number were seated together as group numbers 1–4. Each group received a different example of the chord progressions, and they worked together to solve their chord progressions for five minutes.

All group members tried to interpret the chord progressions. In a cooperative learning environment, they communicated with peers. After five minutes, one student, designated the head from each group, moved to another group and explained the solution to their chord progression to the members of the new group. The remaining students in the new group welcomed the head from the other group and listened to his/her explanation carefully. They asked questions, answered questions, and discussed the chord progressions. During this cooperative learning activity, students enjoyed sharing their ideas, asked questions, and discussed chord progressions. In doing so, they had ample opportunities to communicate with their peers. After the group work, a number of students told me they had enjoyed the activity that they thought was helpful in understanding chord progressions.

This teaching experience of incorporating cooperative learning reminded me of my class observations and informal conversations with general music teachers in the Boston area in 2010. During these conversations, I found out that general music teachers were hesitant to utilize cooperative learning for various reasons, including, but not limited to, their lack of teaching experience with cooperative learning. Because I had personally found cooperative learning to bring positive outcomes, I was surprised to learn of this hesitancy. These observations and conversations led me to ask how cooperative learning can be utilized by general music teachers in elementary music classrooms.

A search of four major search engines for related studies since 2014 on cooperative learning yielded the results outlined in Table 1. As the table illustrates, comparatively few studies have been conducted in the field of music education,

particularly in elementary music education. The ratio of these articles to the total number

of articles on cooperative learning was between 0.4% and 6.5% as of September 2016

(see Table 1).

Table 1.

Search Engine	Total Number of Articles	Total (and Percent) of
	on Cooperative Learning ^a	Articles on Cooperative
		Learning in Music at
		Elementary Schools ^b
Google Scholar	2,790,000	12,300 (0.4%)
Academic Search Premier	11,560	758 (6.5%)
ERIC	19,543	140 (0.7%)
JSTOR	84,273	2,820 (3.3%)

Results of a September 2016 Internet Search on Cooperative Learning in General Music at Elementary Schools

a. Search Criteria: "Cooperative learning"

b. Search Criteria: "Cooperative learning" and "Music" and "Elementary schools"

Although I was able to locate some studies that entailed cooperative learning in music education (Cangro, 2004; Costes-Onishi & Caleon, 2016; Cornacchio, 2008; Freiberg, Huzinec, & Templeton, 2009), it was difficult to find literature focusing on general music teachers' pedagogical practices using cooperative learning in elementary music classrooms. To address this gap in research, I observed two music teachers in two different elementary schools in metropolitan Boston, Massachusetts, with the aim of studying elementary general music teachers' classroom practices, especially regarding their utilization of cooperative learning. The results of this qualitative study might provide insights to explain the teachers' reluctance to employ cooperative learning activities. In addition, it might present a meaningful source of information for music educators and school administrators interested in classroom strategies for incorporating cooperative learning in music education.

Theoretical Framework

Social interdependence began to be theorized while Koffka (1935)—one of the founders of the Gestalt school of psychology-argued that groups were dynamic wholes in which the members experienced and evidenced various levels of interdependence (Johnson & Johnson, 2016). Based on Koffka's studies, social psychologist Deutsch (1949) investigated how people cooperated in teams. Deutsch formulated a theory of cooperation and competition, arguing that positive interdependence occurs when students share their ideas with others to achieve their common goals (Deutsch, 1949; Johnson & Johnson, 2016). While working together, the students take on a role, help and assist each other, exchange necessary resources, and communicate with group members. Cooperatively linked, they develop accountability and responsibility and learn how to respect others. In contrast, negative interdependence, characterized by arguments and conflicts, may also exist in group work among the group members (Johnson & Johnson, 2005, 2016; Johnson & Johnson, 1991). For example, some students compete against each other over their academic results. Those competitively linked students experience negative interdependence. When students reach their goal without any assistance from other group members, no interdependence occurs (Johnson & Johnson, 2005). In such

cases, students focus on obtaining their goals "regardless of whether other individuals in the situation attain or do not attain their goals" (Johnson & Johnson, 2016, p. 164).

In the 1960s, Johnson and Johnson applied social interdependence theory to the education field building on the works of Deutsch (Johnson, 1970). Other researchers have also investigated the influence or effects of social interdependence on various dependent variables, such as individual achievement (Bloom, 1984), group and organizational productivity (DeVries & Edwards, 1973), motivation (Roseth, Johnson, & Johnson, 2008), job satisfaction and self-esteem (Panitz, 1999b), and psychological health (Whitener, 2016). Such studies concluded that social interdependence allowed individuals to interact with each other and achieve goals that benefited others as well as themselves. According to Roseth, Johnson, and Johnson (2008), if a cooperative structure exists, collective student interactions can improve such individual students' emotional factors such as engagement with the learning process, motivation, self-esteem, selfimage, attitudes toward school, and development of resistance to social isolation. Johnson and Johnson (2002), and Morgan, Whorton, and Gunsalus (2000) also emphasized the necessity of cooperative learning environments as opposed to competitive or individualistic environments for fostering positive interactive relationships.

Purpose and Research Questions

The purpose of this study was to examine general music teachers' practices of cooperative learning in elementary music classrooms in two elementary schools in Boston. In this study I addressed the following research questions:

1. What are elementary general music teachers' perspectives on cooperative

learning?

- 2. How do the elementary music teachers implement cooperative learning in their general music classrooms?
- 3. What are the challenges the music educators face in creating and implementing cooperative learning into their classrooms?

Limitations and Boundaries of this Study

This study was subject to three limitations due to the scope of the project. First, this study consisted of a limited number of participants. I selected one general music classroom in two elementary schools, totaling two general music teachers from different schools. Second, this case study had a limited data collection period. As a non-participant, I undertook eight classroom observations at each school and conducted three interviews with each teacher in the fall 2016 semester. If a study had been conducted either over a longer or shorter duration, it might have yielded different results. Third, I conducted this study in metropolitan Boston. To select research sites, I used a convenience sampling and chain-referral sampling (or snowball sampling) at the same time (See chapter 3.) Two elementary schools were chosen based on accessibility and proximity, as well as availability. Because of the limitations outlined above, it is difficult to generalize this study's results to apply to other situations.

Organization of this Study

In Chapter I, I presented the background of this study, need for the study, the purpose of the study, research questions, theoretical framework, and limitations. In Chapter II, I review relevant literature about and related to cooperative learning in general and music education. In Chapter III, I describe the research design of the study, the rationale for the case study method, site selection, participants, data collection, data analysis, and trustworthiness. With Chapter IV, I report on the findings of this study and it is followed by cross case analysis in Chapter V. Finally, I conclude with a brief overview of the study, a discussion of the findings, implications, and suggestions for further study in Chapter VI.

CHAPTER II

LITERATURE REVIEW

This literature review provides the rationale for, and verifies the lack of, providing information on cooperative learning in music education, especially in elementary general music classroom settings. Throughout this chapter, three main strands are examined: cognitive development, theoretical foundation, and cooperative learning. In the section on cooperative learning, I present the following topics: the five components of cooperative learning, the types of cooperative learning, a cooperative learning strategies, a comparison between cooperative and collaborative learning, and a comparison between cooperative learning. Then, I examine related studies on cooperative learning in general education, music education, and elementary music education.

Cognitive Development

Having studied how thinking changes over childhood, educators and scientists have during the last century described developmental differences in cognition (Bjorklund & Causey, 2017). Psychologist Jean Piaget worked on children's thinking and learning. Piaget (1964) studied the learning process from birth through adolescence, and he outlined children's cognitive development as occurring in four stages: sensorimotor stage, preoperational stage, concrete operational stage, and formal operational stage. In the sensorimotor stage, infants can sense their environment by seeing, hearing, or touching, but are unable to express their thoughts, feelings, or ideas in words. The age of children in the preoperational stage ranges from two to seven years old. Children in this stage begin to use language for expressing their thoughts, feelings, or ideas. They also start to understand concepts, albeit weakly. For example, they cannot understand causality and logic. Between the ages of seven to eleven, they enter the concrete operational stage. The children can then describe their logical thinking regarding tangible objects and processes. In the final formal operational stage of cognitive development, according to Halpenny and Pettersen (2013), children's thinking is "abstract in the sense that they can mentally manipulate information without needing to rely on the concrete presence of this information" (p. 135).

Based on the Piaget's theory, researchers such as Johnson and Johnson (1998), Pope (2016), and Anderson (2016) studied the relationship between cognitive growth and learning. For example, Pope (2016) noted that "Piaget's theory provides valuable insight into children's interests, and what they are able to achieve during various stages of their development, and is based on discovery learning where students are able to construct knowledge that is meaningful within an educational setting that supports the varying ways students learn" (p. 17). Anderson (2016) stated there was correlation between individuals' cognitive development and "perspective-taking ability" (p. 25). Johnson and Johnson (1998) reported that cooperative learning enhanced cognitive growth and intellectual development.

Underpinning of Theoretical Framework

Social constructivism is a learning theory outlined by Vygotsky (1980), according to which individual students are able to develop and understand knowledge through sharing in a social context. Vygotsky also posited the zone of proximal development in which individual students can develop "problem solving under adult guidance or in

collaboration with more capable peers" (Vygotsky, 1980, p. 86). Based on Vygotsky's ideas, studies by social constructivists show how children interact with each other in the learning process (Hilk, 2013; Palincsar, 1998). In addition, some social constructivists— Bandura (1986), Hilk (2013), and Johnson, Johnson, and Smith (1991)—examined meaning of learning. For example, Bandura (1986) posited that learning primarily occurred through observation or modeling of others. Johnson, Johnson, and Smith (1991) defined learning as a personal transaction among other students and between teachers and students. Hilk (2013) also asserted that learning was promoted by "purposeful discussion, collaborative arguing, and reasoning to resolve cognitive conflicts" (p. 12). Additionally, Jones and Brader-Araje (2002) noted that social constructivism was commonly found in schools through the use of cooperative learning.

Theoretical Framework

Koffka (1935), one of the founders of the Gestalt school of psychology, argued that groups were dynamic wholes in which the members experienced and evidenced various levels of interdependence (Johnson & Johnson, 2016). Based on Koffka's studies, researchers began to study on cooperation and peer influence in the field of education (Johnson & Johnson, 2002, 2016; Johnson, Johnson, & Smith, 2014). Although the researchers' interest in social interdependence and its educational benefits decreased somewhat in the 1940s and 1950s, these concepts were revisited due to a search for alternative teaching and learning strategies that might de-emphasize the negative aspects of traditional educational models since the 1960s (Bruffee, 1999; Johnson, Johnson, & Smith, 2014; Slavin, 1990). Based on Koffka's studies, social psychologist Deutsch (1949) posited two types of social interdependence: cooperation as positive interdependence and competition as negative interdependence. Positive interdependence occurs when students share their ideas to achieve their common goals (Deutsch, 1949; Johnson & Johnson, 2016). Negative interdependence, characterized by arguments and conflicts, may also occur in the process of group work (Johnson &. F. Johnson, 1991; Johnson & Johnson, 2005, 2016). Unlike positive or negative interdependence, individuals' own orientation towards goals occurs when students reach their goal without external aids (Johnson & Johnson, 2005). In such cases, students focus on obtaining their goals "regardless of whether other individuals in the situation attain or do not attain their goals" (Johnson & Johnson, 2016, p. 164) so that students' academic success is independent of learning progress of other classmates.

In the 1960s, social interdependence theory was applied to the field of education (Johnson, 1970). Various dependent variables of social interdependence have been studied, such as group and organizational productivity (DeVries & Edwards, 1973), individual achievement (Bloom, 1984), motivation (Roseth, Johnson, & Johnson, 2008), and peer relationships (Hilk, 2013). Such studies concluded that individuals obtained benefits through interaction, and those students helped others to achieve goals. Johnson and Johnson (2002), and Morgan, Whorton, and Gunsalus (2000) also emphasized the need of cooperative learning environments—as opposed to competitive or individualistic environments—for fostering positive interactive relationships. However, Johnson, Johnson, and Smith (2014) showed that previous studies were mainly limited to

university settings and that since the 1960s, over 300 studies had been conducted focusing on cooperative, competitive, and individualistic learning in university and adult settings.

Cooperative Learning

Cooperative learning is the instructional use of small groups in which students work together and share ideas, information, and resources for achieving identified goals (Johnson & Johnson, 2005; Johnson, Johnson, & Smith, 2014; Sharan, 1999; Slavin, 1990). Sharan (1990) compiled a list of essential elements for cooperative learning and described the following elements that must exist to provide the adequate structure of a cooperative learning environment:

- 1. Positive interdependence
- 2. Considerable promotive (face-to-face) interaction
- 3. Personal responsibility (individual accountability) to achieve the group's goals
- 4. Interpersonal and small-group skills
- 5. Periodic and regular group processing (p. 27)

Positive interdependence, the first element in promoting cooperation among students, is generally accepted as occurring when students realize that each student in small groups is linked with one another in order to complete their assigned task successfully (Sharan, 1990). In such an environment, each group member encourages the others' efforts and this positive interdependence results in promotive interaction. (Johnson & Johnson 1994; Johnson, Johnson, & Smith, 2014; Sharan, 1990).

This second element, promotive (or face-to-face) interaction, is thought to exist

when students help each other, share their ideas, and encourage each other to complete their assignments (Johnson, Johnson & Smith, 1991, 2014). Students in general experience promotive interaction and cooperation by giving positive comments and supportive dialogue with others in their group (Dyson & Casey, 2016).

The third element is individual accountability, which exists "when the performance of each single child is monitored and the outcomes are offered back to the individual and the group" (Capodieci, Rivetti, & Cornoldi, 2016, p. 3). Each group member becomes accountable for his or her performance by learning together and helping one another (Capodieci, Rivetti, & Cornoldi, 2016; Johnson & Johnson, 2016). The group members, according to Johnson, Johnson, and Smith (2014), also need to know "(a) who needs more assistance, support, and encouragement in completing the assignment, and (b) that [a student] cannot 'hitch-hike' on the work of others" (p. 6).

Fourth, students need to use appropriate social skills (Johnson & Johnson, 1994; Johnson, Johnson, & Smith, 2014; Sharan, 1990; Slavin, 1990). For the success in cooperative learning, students need to possess leadership skills, build trust among others, communicate effectively, participate in decision-making, and resolve conflicts constructively (Johnson & Johnson, 2016).

The last element for cooperative learning is group processing—a process of group discussion that includes acknowledging possible changes that may need to be made (Sharan, 1990). The purpose of group processing, according to Johnson and F. Johnson (1991), is to clarify "the effectiveness of the members in contributing to the collaborative efforts to achieve the group's goals" (p. 203). Through group processing, according to

Johnson, Johnson, and Smith (2014), students may simplify the learning process, avoid inappropriate actions, and improve their cooperative learning skills.

Types of Cooperative Learning

The two types of cooperative learning are formal and informal cooperative learning (Johnson & Johnson, 1994, 2014). Teachers use formal cooperative learning when students need to complete assignments, such as reading a book, writing a report, or conducting an experiment. When teachers implement formal cooperative learning, they allow students to work together "for one class period to several weeks" (Johnson & Johnson, 2014, p. 842). During the formal cooperative learning activities, the teachers may: (1) announce the objectives of the day's lesson, (2) make pre-instructional decisions regarding size of the groups, students' role in the group, materials needed, and classroom arrangement, (3) give a lecture about the task, criteria for completion of the assignment successfully criteria, as well as expected student behaviors, (4) monitor the group works and assist students if needed, and (5) assess student outcomes (Johnson & Johnson, 1994, 2014).

In informal cooperative learning, students engage in the group work that lasts only a few minutes (Johnson, Johnson & Smith, 1991; Johnson & Johnson, 1994). Informal cooperative learning may be used to: (1) encourage student participation in the class materials, (2) set a conducive learning environment, (3) promote the expectations of the lesson, (4) ensure that students are mature enough in cognition to learn, (5) make a summary of the day's lesson, and (6) evaluate student understanding of the class material (Johnson & Johnson, 2014).

Cooperative Learning Strategies

Cooperative learning strategies have been modified since the 1970s (Igel, 2010), and, as a result, several versions of cooperative learning strategies have developed as follows: Jigsaw technique (Aronson et al., 1978), Jigsaw II (Slavin, 1980), Teams-games Tournaments (DeVries & Edwards, 1973), Team-Assisted Individualization (Slavin, 1983), Cooperative Integrated Reading and Composition (Madden et al., 1986), Student Team Learning (Slavin, 1990), Group Investigation (Y. Sharan & Sharan, 1992), Complex Instruction (Cohen, 1994), Cooperative Learning Structures (Kagan, 1994), Heads Together (Kagan, 1994), Structured Academic Controversy (Johnson & Johnson, 1988a), Academic Learning Together (Johnson & Johnson, 1999), and Cognitive Engagement in Cooperative Learning (Howard, 1996).

These strategies are used in a variety of classroom settings to enhance student learning. For example, Huang et al. (2014) introduced cooperative learning strategies to a mobile learning environment; Gambari and Yusuf (2015) studied effectiveness of computer-assisted STAD cooperative learning strategy on physics problem solving; Gibbons-Lester (2016) investigated the effects of Kagan structures on teaching strategies at a public elementary school; and Suresh and Reddy (2017) studied the effects of Jigsaw cooperative learning strategy in junior intermediate students in mathematics. I found it somewhat difficult, however, to find related research that investigated specific cooperative learning strategies in music education.

Cooperative versus Collaborative Learning

Cooperative learning and collaborative learning emphasize students' cooperation

and learning with peers (Bruffee, 1999). Since the two strategies are tied to the works of Dewey (1916) and Vygotsky (1980), they share assumptions. Along with their similarities, they are divergences. Thus, it is necessary to compare the two learning strategies. In addition, since cooperative learning centers on grades kindergarten through twelve (Bruffee, 1999) and this study is intended to focus on elementary general music classroom settings, the term *cooperative learning* was more suitable to use here.

Cooperative learning and collaborative learning share the following commonalities: (1) Since teaching and learning are shared experiences between the teacher and students, cooperative learning could be more effective than the situation where students passively receive information; (2) As a facilitator, a teacher should create a balance between lecture and small group activities. (3) With small group activities, each student is able to develop thinking and social skills, enhance individual abilities to use knowledge, reflect on his or her own assumptions and thought processes, and succeed to achieve the common goals. (4) Individual and group learning responsibilities can promote student intellectual development. (5) It is important to acknowledge the value of diversity in the multicultural democracy society (Matthews, Cooper, Davidson, & Hawkes, 1995).

In a collaborative learning setting, students are able to solve problems through interactions and collaboration and develop the improvisatory and creative skills of collaborative learning (Gaunt & Westerlund, 2013). In a similar way, students in a cooperative learning setting are able to interact with each other, accept others, and develop their cognitive skills (Dyson & Grineski, 2001).



Figure 1. A Venn Diagram of Cooperative Learning vs. Collaborative Learning Differences between collaborative learning and cooperative learning include groups' focuses, emphases, assumptions, as well as long-range goals (Bruffee, 1999). According to Bruffee (1999), cooperative learning centers on grades kindergarten through twelve while collaborative learning focuses on college and university educational levels. Second, their emphases differ. Since college and university students in collaborative learning are expected to use social skills in undertaking and completing tasks, teachers give the students the responsibility for their learning. As a result, it is recommended that teachers evaluate each student individually. In addition, teachers are able to leave their classrooms if their absence provides students with more opportunities

to manage their own learning.

Teachers in cooperative learning environments, however, need to give students more detailed advice and instruction for group accountability, individual accountability, as well as for acquiring cooperative learning skills (Matthews, Cooper, Davidson, & Hawkes, 1995). In addition, teachers need to evaluate each student's understanding as well as each group's outcomes (Holloway, 2001; Hosterman, 1992; Inzenga, 1999; Johnson, Johnson & Holubec, 1998). Consequently, each member in the cooperative

learning groups is individually assessed and, further, held accountable for his or her own learning as well as that of others.

Cooperative versus Individualistic Learning

It is generally accepted that individualistic learning occurs when students work by themselves to complete learning goals without other students' assistance (Johnson, Johnson, & Smith, 2014). Furthermore, Lewis Abedrabbo (2006) defined individualistic learning as a "task-focused" structure that provides opportunities to master materials through tests (p. 13). Students are encouraged to hold individual and independent goals, and, as a result, they are likely to develop continuing motivation to complete their own goals. By holding to these goals, students have more opportunities for self-improvement, self-comparisons, and self-reflection on their effort and task performance (Lewis Abedrabbo, 2006).

In addition, introverted students, as defined by Jung (1990), may not prefer cooperative learning, but rather pursue individualistic learning (Ehrman & Oxford, 1990; Oxford & Anderson, 1995) or e-learning (Mupinga, Nora, & Yaw, 2006). Group activities may be risky for the introverts because the students "need time to internally process the instructions or have difficulty expressing themselves in a group discussion" (Pantaleon, 2016, p. 1). However, if a teacher creates a relatively safe classroom, group activities could help students practice language, try out new behaviors, and make mistakes (Ehrman & Oxford, 1990). Furthermore, it was shown that one's personality type did not impact the group effectiveness and team cohesion (Vickers, 2015).

Individualistic learning may cause some problems in classroom settings because
only the best learners are rewarded while students generally have fewer opportunities to interact with each other and the teacher (Kim, 2007). On the other hand, cooperative learning promotes students' self-esteem, positive interpersonal attitudes, and responsibility (Johnson, Johnson, & Smith, 1991). Students help and assist one another to complete their common goals by working together. Because one student's success influences the results for group members, students are more likely to encourage their peers to succeed (Hilk, 2013; Johnson, Johnson, & Smith, 1991; Slavin, 1990). Furthermore, students, according to Nokes-Malach, Richey, and Gadgil (2015), have more frequent opportunities for explanations and error-correction. Students are not only motivated to work harder, but they also enjoy their tasks in a cooperative learning setting more rather than by learning individually (Lewis Abedrabbo, 2006).

Cooperative Learning in General Education

Over two decades, numerous research studies have been conducted on cooperative learning in the context of general education, and they have illustrated how students accomplish academic goals and develop social skills (Al-Halal, 2001; Ebrahim, 2012; Johnson & Johnson, 1994; Matthews, Cooper, Davidson, & Hawkes, 1995). According to Panitz (1999a), students are able to obtain academic benefits in terms of extending their "critical thinking and reasoning skills and understanding of social interactions" (p. 4). Panitz (1999b) also explained that cooperative learning improved students' self-esteem as well as educational satisfaction because students were able to actively participate in the learning procedures and therefore accomplish shared goals.

In the field of English and linguistic education, several researchers have stated

that cooperative learning influences students' linguistic development (Chen, 2007; Chen, M-L., 2005; Chiaravalloti, 2012; Collins, 2012; Fox, 2010; Khuvasanond, 2013; Lee, 2008; Lencioni, 2013; Queen, 2009). Whisnant (2005) also reported that Spanish-speaking students learning English developed their language abilities even though their teachers use cooperative learning infrequently. Additionally, Alhaidari (2006) mentioned that male fourth and fifth graders in a Saudi Arabian school improved reading skills such as reading performance, vocabulary and reading comprehension, and fluency by working together.

Research studies in mathematics education (Al-Halal, 2001; Dubois, 1990; Ekwuocha, 2012; Hecox, 2010; Kendall, 2011; Phillips, 2010; Quattrin, 2007; Rivera, 2013; Torchia, 2012; Williams, 2004) and science education (Campbell, 2013; Ebrahim, 2012; Ransdell, 2001) have also revealed that the cooperative learning model provided opportunities to achieve and to construct concepts such as self-efficacy and self-esteem. Moreover, Jain, Rao, and Sunda (2016) in computer science reported that cooperative learning was related to students' intelligence.

In a similar context, social studies scholars such as Hines (2008) and Shepherd (1998) have noted that students obtained positive benefits from cooperative learning. For example, Shepherd (1998) reported that cooperative learning helped students develop critical thinking skills and encouraged them to maintain positive attitudes toward problem solving. Furthermore, Hines (2008) mentioned that African-American students improved both in their academic achievement and in acquiring positive social skills, which in turn might prevent school violence and peer rejection.

Apart from the core-subject researchers, scholars in other subjects such as physical education and art education have investigated the impact of cooperative learning. For example, Fortes (2005) investigated how cooperative activities in the physical education curriculum affected students' responsibility and their ability to resolve conflicts and solve problems. Barrett (2000) asserted the effectiveness of cooperative learning in physical education. In addition, Sohn and Kim (2016) examined effects of cooperative learning strategies in a senior clothing design class.

As described above, scholars have investigated cooperative learning in different subject areas. These studies outside music education may help understand the reasoning for utilizing cooperative learning, and they led me to inquire about how cooperative learning can be applied by music teachers.

Cooperative Learning in Music Education

Since interest in student-centered pedagogical environments and cooperative learning has been growing, Kaplan and Stauffer investigated cooperative learning in music (Kaplan & Stauffer, 1994). Based on their research, other researchers have also investigated the influence or effects of cooperative learning in music on various dependent variables, such as rehearsal technique for high school band performance (Compton, 2015), Pop and world music in secondary music education (Evelein, 2006), music achievement and learner engagement in the secondary large ensemble (Johnson, 2013), and music performance achievement, motivation, and attitudes among high school band students (Larson, 2010). The previous research was, however, limited to focused topics such as composition, theory, or instrumental instructions rather than general music.

In addition, these studies were conducted in middle school, high school, or university classroom settings as opposed to elementary music environments.

Cooperative Learning in Middle School and High School

Middle and high school students may receive benefits from cooperative learning in various music classroom settings, such as music theory (Zbikowski & Long, 1994), choral music (Inzenga, 1999), band (Whitener, 2016), and chamber music (Djordjevic, 2007; Harrington, 2016). For example, Zbikowski and Long (1994) studied cooperative learning in music theory classrooms at a middle school. Students received four sample lessons at the post-secondary level. From the data collected, the researchers found that most students readily adapted to group work with peers although barriers—highly competitive learning situations and proscriptions against sharing information—existed. Based on the results, the researchers concluded that if teachers have an interest in cooperative learning, they should recognize these barriers, have confidence about cooperative learning, and use reward systems to motivate students to overcome any reluctance they themselves might face in completing the cooperative group work.

On the other hand, Inzenga (1999) examined teenage female students' sightreading skills in choral classroom settings. The researcher compared student groups working in a large ensemble setting with a small group setting. In the study, students in the big group had a warm-up exercise and then were divided into small groups to complete assignments for ten to fifteen minutes. The results of the study revealed that cooperative learning encouraged students to improve their ability to read tonal and rhythmic phrases even though teachers mainly led the classes (Inzenga, 1999).

In addition to middle school students, high school students may actively interact with each other in music classes. For example, Djordjevic (2007) studied student interaction during rehearsal times. In this study, a total of thirty high school students participated in three instrumental sectional rehearsals and three heterogeneous chamber music rehearsals. From the data collected, the researcher reported that students had positive attitudes toward the group work and enjoyed group discussions. In addition, Harrington (2016) investigated how high school students used cooperative learning in a chamber music setting; Harrington concluded that the students obtained positive benefits from the cooperative groups.

In addition, Whitener (2016) focused on band classroom settings at middle and high schools and used a quasi-experimental design. The results of that study revealed that the five elements of cooperative learning—positive interdependence, individual accountability, considerable promotive (face-to-face) interaction, frequent use of relevant interpersonal and small-group skills, and group processing/reflection—improved students' achievement, interpersonal relationships, and psychological health.

Cooperative Learning at the University Level

Cooperative learning may help university students improve their understanding of music history (Hosterman, 1992), music appreciation (Holloway, 2001), and choral conducting (Varvarigou, 2016). For example, Holloway (2001) found that college students in music appreciation classes significantly improved their musical skills. The researcher compared cooperative learning to a traditional lecture model, and then concluded that students were able to develop listening skills for melody, meter, and

timbre. There was, however, no significant difference between the experimental group and control groups regarding development of listening skills for form or modality (Holloway, 2001).

University students in composition classes may enhance positive interpersonal skills through cooperative learning. Leonard (2012) examined how first-year university students majoring in composition perceived a combination of three strategies: social networking, the writing process, and cooperative learning. A total of nine students participated in the study. The researcher revealed positive results such as interdependence, individual accountability, group processing, social skills, and face-to-face interaction during group work. Students considered social networking tools valuable and developed communication skills by working together in cooperative groups.

Moreover, students in choral conducting classes may engage in their own learning process. Varvarigou (2016) studied how cooperative learning was utilized in choral conducting education and concluded that cooperative learning was effective in promoting student motivation, respect for diversity, positive interpersonal relationships, communication, and leadership.

As described above, these researcher's conclusions may support the notion that cooperative learning strategy brings positive results. The studies were, however, conducted in middle school, high school, or university music classrooms. Furthermore, they were limited to focused topics such as composition, theory, or instrumental instructions instead of general music.

Cooperative Learning in Elementary Music Education

Cooperative learning strategies have been investigated since the 1970s (Igel, 2010), but it is difficult to find related research in elementary general music classrooms. Cornacchio (2008) compared cooperative learning and individualistic instruction in elementary composition classes; Cornacchio used pretest and posttest experimental designs. From the data analysis, the researcher found that experimental groups' pretest scores significantly increased in the posttest. Cangro (2004) also used pretest and posttest design, but focused on instrumental music classrooms. He investigated effects of cooperative learning strategies on music achievement for the fifth and sixth graders. In his study, he divided the students into two groups: an experimental group that received cooperative group lessons, and a control group that did not take the group lessons. The study was conducted for twenty weeks. Cangro could find no significant difference between the control group and the experimental group in terms of students' playing ability.

Jellison, Brooks, and Huck (1984) analyzed students' interactions in grades three through six. They conducted this study under three teaching situations: (1) large group, (2) small cooperative group, and (3) small cooperative group with a music listening component for cooperation. Although this study of Jellison, Brooks, and Huck (1984) might help readers better understand influence of the teaching situations on students' social interaction, it failed to show how the teachers implemented cooperative learning in elementary general music classrooms.

On the other hand, McNair (2006) compared cooperative learning's application in

a private school with a public school. After interviewing teachers, the researcher concluded that both private school teachers and public school teachers gave lectures before cooperative learning, and the teachers at both schools monitored their students closely. McNair (2006) also reported that the characteristics of cooperative learning positive interdependence, promotive interaction, group or individual accountability, and collaborative skills—were not observed in the public school classrooms.

Chapter Summary

In this section, previous studies were discussed to demonstrate how cooperative learning was utilized in various elementary level music classrooms. The studies also supported the concept that cooperative learning could bring positive results. Since the researchers mainly focused on students, however, the results lack information regarding characteristics of elementary general music teachers' instruction, their beliefs about cooperative learning, and strategies for cooperative learning. According to Matthews et al. (1995), teaching and learning are shared experiences between a teacher and students; in addition, the teacher's role is important in cooperative learning. If more detailed information about teachers' practices of cooperative learning is provided, general music teachers who are hesitant to utilize the strategy for various reasons might actively apply it in their classroom strategies. Thus the need for more detailed information about teachers' practices of cooperative a viable idea.

In this chapter, a foundation of the study was developed with related research studies on cognitive development, underpinning of theoretical framework, theoretical framework, and cooperative learning. Comparatively limited evidence of cooperative learning's application in the field of music education was available, however, especially within elementary general music classrooms. The literature review also revealed a robust research related on students' academic achievement and interpersonal development during cooperative learning while not as robust an investigation into teachers' instruction, their belief in cooperative learning, and strategies for cooperative learning. To provide insight into music teachers' practices of cooperative learning, this study is needed. In the next chapter, I shall discuss the rationale for this intrinsic case study method, research design, participants, research sites, data collection and analysis, and my method to establish reliability and validity.

CHAPTER III

METHODOLOGY

Introduction

In this chapter, I address my research methodology under the following categories: the rationale for the case study method, the research design, site selection, participants, data collection, data analysis and trustworthiness, and a research timeline. Using an intrinsic case study designed by Stake (1995), non-participant observations and interviews with two music teachers were conducted for eight weeks beginning September 27 through November 29, 2016.

Rationale for Case Study Method

I chose a qualitative approach with a case study design in order to examine a particular phenomenon in a bounded setting. Specifically, in this study I examined general music teachers' teaching practices of cooperative learning in elementary music classrooms. According to Merriam (2009), if the phenomenon does not have intrinsic boundaries, it is not a case; characteristics of a qualitative case study are particularistic, descriptive, heuristic, and inductive. In addition, according to Stake (2005), case study research requires experiencing the activity of the case in its particular phenomenon or situation, as well as providing a rich and thick description. Geertz (1973) defined it as describing the details and determining individuals' behaviors using concepts proposed by Ryle (1949). Therefore, case study researchers need to collect data and report the individual cases in order to illuminate participants' actions and perceptions (Stake, 1995). The investigators are also often able to observe and record the participants' actions,

thereby opening possibilities for deeper insights than their own account of events and actions would provide (Yin, 2009). Such was the case in this study.

Furthermore, a qualitative case study design has been utilized in several studies of cooperative learning (Bassett, 1991; Colon, 1992; Hamilton, 2001; Kalkowski, 1992; Krawczyk, 2016; Krejci, 2010; Lindsay, 1999; McNair, 2006; Stout, 1993). To conduct this case study, I received approval from the Boston University's Institutional Review Board. Following the approval, I sent informed consent forms (see Appendix B) to participants who reviewed and gave their permission. Throughout observations and interviews, I was able to obtain multidimensional data on the music teachers' experience, beliefs about cooperative learning, as well as about the challenges they faced in creating and implementing cooperative learning into their classrooms.

Intrinsic case study

To better understand particularities of the situation, I used an intrinsic case study. Stake (1995) describes three types of case studies: (1) intrinsic, (2) instrumental, and (3) multiple or collective. An intrinsic case study is used when the case being studied is of primary interest to the researcher. On the other hand, an instrumental case study is used when the purpose of the study is "accomplishing something other than understanding this particular [case]" (Stake, 1995, p. 3). A collective case study is appropriate when the study requires involving several cases (Stake, 1995). The purpose of this study was to examine general music teachers' use and understanding of cooperative learning, rather than to use the case study to achieve other goals or draw generalized conclusions from undertaking several studies. Therefore, my case study is situated under the category of an intrinsic case study.

Research Design

A case study is "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (Stake, 1995, p. xi). Case study researchers should thoroughly describe what happens in the research sites and "what they find meaningful as a result of their inquiries" (Stake, 1995, p. 12). As case studies often involve human subjects, it is also necessary to obtain prior approval before undertaking the study.

Names of participants and their schools were kept confidential in this study. To refer to the participants, I planned to use first names rather than using full initials in order to avoid the depersonalization at first. However, I realized that their first names were relatively unique so that readers could know who they were. To keep confidential, I used false first names for the participants. I also assigned random pseudonyms for each school. Data collected for this study were stored in locked files on my password-protected personal computer and will be destroyed after seven years.

After the Institutional Review Board approval, I began conducting classroom observations and interviews for eight weeks, September 27 through November 29, 2016. During this period, I undertook eight classroom observations at each school and conducted three interviews with each teacher. I visited Elsa's class and Chris's class on consecutive Tuesdays and Thursdays respectively. Throughout the class observations and interviews, I collected written and oral responses from the teachers on their use and perspectives on cooperative learning in elementary general music classrooms. Initially, I did not intend to compare the two cases because of my primary interest in cooperative learning. As the study progressed, however, their pedagogical practices of cooperative learning revealed interesting similarities and differences, which prompted me to report the data as two separate case studies, as well as in cross-case analysis format presented in the next chapter.

Site Selection

When qualitative researchers select a site(s) for the study, they must choose a place that allows them to answer their research questions most productively (Stake, 1995; Yin, 2009). I chose the sites intentionally by using convenience sampling and chain-referral sampling (or snowball sampling) at the same time. I employed the convenience sampling method, which includes "drawing samples that are both easily accessible and willing to participate in a study" (Teddlie & Yu, 2007, p. 78). Based on the criteria of ease of access, I decided to observe general music teachers in metropolitan Boston. Six general music teachers in the Boston area were contacted via e-mail using convenience sampling. Although it was suitable for my purposes, convenience sampling also placed certain limitations on the study, since the method made it difficult to apply the findings to other music educational situations.

Along with convenience sampling, I also used chain-referral sampling to reach prospective participants. Chain-referral sampling makes use of the fact that, through personal contacts or informants, researchers may gain access to "others who possess some characteristics that are of research interest" (Biernacki & Waldorf, 1981, p. 141).

Since this sampling method can produce in-depth results relatively quickly (Atkinson & Flint, 2001), I asked several colleagues to refer elementary general music teachers. They gave me the teachers' contact information; and four music teachers were contacted via email through chain-referral sampling.

Participants

Of ten prospective participants, six were convenience samples and four were the chain-referral samples mentioned above. Only six of the ten responded to my recruitment email. After email exchanges with each prospective participant, four were eliminated because one teacher was going on maternity leave for the majority of fall 2016 semester; two teachers did not show an amenability to participate in this study; and the last teacher had a rotating class schedule that made it difficult for me to observe because class times changed from week to week. Although I focused on teachers' pedagogical practices of cooperative learning, I also thought it important to observe classes with the same students over a period of time, not possible in the case of with the teacher within a rotating schedule. Ultimately, two elementary general music teachers were chosen for this study. Although the number of participants may be considered small, the combined number of their classes during the eight-week period was sixteen, which provided ample opportunities to observe classes in action. This number also fit well within the scope of this intrinsic case study.

The two music educators, Chris and Elsa, were suitable candidates for the purpose of this study because: (1) both teachers were full time faculty members at their respective elementary schools, (2) their classrooms included cooperative learning activities, and (3) those cooperative learning activities included both formal and informal cooperative learning. Chris is a certified full-time music teacher for kindergarten through second grade at the Bartine Elementary School located in the northwest part of Boston. He has been teaching music for almost a decade. I observed Chris's second-grade class. The other participant, Elsa, is also a certified full-time music teacher for grades two through eight at the Rotis Public Elementary School in the southern part of Boston. Her extensive teaching experience reaches over thirty years. I observed Elsa's fourth-grade class.

Data Collection

Merriam (1998) argues that different sources of data can help the researcher better understand and describe the case. To collect sufficient and varied data, I visited each music teacher's classes once a week during the fall of 2016. As a non-participant observer, I conducted a total of eight class observations and interviewed each teacher three times over the data collection period. After the third observation and first interview, I began preparing collected data for analysis; for example, I scanned hard copies of handouts and lesson plans provided by the teachers. To organize the data, I created a separate folder for each participant on my laptop and saved all documents, sound files, and pictures. I also created paper file folders for each general music teacher in which were compiled all handouts, booklets, and curriculum maps provided by the teachers. Detailed individual case analysis and cross case analysis will be discussed in Chapter IV.

Observations

Through observations researchers are able to observe nonverbal communication not always evident in interviews (Merriam, 2009). Observing their classroom interactions firsthand yielded more layered and nuanced dimensions than would otherwise have been available through interviews only. Throughout the observations, I paid special attention to the teachers' eye contact, body language, and voice inflection. Moreover, following the non-participant observation method outlined by Creswell (2007), I took a seat on the periphery of the classroom to be of minimal interference to the classroom activities.

Each observation of a class lasted 45 minutes, and every class was audiorecorded. I also took field notes every time I was in the classroom. The field notes helped me to remember the time, place, participants' comments and behaviors, as well as my initial reaction and interpretations regarding the session. All notes were immediately afterward saved on my laptop computer. This post-observation procedure allowed me to accurately keep track of specific quotes.

Elsa's classes with fourth graders were observed on Tuesdays from 12:05 to 12:50 p.m. Chris's second-grade classes were observed on Thursdays from 1:15 p.m to 2:00 p.m. I arrived ten to twenty minutes early to every class. Before the class observation, I helped set up the room such as arrangement of musical instruments. I also used this time to observe conversations between teachers and their students or have informal conversations with the teachers. During these conversations, I asked questions about their students, lesson plans, or upcoming events, and the teachers were gracious in answering my questions. They often shared with me the day's handouts, showed me students' performance videos, or pointed me toward resources for elementary general music education. Especially, since Elsa's class was held immediate after lunch, I was able to use some of that time to have a longer conversation with her.

Interviews

Interviews are thought to be one of the main methods for obtaining multiple views of the case (Stake, 1995). In this case study, the participants were available and willing to discuss their practices. I conducted individual semi-structured interviews guided by outlines provided by Harrell and Bradley (2009). Because interviewees usually speak in generalities (Chase, 2005), I thoroughly prepared for each interview in order to obtain more depth with their response. For example, when I asked them how they compared and contrasted the value of cooperation, competition, and individual (see Appendix C), their answers were quite simple and short at first: for example, "It [cooperative learning] is good." Then I asked them again why and how. I also followed the flow when unexpected topics came up. In doing so, I gained much information that I would have been unable to collect from direct class observations.

In order to see the process of cooperative learning over the observation period, I conducted interviews three times with each teacher: (1) at the beginning of the eightweek observation period, (2) at the middle of the observation period, and (3) at the end. Before the first interview, I explained my use of the term cooperative learning in preference to collaborative learning. Both participants fully understood and agreed with my use of cooperative learning. In the first interview session, I asked questions regarding the music teacher's background and views on cooperative learning. In the second interview session, I asked questions about specific activities, procedures, and strategies of cooperative learning employed by the teachers. The last interview session concentrated on self-reflections about their cooperative learning practices. Additionally, I asked for

their opinion and perception of this study. Throughout three interviews, I was able to obtain multiple views of their perspectives on cooperative learning, beliefs about cooperative learning, and strategies for cooperative learning.

Because I wanted the participants to feel comfortable during the interviews, I conducted interviews on the research site or at a location convenient for them. I also emailed interview questions a week prior to each interview in order that the instructor have an opportunity to reflect on the questions and not feel pressured to produce answers on the spot. The teachers also reviewed interview questions to ensure that every question was relevant to the focus of the study. Each interview lasted from twenty to thirty minutes. All of the interviews were recorded on a professional recording device. Since the recording device had embedded USB functionality, I was able to save the audio files on my laptop immediately after each interview. To protect the identity of participants, I assigned code file names. For example, Chris's interview files at the Bartine Elementary School were coded as "BS interview1," "BS interview2," or "BS interview3." In the same way, Elsa's interview recordings at the Rotis Elementary School were coded as "R interview1," "R interview2," or "R interview3." To ensure accurate transcription, I transcribed all interviews on the same day, when the interview was fresh in memory. I sent each transcript to the teacher to check for accuracy. They added comments and modified their first comments. Such steps ensured the accuracy of collected data.

Data Analysis and Trustworthiness

Merriam (2009) wrote, "Data analysis is the process of making sense out of the data" (p. 175) and recommended beginning the process of analysis immediately after the

first instance of data collection rather than waiting until all data are collected. Following steps provided by Creswell (2003), I read through the data and reviewed them separately to gain a general sense of the teachers' practices. Using social interdependence theory as the theoretical framework, I let my research questions guide data analysis. After reviewing each case individually, I reviewed the cases comparatively since the two general music teachers' practices of cooperative learning were both similar and different. In comparing the two cases, I followed a sequence developed by Boeije (2002):

- 1. Compare single interviews and observation documents.
- 2. Compare multiple interviews or observation documents from the same participant.
- 3. Compare all of the data collected from two general music teachers at different schools.
- 4. Repeat each of the preceding steps.

Coding

Coding is a "process of naming and locating" the data (Glesne, 1999, p. 133). Before beginning the coding process, I found frequency words that led to the key words. Along with the key words, I read and analyzed interview transcripts and observation field notes again to understand the themes that emerged from the data. Then, I assigned two to four letter codes to identify the data. For example, "CL" represented cooperative learning and the letters "ICL" signified informal cooperative learning. I inserted the coding letters into Microsoft Word documents of interview transcripts and observation field notes. This process allowed me to read clearly, edit easily, and track any changes.

Using the coded data, I asked myself to my research questions and sections of

literature review. Asking myself such as "What is this about? What does the word (or words) imply?", I decided which codes were most important and discussed deeply. Throughout the process of the coding, I was able to find various codes and their meanings, and, further, I made Figure 14 (see page 92) and Table 2 (see page 100).

Trustworthiness

Qualitative researchers should establish validity and reliability for their studies. The researchers also have "ethical obligations to minimize misrepresentation and misunderstanding" (Stake, 1995, p. 109). To establish trustworthiness of this study, I devised triangulation involving member checks, peer reviews, and an external audit.

Member checks. To check whether the reported results are consistent with the collected data, researchers need to ask participants to examine drafts of writing for accuracy and palatability (Lincoln & Guba, 1985; Merriam, 2009; Stake 1995). To ensure reliability of data, I asked the music teachers to carefully review their interview transcripts and finding reports. I sent each transcript via email once it was ready. They provided comments or clarified their first comments. Throughout these member checks, I ensured that my collected data were accurate.

Peer review. Peer review is a process of "exposing oneself to a disinterested peer in a manner paralleling an analytic session" (Lincoln & Guba, 1985, p. 308). I shared my initial interpretations, data collection procedures, emerging analyses, and final stage analyses with one of my doctoral student colleagues in the Music Education department at Boston University. My colleague and I communicated through such internet technologies as emails and online video calls. Through these conversations with my peer,

I established that my findings and interpretations were trustworthy within the scholarship of research in our discipline.

External audit. To increase validity and reliability, qualitative researchers need to engage an external consultant(s), the auditor, who examines the process and product of the study (Creswell, 2003; Lincoln & Guba, 1985; Merriam, 2009). My dissertation advisor, Dr. Vu, served as an external auditor for this study. I shared my dissertation process including data collection procedures, emergent coding, and emergent themes. Dr. Vu reviewed the material thoroughly and provided guidance to the challenges I faced in collecting. He also gave me ongoing feedback regarding data analysis.

Chapter Summary

In this chapter, I discussed the methodology for this intrinsic case study including the research design, data collection, and data analysis. I also described how I established trustworthiness through a combination of member checks, peer review, and an external audit check. In the following chapter, I shall focus on the findings of the study.

CHAPTER IV

FINDINGS

Introduction

I divide this chapter into two sections, part I and part II, to report on the two general music teachers' use and understanding of cooperative learning in their elementary general music classrooms. The findings are followed by a cross-case analysis in the next chapter, chapter V.

Part I: The Case of Chris—"This is Your Music Class"

Bartine Elementary School

Bartine Elementary School is located in northwest Boston. A private, lower division school of the Bartine & Harvey School, it serves students from pre-kindergarten through grade twelve. Those in the pre-kindergarten through sixth grade attend the elementary school; students in grades seven and eight attend the middle school; and students in grades nine to twelve attend the upper school. The campus of Bartine Elementary school consists of nine buildings. Among them, Building A is designated for students in grades kindergarten through second grade. Since it is located next to the main gate, the gatekeeper's office is also in Building A, and every visitor must pass by it.

In the academic year 2016–2017, eighteen to twenty students occupied each homeroom. Students attending kindergarten through second grade were required to take general music classes twice a week. Each general music class lasted 45 minutes. The two music classes per week were approached in two different ways: one was conducted as a half-group class, the other as a whole-group class. As a result, music teachers in the Bartine managed the classes differently to efficiently meet the students' needs. For the half-group class, the music teachers usually taught new musical knowledge, reviewed previous topics, and built connections between previous topics and the present topic. On the other hand, in a whole-group class, the teachers mainly focused on students' group work, as well as reviewing what the students had learned in the half-group class.

From the end of September 2016, I observed Chris's whole-group classes with second graders. I was supposed to observe a total of eight whole-group classes, but schedule changes resulted because of school events such as an end-of-semester concert and Grandparents Day. As a result, I observed with a total of six whole-group classes and two half-group classes.

Music Classroom at Bartine Elementary School

The music classroom is located on the first floor of Building A. The music room measures approximately 35 feet by 20 feet. The room is well arranged to maximize all usable space. It includes two big bookshelves, one laptop and one computer on the teacher's desk, multimedia equipment including a projector and audio systems, and classroom percussion instruments such as guiros, triangles, egg shakers, and claves. The music room also has a piano, a guitar, and six long benches for students. An armless stool in front of the projector screen rolls so that the teacher is easily able to easily reach his students from the screen without standing up. Large windows on two sides of the room provide much sunlight. The walls are light beige-colored. Figure 2 indicates the music classroom's floor plan at the Bartine Elementary School.



Figure 2. The Bartine Elementary School Music Room Floor Plan

Portrait of Chris

Chris is a full-time general music teacher at Bartine Elementary School. He obtained a bachelor's degree and a master's degree in voice performance. While studying in a vocal performance master's program, Chris began teaching at a public high school and assisting in the development of music programs at Chelsea Boys and Girls Voice Club. Having had these experiences, Chris decided to seek another master's degree, this one in music education. While Chris studied for his second master's degree, he started teaching at a public elementary school. Since 2010, Chris has been educating elementary school students. In the academic year 2016–2017, he taught students in grades pre-Kindergarten through second grade. Their ages ranged from four to seven years old.

Chris described how he facilitates his general music classes. He explained that since he believes that "proper muscle groups" involved in singing help students to build

vocal stamina, his classes always began with vocal warm-up practices. Chris stated the importance of musical challenges, which motivate his students to learn music. He believes his students gain the opportunity to set their own personal learning goals from demanding pieces:

I look at the difficult pieces of music that you think the children are going to have a challenge with, and make that challenge a part of my routine. That is something that we can learn. I think, from the challenging pieces, children can set their goals. They make them want to learn.

Chris also stressed the importance of the natural process of breathing work. Just as he had emphasized, Chris and his students practiced inhaling and exhaling in every lesson during the observation period. Chris recalled the first year of his teaching career when he began implementing cooperative learning activities into his music class. Chris elaborated on this experience:

Ever since my first year of teaching, I have used cooperative learning. I have always included cooperative activities and team-building activities such as name games in my curriculum. I truly believe that in order to make great music together, my students have to learn how to work together. Team building activities seem to help them understand what it means to work with others, how to make music together, and how to listen to others. These group activities occur in the first two to three weeks of the school. So, I would like to say that [cooperative learning] has always been in my curriculum.

Although Chris acknowledged that cooperative learning was helpful to students to

learn music, he did not always incorporate it for all his teaching. Chris also recalled a time when his instruction consisted of lectures, standing in front of the classroom. He noted that when he taught musical information in this way, his students listened to his lecture and interacted less often with him. Because the students were focused on trying to remember the information, the result was similar to a teacher-centered classroom setting. Elaborating on lecture instruction, Chris drew on the banking concept of Freire (1986):

If I did not have cooperative learning approach, it would make me be in front of the classroom and talking to students, and the students would be listening and having less interaction. It's more like deposit theory, the banking concept: the children are the deposit boxes and teachers just pour knowledge in their heads. Children are just sitting down in the classroom and I'm standing in front of them. There is little interaction between my students and me, and students and other students.

Chris agreed on the need for some teacher-centered lecture instruction, but he highlighted that such instruction produced fewer opportunities to express students' ideas.

Chris's Views of Cooperative Learning

Chris was a firm believer that cooperative learning: (1) engages students in the process of learning music, (2) improves student classroom behavior, (3) enhances students' responsibility for their learning, (4) fosters healthy, safe competition in group work, and (5) allows students to obtain individual and group benefits from the group work. Additionally, Chris believes that if music teachers want to apply it to their classes, it should be aligned with students' cognitive development.

Chris emphasized that cooperative learning motivated students to actively engage in their musical learning process, and he stressed that cooperative learning encouraged students to improve classroom behavior. Chris mentioned the relationships between students' participation and behavior issues. He felt that some students showed passive behaviors with minimal involvement in traditional classrooms, which might be because students are less accustomed to interacting with their peers. He recalled when students' behavior improved:

I saw students sitting down and listening to music, or sitting down and talking about music. Those [students] were cutting up in my classroom. I had more behavior issues. I had more classroom management issues. But management issues have begun to disappear since my students stood up and moved around. Fewer students said music was boring when they were able to talk with each other about music and work together. And they are able to bring their experiences to the rest of their classrooms. Therefore, I want my class to be more studentcentered. I just decided that I have to have more cooperative learning opportunities in my classroom so that students can engage in learning music, and work with each other. I think working together is important.

On another note, Chris explained that cooperative learning promoted students' accountability because students were allowed more authority to manage their learning. Chris also described how he led his students to become more involved in learning:

When I first started this work, I did give too many directions. I did try to control the students by giving directions that would force students to come up with the answers I wanted to hear. However, as I am getting older and have included more cooperative learning activities in my classroom, and I have realized that I don't have to give all the details. In fact, it's exactly the opposite. I build the scaffolding and give the students just enough information to complete the exercise. This allows me to be less involved and creates the space for the students to be more involved. Making the students more involved in the exercises allows for them to be in the moment and draw their own conclusions based on their experiences. It's their life experiences, and the doing that allows students to understand, feel, and own their ideas.

Chris considered that conflict within the group was in fact necessary for cooperation, "Because some students think in this way and the other students think in that way, they don't want to try to have a resolution of the problem at first." He explained that students gradually become self-aware of the conflict. "Even though there is conflict among the children, it is not that bad." Once they are willing to resolve the problem together, they finally participate in decision-making for their teams. Throughout the observation period, I found that Chris allowed students to have opportunities to resolve their group problems by themselves. In doing so, his students discussed the problem with each other and tried to solve it in their own ways, such as performing a rock-scissorspaper exercise.

Chris also recalled a time when students had problems making a choice for their groups. Students sometimes were faced with competitive situations, but he thought that "the group members can still learn from unsuccessful experiences." Elaborating on such

competitive situations, he compared cooperative learning and individualistic learning:

As a teacher, you have to let [students] know it's okay to step back from solving the problems. You have to tell your students, "it's okay. This problem doesn't have to be solved at this time." [Cooperative learning] is much messier than individualistic learning. For teachers, cooperative learning is more demanding than individualistic learning. The thing to remember is that I am teaching through music. And teachers must teach students how to listen to others and how to work through conflicts. To me, cooperative learning is teaching students about ways to listen to others and share your perspectives. And it's messy. Actually, individual working can be much easier for both students and teachers. In the individualistic learning environment, you can say to students, "OK. You sit down and think about this by yourself, and work it out."

Chris continued by explaining that students obtained both individual and group benefits from group activities. This is because cooperative learning provides opportunities to help others, and students are able to learn from each other. He drew on Vygotsky's zones of proximal development (1980) for this argument:

I do think there are individual benefits. In the cooperative learning environment, each student has to share their ideas and listen to others. Students learn in their comfort zones and begin to learn what their boundaries are. I also want to give each student the opportunity to build one another up. Vygotsky calls this, "zones of proximal development." I think each student grapples with his or her strengths and weaknesses socially and academically. A student's resiliency is tested. The group will grapple with and experience the successes and challenges of compromising, goal setting, and working toward the goal with others. They need to understand delegating responsibility. They need to understand roles, get rid of determent, and experience how each part works for the entire group. I believe more growth is likely in challenging situations only if teacher and students reflect and make plans to improve.

Furthermore, Chris mentioned the numerous times that cooperative learning had helped students develop social skills. For example, he described how the students enhance their positive interpersonal relationships:

I think they are becoming more excited to make music together because they know they are not just going to sit down [and listen to the teacher]. They know they are going to be involved in the process. They know they are going to dance with others. They know they are going to have a chance to talk with others. They know they are going to have different activities. So, they bring their motivations and excitement to the music class. Definitely, when they first started their band projects, their social skills—I mean, I saw their social skills improved. They've really learned how to work with others. Students will step back and listen to others. And I am happy to hear that they are thinking in this way. I'm really happy to see that they listen to each other. That didn't happen in the first, second, and third week of the project. It happened in the fourth, fifth, and sixth week of the project when they have been doing it for a while. So, their social skills have developed and they are getting to know how to resolve problems together. It's so clear. It's really cool to see.

At the end of the second interview, Chris asserted that cooperative learning was one of the most effective ways to help students live in a diverse society. He explained that students were expected to work together with others, so that it was required of them to know how to respect others, build trust, communicate effectively, participate in the decision-making, and resolve conflicts. He claimed that "cooperative learning helps students to be a citizen." Chris also stated:

Our students have, actually, already begun to put into the practice conflict resolutions. Why do we have to wait until they are older to teach this? Why do we have to wait to let them to get these skills? Why not teach them right now? It would not be perfect, but it is an idea for them that they need to know. In every situation, no matter what they are, they have to work with others. They have to engage with other people. You don't always have to like the people you're working with, but you do have to respect them. You have to respect their experiences. You do have to respect where they are coming from, and try to understand. You may not agree with them. But, you have to try to understand them and empathize.

Chris remembered facing challenges when creating and implementing cooperative learning into his classes. He described that since first graders' cognition was not developed enough to understand the concept of cooperation, they did not want to work together for a common goal. In this case, Chris said, "They were not yet able to feel what others felt. It's quite tough to teach them about it." He elaborated the problem he

experienced when younger students worked with peers:

For younger students, each individual student thinks he or she is the most important person. So it's tough for them to work together. And it's hard to set up a rule for working together. If the rule is broken, it's really hard to make [reimpose] it. And also, if the group is having a really challenging time—if one student is really set on the idea, for example—then, they don't want to take others' ideas. [Working together] is going to be really challenging because they didn't know how to handle the problem and how to resolve the problem. So, I'm still learning how to deal with those kinds of the problems when the students are only four, five or six years old.

Chris had a difficult time applying cooperative learning to younger students because of the children's lack of mature cognitive development. Nonetheless, he is still tied to his belief that cooperative learning engages students: it improves student classroom behavior, enhances students' responsibility for their learning, produces healthy competitions within group work, allows students to obtain individual benefits as well as group benefits.

Chris's Teaching Practices with Cooperative Learning

Based upon observations and interviews, I found that Chris's instruction mirrored the characteristics of cooperative learning and reflected his own beliefs about cooperative learning. Along with his pedagogical practices with cooperative learning, Chris had a routine pattern of teaching practices whether or not he had planned a group activity for that day. He always started a class with an announcement of the day's objectives and learning targets. Then, Chris led body warm-ups and vocal warm-ups. Although Chris did not check attendance by calling students' names, he was able to identify who was present (or absent) because every student must sit in his or her assigned seat at the beginning of the class.

After body and vocal warm-ups, Chris reminded the students of the day's objectives and goals. By making the students aware of the goals, he built a connection between previous lesson topics and current lesson topics, or between their current class activity and upcoming events. For example, Chris reviewed the "Boston Song" on my first observation day. He initially made students practice short parts of the song and then the complete song, because the students were going to sing it on the field-trip day in the upcoming week. Chris reminded the students numerous times that they would be singing in front of others, including their parents. Chris encouraged students to actively participate in the practice. He gave a variety of examples of what could happen on the field trip. Several times Chris also made the students practice the upbeat starting cues and syncopations that students were apt to miss easily.

Throughout observations, I found that Chris used both formal and informal cooperative learning to meet students' educational needs. When students had a compositional activity, Chris used formal cooperative learning. For example, on the first observation day, Chris allowed the students to spend more than half of the lesson time on a mascot compositional activity. Before the students had the group activity, Chris gave a handout (shown as Figure 3) and thoroughly explained the task to students. For this activity, they had first to select a mascot among four—Celtics, Red Sox, Bruins, and New

England Patriots—for themselves.

You're going to your friend's birthday party and each group will bring one of the mascots with them to the party. Which Boston mascot will you bring with to the birthday party? And why? First of all, you'll do the top [of the handout]. For the part above the line, I want you to choose which Boston mascot will be going to the party with you. Personally, what mascot do you want to go to the party? Please draw a circle on the mascot. Make a circle on the mascot that you want to bring to the party for yourself. You have a Wally for Red Sox. You get a Celtics player for basketball, you had a bear, the bear for Bruins, and you had a Pat Patriot for New England Patriots. So, circle the one you want to bring to the birthday party. Draw a circle on one of them above the line.

You and your friends are going to a birthday party. Each group can only bring ONE mascot with them to the party. <u>Which Boston mascot will your group bring and w</u>by?

1. Circle the mascot you want to take with you.



Figure 3. Handout for the Mascot Activity

Name

After giving the instruction, Chris walked around the students to confirm whether each student was done with making an individual choice. Then, he gave another instruction on how to form a group. As the students were already sitting in groups of four to a bench, Chris considered those four as a group. He said:

I think you are ready to work together. With your bench members, you're going to move. With your bench members, I mean, all of four people are going to go with you. With the people in the same bench with you, it will be a group. You are going to have to decide which mascot will be a group mascot. Which will be a

challenge when you have different circle individually? So, as a group, you have to decide which one is going to be taken. And each group member needs to make a circle, same one, at the bottom. Listen up before doing that. I'm going to move around. You four, going there. You four, going there.

Working the handout, some students complained it was too difficult to make a selection for their group because they wanted to keep their personal choices. A student yelled, "I want to keep it," and another student said, "I'm not interested in that." When students had difficulty picking a mascot for their group, Chris tried to mitigate the situation. He made them calm down first and carefully listened to each student. He then began to explain. This moment, on September 29, is described in the following observation field note:

Teacher (T): Please, I seriously mean that without talking, just raise your hands. Raise your hand if your group didn't decide on one group mascot to take to the party. OK, still without talking, raise your hand if you thought it's very difficult to narrow down your choices to one. Still without talking, raise your hand if you thought it's very easy to make a choice. Raise your hand silently. I have two questions for you. For these questions, I'll give you time to think and answer. I'll call two or three people to answer. Question one is, if you found it was really hard to get to one choice in your group, please tell me why it was hard to do it. Romney?

Romney: Because two of us have different ideas and two of us have the same choice.
T: So, a half of your group has chosen one same thing, and the other half group has the other. That's why it was really hard to get to one group choice.Reins: No, no. I and Jack had Celtics. Romney has Bruins. And Amelia has Patriot.

T: OK. So, people have different ideas about different things. So, it's really difficult. You have one idea and you are trying to get everyone to understand your idea. I knew not everyone has the group decision. I knew that. That is why I do this activity. How can we use our ideas and combine the ideas within a group? Because it's going to be the same thing when you are working for the band. And you and your band have to create your own music. All four can have different ideas, but you have to come together as one in order to create your group song. So, it's our very first activity to figure out how to work together with others, especially when we have very different opinions.

In addition to the mascot activity was another example of the use of formal cooperative learning. When students composed their own team songs for Thanksgiving, Chris allowed them to distribute the Thanksgiving composition over two lesson periods. During the group discussion, students needed to decide on the melody, rhythm, the instruments to use, and so on. The following description reveals how students worked together with peers:

Kate: C, C, and then (playing different ways)?Gordon: Francisco, which one is better?(While playing two different melodies) This? Or this?

Francisco: I think that this one is better. Actually, both are good.

(Students are working.)

Kate: should we match the rhythms and notes?

Gordon: I think so.

(Students are working.)

Kate: CC-GG-A-C? (Playing)

Francisco: I like it. CC-GG-A-C.

Kate: CC-GG-AA-C?

Gordon: I don't know. It's also good.

Kate: (After playing) How about it, du-day, and du-day?

Gordon and Francisco: (Playing different notes with the rhythm that Kate played.)

As described above, each student in the group was actively engaged in speaking and listening to one another. Since they were freely communicating with each other and sharing their ideas, I assumed that they were comfortable working with peers during the compositional group activity.

Along with formal cooperative learning, Chris also utilized informal cooperative learning when he needed to check the students' understanding of materials before and/or after that day's instruction, or in the middle of the lesson period. When Chris compared quarter notes and eighth notes, for example, he taught it step-by-step and allowed students to have group discussions interspersed throughout the lesson. Chris started playing quarter notes in a steady pulse, using the drum. His students were allowed to tap or clap the quarter-note pulse. Then, Chris played and verbalized eighth notes while his students played the quarter notes. Next, Chris played the quarter note pulse while his students played the eighth notes. After the students were accustomed to playing eighth notes, Chris divided them into pairs. He gave two or three rhythm patterns to each group, and the group members tried to echo them correctly.

Interestingly, Chris rarely assigned roles for students such as leader, reporter, or presenter, regardless of the type of cooperative learning. The reason for this, he explained, is that the roles could cause division and become counter-productive:

For example, if someone gets the role of the leader, others may get really upset about it. And I think [assigning the roles] can . . . do more harm rather than good because the students spend more time being in their feelings. So it really depends on the class and what [the day's objectives] are.

Additionally, Chris explained that working in a pair might be easier for younger students rather than working in a relatively big group in which each group member was assigned a specific role. He elaborated,

If we have students in the class, specifically, whose ages are so young, it's hard to make them work together. So I need to make the students think individually at first. I give them time to think through their own responses and ideas. And then, I divide them into pairs. They are going to share with a partner. And both are going to talk about it together.

I was able to observe that Chris indeed rarely assigned a specific role for students. In his not doing so, students were able to have more opportunities to share leadership through cooperative learning.

Based upon observations and interviews, I found that Chris used a classroom management computer program—called ClassDojo—to provide opportunities for selfreflection at the end of the lesson. Using the program, students were allowed to evaluate classroom behavior and participation. Students earned the points depending on their selfassessment. For instance, if students indicated one, that meant students thought that their behaviors and participation were poor, in which case Chris gave them ten points. If the students rated the class as two, that meant they considered their participation was pretty good, and Chris gave them twenty points. If the students thought of it as three, they considered their behaviors and participations were excellent, and Chris gave them thirty points. Chris explained the software's use,

Actually, ClassDojo is for immediate feedback. I also think about it as long-term feedback because eventually, my students have to get to 1,000 points in order to have a party. In immediate sense, every day, they can build up.

In addition to the use of ClassDojo, Chris also provided opportunities for selfreflection about their actions and individual's outcomes. For example, after the practice of "Boston song," Chris asked questions about individual's outcomes as well as that of the other members. Students answered questions about how they sang the song, produced the syncopations, their feelings, and what mistakes they made. Regarding this evaluative process, Chris brought up a rule to control criticism in terms of students' self-reflection. Specifically, he spoke of how he managed to avoid personal attacks among students.

They are going to have self-reflection. And I always frame it, "We don't point out, or we don't say 'I saw John did that."" We don't make any single one feel bad. So you can say, "I saw someone did . . ." "I saw someone turn around." "I saw lots of people got the correct words." Or, "I heard someone yelling." Students cannot point at any single one person.

Furthermore, Chris always encouraged students to participate in group work by giving positive comments. Whenever students completed an assigned task, Chris made positive comments such as "very good" or "excellent." An example is the case of students learning about eighth notes. At first, Chris divided students into small groups, consisting of two or three students. Then Chris assigned a rhythmic song, "Miss White had a fright in the middle of the night," shown in Figure 4.





Figure 4. The Rhythm Song "Miss White Had a Fright in the Middle of the Night" He gave one rhythmic phrase to each group and the group members needed to answer whether the phrase contained one quarter (one sound) or two eighth notes (two sounds). This moment is described in the transcript of the seventh observation: Teacher (T): Let's figure out which word has one sound and which word has two

sounds. Ready? "Miss. White had a fright."

Children: (Copying the line with clapping.)

T: Please give me the word having one sound.

Tess' team: "Had."

T: Great.

Maya's team: "White."

T: Excellent. How about the word having two sounds?

All children' answering: "Had a."

T: May I think about "In the middle of the night"? Let's clap it together.

(Children are clapping.)

T: Again, we're going to put the words together in one beat. And we're talking about music. Music is putting together. "In the middle of the night." (Clapping.) Francisco's team: Two words in one beat: "In the," "middle," and "of the."

Romney's team: how about "not"?

Tess' team: "Not"? One.

T: Yes, you are right. Excellent. It's one.

In addition to giving ample praise, Chris tried to emphasize that students should be accountable for their own learning. He frequently said, "It's your class. It's your music." Chris also enabled students to make their own rules for classroom behavior. In his interview, Chris elaborated on how he encouraged students to build responsibility:

I let the first and second graders have time to make their own rules. I think this is

really helpful. During that time, they can develop their ownership. And I also say to them, "I don't want to approve them." "I don't want to create them." "This is your document." "This is about your behaviors during the classes." And I took the points away when they broke the rule. It is effective. I think, I put more power back into my students and their hands. I always say, "This is your music class. I'm here to help you learn music, help you understand music, but still, this is your music class. This is really your class and your space." I think it really contributes to building student responsibility at the beginning of the year.

I was able to observe that such discipline encouraged students to build individual and group accountability. Furthermore, the students realized that all group members were linked to each other to accomplish the common goal.

During group activities, Chris encouraged positive interdependence and promotive interaction. Having group discussions with peers led students to treat others with kindness. They learned to listen to one another and respected others' opinions. Every student made an effort to achieve common goals. As a result, students were able to enhance their individual accountability and group accountability.

Chris's Strategies for Cooperative Learning

In addition to Chris's clarification of his teaching strategies for cooperative learning, the following strategies were observed: (1) delivery of clear instructions, (2) use of tension and release, (3) development of his own teaching practice, (4) choice of student-friendly words and ideas, and (5) self-reflection. By incorporating these five strategies, Chris tried to get students to obtain positive outcomes from cooperative learning.

His first strategy was to give clear instructions. Chris tried to communicate well with his students so that they were able to fully understand what was expected of them. For example, Chris recalled when he taught a Lesson One, "Africa," to first graders. He started by giving some general information on Africa, such as the location of the continent, the savannah, and animals and plants that live on the savannah. Then Chris made students write one or two sentences about the savannahs and improvise a single melody based on their feelings. Chris explained the process:

I showed a map and pictures at first. I showed them where Africa is on the map, so they know what it looked like. Then I gave them a minute to them for discussion. Then I asked them, "give me your ideas, two or three ideas." I let them talk among themselves. They talked with their partners about what they were thinking about the Africa and what they learned about Africa. In doing so, I gave tomorrow [the end result] first. I gave them information. And I also typed everything I needed during the class and what they were saying. They were able to see everything on the screen. It's really important to let them know what they will be doing in class.

As can be seen here, Chris gave enough information about the task before the group activity. By doing so, students were able to thoroughly understand what to do as well as the criteria for successful completion of the assignment.

Secondly, Chris continuously walked around his students and monitored his class closely. As a result, students experienced some natural tension, and they were focused on

the music class. Yet, along with the close monitoring, Chris cracked jokes and allowed them to make noises at an acceptable level. In this way, Chris built in tension and release during the group work sessions. On this strategy, he said:

When we were talking about phrasing with the song "Shalom," I allowed them to work together. I didn't do anything for my second graders. But I did monitor them very closely. Some of them were joking and playing around, but that is expected because they are just second graders. They are young. I'd like to say the idea of the tension and release. I thought that it is really effective to work with someone. And it's really helpful.

The third strategy was for the teacher to develop personalized teaching practices. Chris stressed the importance of personalized instruction as part of his teaching strategy. If a teacher has his or her own teaching practices, Chris said, "it makes you a good music teacher." Chris also stressed that teachers must have the confidence to be willing to try out new ideas and strategies. If a teacher has confidence, he said, "it is not necessary to check all of the boxes."

The fourth strategy was to use student-friendly words and ideas. Chris explained how he modified the language and instructions to fit the needs of his students:

I took [student-friendly words and ideas] from adult-language and adult-concepts. [I would] keep the ideas. Keeping the skills. For example, I used to use the hulahoop when I was in college. Students used their index finger and middle finger to hold the hoop. Everyone had to put their arms out. The hula hoop rested in the middle with everyone's two fingers holding it. As a whole class, or a group, you try to lower the hula-hoop down. What will happen when everyone is not going down at the same time? The hula hoop is like, you know, like [making falling gestures]. First graders and second graders are not able to do something like that successfully. Therefore, what I've done instead is to use the balloons. I said, "You all have a balloon. As a class, the balloon can't touch the floor. How can you work together to make sure the balloon doesn't fall to the ground? Make sure that the ball doesn't fall." Like that, I take an activity and modify it. If adults can do it, but children can't, I ask how can I still keep these ideas but teach it differently? I need to think about working together and the compromise. How can I still keep those skills in the activities? I use the idea, but make it fit the age group that I'm teaching.

Finally, Chris discussed that he held self-reflection in order to get students more engaged in their learning as well as to improve his instruction. While Chris showed his reflection notebooks to me, he explained why and how he handled self-reflective dialogue:

I always try to be aware of what I'm saying, what the student's saying, what they are doing, how they are reacting, what the students can do, and what the students can't do. Sometimes, I immediately changed something for the next class. "Oh, this is not working for the class. Let me think about it quickly, about how to change it for the next class, coming in three minutes." Other times, I write notes like this [showing his notebook]. Before getting into the activity and after the activity, I sit back and look at it. "All right. This isn't going as planned. What can

I do to fix it?" I just think through it again. I write a lot of stuff like that after class. Then, I think through it again. "OK, let's think about it. Let's fix that." That's why I always keep it on my desk at all time. In the notebook, there are all of the lesson plans, goals, or something like what I want my students to be able to do. That makes me come back and write something down. "That's good. That's not working. Let me fix that." Or, "Let me think about it backward. Switch it. They can't do that."

As described above, Chris made notes about all of the lesson plans, their objectives, other activities, and so on, since the first year of his teaching career. He also kept all notebooks for reference. Through self-reflection, Chris became aware of his instructional strengths and weaknesses. As a result, he was able to improve the instruction for effectiveness and productivity.

Part II: The Case of Elsa—"Making a Balance"

Rotis Elementary School

Rotis Elementary School is a public school located in south Boston. According to the school's website (2016), it is considered one of the largest elementary schools in the city, with over 800 students in attendance. The main building is big enough for a large indoor gymnasium and an auditorium that can accommodate the entire student body. The school also has an outdoor area that students are able to enjoy in their free time.

Every student from kindergarten through eighth grade takes two music classes a week. Students in grades kindergarten through second grade attend general music twice a week. For third graders, one music class is general music, and the other is instrumental instruction. For instrumental instruction, all third graders receive recorder instruction, and fourth graders are given a choice between band and orchestra. From fifth grade on, students can participate in one of the three Rotis Choruses: Fifth Grade Chorus, Choral ensembles, or Chorus 21. Students in grades seven and eight are able to choose any two from the four music classes available: guitar, ukulele, general music, or music production.

Music Classroom at Rotis Elementary School

The main building of the Rotis Elementary school is L-shaped and four stories high. The front entrance is always locked so that everyone must press a buzzer to enter. When the main office let me in, I signed in at the office before going to the music classroom. Since the music classroom is located at the end of the hallway on the ground floor, I often faced a bustle of students going to their classes.

Elsa's classroom is spacious and everything is carefully laid out, including various instruments: an electronic piano, Orff instruments, and classroom percussion instruments. The room is also furnished with classroom facilities, including bookshelves, cabinets, the teacher's computer and laptop, the teacher's desk, a portable standing desk for laptop, a desk for handouts, three-step-long benches for students, audio systems, and display devices including a projector and white boards. Despite the seemingly large number of items in the room, it appears neat and meticulously organized rather than crowded.

Since the water faucets are installed in the music classroom, anyone can use the water fountain and a little sink. If a student asks Elsa to use it, she rarely refuses the

request unless the students are learning important musical concepts. With the teacher's permission, the students are able to drink water or wash their hands during class. Figure 5 presents her music classroom floor plan.



Figure 5. The Rotis Elementary School Music Room Floor Plan

Portrait of Elsa

Elsa is a general music teacher with more than thirty years of teaching experience. Elsa earned her bachelor's degree and master's degree in music education focusing on vocal performance. Along with her musical and educational training, Elsa obtained the Orff Level I and II Certifications and also received training in solfège.

While a graduate student Elsa was hired to teach undergraduate choir courses. She also had experiences teaching private music lessons, chorus, and guitar. This experience provided Elsa with valuable ideas about running multi-faceted programs, working with colleagues, and teaching music to students. After working as university instructor for two years, Elsa realized that she most loved teaching elementary school students. Since 2000, she has taught kindergarten through eighth grade. In the academic year 2016–2017, Elsa taught general music for students in grades two through eight. I observed her fourth graders.

Elsa believed that her Orff and solfège training were valuable. She explained that this background provided a "big continuum because having students in grades two to eight is consistently cycling through the stuff." With such training, Elsa began thinking about a variety of teaching and music-making strategies involving cooperative learning, and she tried to develop her own teaching practice utilizing cooperative learning concepts. To this end, Elsa made effort to find new resources from old books, old folk songs, or history books. Then she undertook several learning activities to maximize students' retention. Elsa also created many games for her classes. An example of such a game is offered in Figure 6.



Figure 6. An Example of the Games Elsa Used

Elsa emphasized the importance of the games in this way:

I love making some handheld games for them. And I love making something that [students] can manipulate. It helps them have a sense of the names of notes, rhythms, meters, tempos, measures—all kinds of stuff.

Elsa generally thought that cooperative group works could be creative and beneficial. In the last few years, however, she also noticed that some students had difficulty during group activities. Elsa worried about those children because they only wanted to take the "safe way," and they were used to being spoon-fed. Elsa described this situation:

I found that, in the last few years, children have a hard time when they are working in groups. . . . They want everything spoon-fed now. These days, their imagination doesn't seem to be there anymore. They want a step-by-step guide. They want to know what to do. Children used to have creative movement ideas. But, now, I don't know. I have to pull [creativity] out from them. I don't know why. I teach the same-aged children at the same school, and I did the lessons for years with great success. What I found in the last three years, however, is that the classes are becoming very difficult to teach cooperative learning. It's very difficult with the fourth graders, for example. I just think [the spoon-fed thing] is a common thing these days, although I'm not sure why. I think most teachers who've taught for ten years or more may have similar opinions.

Elsa's Views of Cooperative Learning

Elsa has an exceptionally well established concept of cooperative learning in that

she has defined six aspects: (1) cooperative learning motivates students to learn music, (2) it promotes students' positive behaviors in the class, (3) it helps students develop social skills, (4) it enhances students' responsibilities for learning, (5) it enhances students' learning satisfaction, and (6) the teacher should provide accurate responses to students' questions based on course standards and materials. In the sections below, I shall examine the six aspects one by one, showing how Elsa puts them into practice.

First of all, Elsa believed that cooperative learning motivated students to learn music together. On my first observation day, Elsa asked her fourth graders to play the theme from Dvořák's *New World Symphony* on the recorder (Figure 7). From third grade on, the students had learned to play the recorder. As a result, students were supposed to know all the notes on their recorders. It was their first time handling the recorder in the academic year 2016–2017, however, so Elsa gave instruction first before having the group activity:

Antonin Dvořák was from Bohemia. He visited the United States in 1892 to teach music-this was just six years after the Statue of Liberty was assembled in New York. He was so inspired by American music that he wrote his "From the New World" symphony, and this melody is from the second movement. New Note E 1 1.000 01 02 凤 Antonin Dvořák 5 9 n 13

Figure 7. Handout for the New World Symphony Lesson

We are learning to play the theme from Dvořák's *New World Symphony* on the recorder. The notes are "B-D-B-A-G-E," [skipping to] "E" and going bar-by-bar. Playing five notes is not too hard. Last class period, we had the first two measures of each phrase. And they are the same, same, same [of each phrase], and just different on the bottom [phrase].

Elsa then gave another instruction for the group activity:

I'm going to have three groups. . . . In your group, you are going to have just one line, the last line. To learn the last two measures of the last line, you are going to work together. After the group activity, we will talk about what remains the same and what's different: how many phrases are there, how many phrases have you practiced, what's the form, and etc.

By grouping students, Elsa helped students to work together. During the group activity, I observed that students achieved musical development through peer-assisted learning. While hearing and coaching each other's playing, the students understood how to make better sounds on their recorders. They also used and developed their cooperative learning skills by assisting each other. They tried to read the notes together, produced a good sound quality, and finally played the last line together. By doing so, students were able to enhance their own learning responsibility as well as that of others.

Second, Elsa felt strongly that cooperative learning resulted in behavioral improvement. She explained that cooperative learning could be an effective teaching strategy for helping students develop concepts related to classroom behavior. Elsa elaborated:

[Cooperative learning] is very effective. Children are coming from what they understand, modeling behaviors and studiousness among themselves. Some children don't give up—some children rarely give up; and some children easily give up. But then, children can see other children. I think they become more aware of their behaviors by looking at others. Elsa also emphasized that the "modeling effect" had benefits for both the individual and the group, resulting in improved student behavior:

I think there are some of group benefits and some individual benefits. While they're helping each other, they are also seeing how others are doing it. It's like while they're working together, they are looking at many different models. Yes, there are the model students. From the model students—their peers—[students] learn.... That is a positive effect from cooperative learning.

Third, along with the modeling effect, Elsa stated that cooperative learning provided opportunities to enhance their social skills for their own education, as well as that of their peers. She considered social skills essential in today's diverse society. During the final interview, Elsa emphasized the importance of knowing how to work together with others:

Each child needs to learn to respect others. They need to cooperate with each other. They will need to do things with others who are not always their best friends. They don't have to sleep over with them on Friday night, or invite them to the birthday party. However, they will have a job that requires them to work with others. I don't allow them to switch the groups unless something physical is going on, or something like bullying nature. I emphasize that they are going to work with group members, not with friends who they want to work together. Push them—I hope push them to work with others who normally wouldn't work together.

Fourth, Elsa believed that students enhanced their learning responsibility

throughout group activities. She described a time when students achieved common goals:

When they work in a group, they need to be a part of the group. They need to share their ideas to resolve a problem. They may have a conflict, but it's ok. They need to work through the conflict. When the group members complete an assigned task, they are really satisfied. They say, "We got that!" "We did it! We can do it!" "Elsa, we all made it together!" They are proud of themselves. It's cool to see.

Fifth, Elsa mentioned students' learning satisfaction:

I know that children want to figure it out by themselves. When they accomplish an assigned task, they are proud of themselves. That's why I left them on their own. Because it was not such a hard task, they can handle it. They want to handle it. That's why I have to give them space.

Lastly, Elsa emphasized the teacher's role as a deliverer with accurate answers to students' questions based on course standards and materials during the group activities. She said students in small groups did not need to teach others professionally because their role was to learn. Elsa agreed that peer coaching conditions may exist in cooperative leaning conditions, but she still considered teaching to be the primary mode of instruction:

It's not their duty to teach the other who doesn't understand a concept. It happens a lot in the classroom. That's not a student's responsibility even if they work together. Their duty is to understand what they are learning. Understanding doesn't mean that they are good at explaining it to another child. Their job is to be a student. It's great if one child helps another child during a group activity. It's great if students encourage other students' inquisitiveness. Still, I think they need their teachers. That's why I need to deliver a parcel of the information with a correct resource [accurate answers to students' answers based on course standard and materials].

Additionally, Elsa mentioned it may be necessary to assign a specific role such as leader during group activities. She assigned the student leader to check each group member's achievement. Elsa explained the rationale behind the choice and how she assigned a leader student to each group:

Usually, I allow them to figure out their roles while they work together. But, I also want them to make sure they're learning. For this reason, I choose students, who have studied an instrument or have taken private piano lessons, to be leaders. If I want a really good product, or if I want to challenge them to create something, I want to make the groups harmonious. If there are many good musicians in one group, [and another group doesn't have any], it's not fair. So, I spread out the students who have previous musical experiences into each group.

Obviously, Elsa thought that, throughout cooperative learning, students achieved academic benefits and cultivated positive interpersonal relationships. But again, she considered teachers' roles to be essential in facilitating learning. In particular, she said that teachers should ensure that the students participated in the group work fully and equally, even if some students may present challenges. To illustrate, she recalled when students were working together for the I, IV, and V chords of the *New World Symphony*

on my third observation day:

I think most of them want to learn music—they want to participate in making music even though some behavior issues can be affecting other children in the same group or other groups. For example—as you may remember—there was the group around the corner. A boy and girl were working together to play the I, IV, and V chords on a xylophone. He was so oppositional, but she just kept plugging in it. She was not willing to drop it. She wanted to break up with him at first. She wanted to be away from him, or doing something else.

As Elsa mentioned, not every student appeared to enjoy working with others. To facilitate cooperative learning, Elsa began asking the boy and girl to talk each other. By monitoring the group, she encouraged the girl not to give up and the boy to actively participate in the group. The mood was always encouraging and helpful in nature rather than one of oppressive monitoring. Eventually, the two wanted to work together. Elsa said, "They wanted to have a good outcome. Ultimately, they contributed to make the climate by wanting to participate, wanting to learning music together, and wanting to complete the assignment."

Elsa's Teaching Practice with Cooperative Learning

Elsa's teaching practice was tied to her belief that children need routine patterns in their learning process. Before the start of the lesson, Elsa always informed students of the day's objectives and learning targets. With the announcement, Elsa did body and vocal warm-ups. During the vocal warm-ups, she called her students' names by singing them. Elsa usually sang intervals such as the major second or major third. Then the

student whose name had been sung answered by echoing the interval. If a student had a difficult time producing the correct pitch, Elsa changed the pitch or the interval for the student. When a student succeeded in answering with that pitch, Elsa made a positive comment such as "really good," "excellent," or "you did it!"

Most of Elsa's activities involved small groups or pairs of children working together. Elsa once utilized formal cooperative learning over several sessions for openended projects, but she is currently moving away from formal cooperative learning by using instead a much more informal cooperative learning strategy.

There are many things about the wind
that I do not know.
I have not seen the wind and no one has told me where the wind lives, or where it is going when I hear it
and when I feel it rushing by.
And something more I do not know about the wind.
I do not know if it is angry or if it is just playing and just doing the things it does for fun.
Sometimes the wind gathers sand into whirlwinds and makes them dance over the flat lands until they are tired and lie down to get their breath.

Figure 8. The Poem "The Wind" for Formal Cooperative Learning

Elsa recalled a time when she used formal cooperative learning with the poem presented in Figure 8 above:

I worked with fourth graders, integrating material from social studies about Native Americans. After we have read the poem, we would talk about what the poem was about in a large class. And then, I broke up the students into small groups, and gave them a project of: "You're going to illustrate this poem with your bodies. You're coming up with motions. You can dance as a group while one of your group members read the poem." They had to be on the stage and be creative. The students always got very creative and get wonderful outcomes. They wanted to work together. I did this project for years with great success.

Although nothing had changed in the setting and student makeup, Elsa said she was having difficulty now, in the last three years, to get such a group project going. This difficulty led her in 2016 to use informal cooperative learning rather than formal cooperative learning. Elsa allowed students to work with peers in a short period of, usually, five-to-seven minutes. The group activity took place in the middle or at the end of class. On my third observation day, Elsa taught the I, IV, and V chords of the *New World Symphony*; here she allowed students to work with the xylophones. This instance is described in the following observation field note:

In a couple minutes, we're going to work in groups. We're going to break up into very small groups. When I get you to play the instrument, you and your whole group will try to do figure out the harmony for each measure. Yes, you already learned the melody, and that helps you to find the harmony. Harmony is the sound around the melody. Hopefully, the sounds meet together. Look here [pointing at Figure 9]. I, G, is most important in the key of G. G is the number one chord. V, D, is the next most important. What's the number for D if the G is a number one? Five. How can I write five in a Roman numeral? IV, what number is it for? Four. Because the fourth is from the I. How we can call it in the solfège? Fa.



Figure 9. Elsa's Drawing for the Chords

As seen here, Elsa taught the chords in a lecture style. After giving the musical information to students, she assigned student leaders to each group. Elsa thoroughly explained how to work together and what was expected:

Look at the score [pointing at Figure 10]. In your group, one person plays the letters [G] twice a measure. All the other people in the group will sing the melody. After that, you all write down the letters for [the entire] bass line. Then I will give this handout [Figure 11] for your practice at home. When you are done with your group work, go back to your seat. . . . I want to make sure every group has a music leader. If you take the private piano lessons, violin lessons, or whatever, please raise your hand.



Figure 10. The Theme from the *New World Symphony* by Antonín Dvořák Elsa Used in Class



Figure 11. An Engraved Version of Elsa's Handout for Bass Line of the *New World* Symphony

Another example of the use of informal cooperative learning was observed on my sixth observation day. Elsa assigned students to work together for five-to-seven minutes with large cards and clothesline clips. She explained dynamic terms including *piano*, *forte, mezzo piano*, and *mezzo forte*. After giving the lecture instruction, she divided the students into pairs. This moment is described in the following observation field note:

Now, it's time to talk about terminology. Here, we have cards for dynamics. When you see the card, what should you say? "p" is for *piano*. *Piano* means "make softer." "f" is for *forte*. *Forte* means "loud." "Mezzo" is a prefix. Say, "Mezzo." Doubled z is pronounced the same as "Pizza." Mezzo means "half." *Mezzo-forte* literally means, "Half loud." The abbreviation is going to be *mf*. And *mezzo-piano* means "half soft," and its abbreviation is *mp*. *Issimo* is suffix. *Issimo* means literally "more." *Fortissimo*, *ff*, means "very (more) loud." Ready? In a couple of minutes, I'll give you the card and dynamic [clothes pin] clips. When you're done, you should clip it [onto the card] because I don't want you to lose anything. I will give the direction for group activity with the dynamics cards. One part is in English and the other part is in Italian. When you are getting the *pp*, you can clip it on the right spot. If your group is done, come here and pick up another card. Listen to it carefully. When you meet your partner, one person gets the clips and one person gets the cards. Now, you are going to choose your own partner.



Figure 12. Outcome from the Group Activity for Dynamic Terminology

Figure 12 presents one group's outcome from the group activity. Students appeared to treat each other with kindness while working with their partner. The following sound track (Figure 13) and transcript give an example of how student groups worked together on the sixth observation day.



Figure 13. The Sound Track of the November 18, 2016, Class

(Double click on the sound icon to play.)

Matt: Give me. Very loud? Look at them.

Martin: Oh, the loud is here. Look at here. This is a *forte*.

Matt: Oh, my god. You can put it here. This? Soft?

Martin: Very soft.

Matt: OK, let's do it. Do focus.

Martin: OK.

Matt: Put it here.

I noticed that most groups communicated freely and made a common decision to match each term with its definition. All students enjoyed the group work and tried to complete the assignment. While watching the students, I was able to observe instances of individual accountability.

As described above, Elsa gave a short explanation of the musical terms. She then checked the students' understanding by asking questions. Afterwards, she allowed students to work together to complete the assigned task based on what they had learned. As can be heard on the soundtrack, students actively participated in the group work with their peers. They had discussions with others and shared their ideas. When students were done with the matching the dynamics terms with their definitions, they turned in their cards to the teacher. Elsa then assessed their work, checking if every term was correctly matched to its definition. If an error was found, Elsa provided another chance to find the correct answer.

In short, Elsa's teaching practice of cooperative learning was closely related to informal cooperative learning. Before assigning group work, Elsa gave a lecture about the material, and students concentrated on learning each concept. Every student completed the assigned task by putting the concepts into practice. During the group activities, Students also strove to better understand what they learned and make it concrete.

Elsa's Strategies for Cooperative Learning

To promote cooperative learning, Elsa employed three strategies: (1) being flexible within structured lesson plans, (2) helping students to negotiate their ideas, and (3) encouraging students to actively participate in class. I shall review each strategy below.

First, Elsa mentioned that teachers who wanted to use cooperative learning should be flexible within structured instruction. She stated that when planning lessons, teachers should consider that unexpected situations that may arise in their classrooms. Elsa continued to explain that, although teachers are often able to anticipate students' responses, no teacher can be sure how the lesson will go. Therefore, she maintained, teachers should prepare for uncertainty. Elsa also stated that teachers should be aware of

the unpredictability in students' learning outcomes and the effects of teaching.

Every class just goes differently. You can't pinpoint how it is going to go. Sometimes, it takes weird turns and you just have to go with it. You have to take a totally new direction and you need to go with the flow. Surprisingly, [students] may not be learning from what you thought they would. Still, that's valuable as well. Learning comes from the unexpected. After six years of taking the general music classes, [students] are going to go somewhere anyway. It doesn't matter if you have a very structured instruction. When they are ready to accept and learn it, they will get it. I think it's really important to remember that, some things are structural, and some things are developmental. [Students] also need to learn some things before others. Therefore, [teachers must] be flexible in the structured instruction.

Along with flexibility, Elsa also emphasized the importance of striking a good balance. She said,

You have to be very organized. If you are not organized, all kinds of multiple jobs are going to be messy. Since there are multiple grade levels, it is easy to be out of control. Thus, it's really important to strike a good balance. [Teachers should keep] a balance. It is really crucial to keep a balance and be flexible.

Elsa's emphasis centers on preparation for uncertainty and achieving a good balance between structured instruction and the flow of the lesson. In addition, she stated that these strategies could be helpful for pre-service teachers in applying cooperative learning and maximizing students' retention. Secondly, when students had conflicts with their peers, Elsa made them negotiate their ideas. She explained that since all children wanted to hear their own voices during the group activity, it was easy to have conflicts. To illustrate this point, Elsa shared her experience that occurred when second graders learned a folk song and composed dances for the song:

Our second graders did cooperative folk dances for a month and a half. During that time, we made a list of all folk dance moves we had learned. Then I broke up them into the two groups. For each group, they chose four of the moves, made their own dances, and performed the dance. In the end, it was really successful. But, actually, one group had struggled with it, although at the end they came up with a good product. They had a hard time getting in there, because everybody wanted to hear their voice and no one wanted to compromise. For instance, one child said, "I don't want to do this dance move." And another said, "No, I don't want to do that dance move." So, they had to know how to compromise and resolve the problem. One couple needed to dance together, but one child didn't want to do it. They had to learn how to compromise and resolve the problem. . . . We needed to figure out who would do the dance with the student instead of the previous partner. It was an issue, but it's a very small issue because they all wanted to accomplish the dance successfully.

To facilitate students' negotiation, Elsa tried to establish a positive atmosphere by encouraging cooperation. She encouraged each student to make his or her own dance with team members. Elsa mentioned numerous times that it would be great if every group

performed the cooperative folk dance. She remembered:

In the end, they ended up with a product and they were very proud of themselves, and very proud that they worked together well. They compromised and succeeded.

Last, Elsa is actively engaged with students in the learning process. She frequently gave positive comments, praised student performance, and clapped to show her satisfaction regarding the outcomes. Elsa gave tangible rewards such as stamps to students in third grade or younger. She rewarded older students with positive reinforcement such as showing funny videos from online resources. Elsa explained how she used the reward systems:

In the third-grade classes, I used structured reward programs. Once they get the B, A, and G on their recorder, I give them a chart for each letter. And each class can get a stamp. For example, we practice the piece maybe for a week. When we are ready to listen to our playing, I will allow them to play it and allow that two children can make mistakes because you can never get everyone to play it perfectly. And then, if I judge that two children or less made a mistake, then they are going to get the stamp. Still, they have to do it in the class. That really makes them practice more because they want to get the stamp. However, that doesn't work for fourth graders, so I don't have any reward systems for the fourth graders. "It's time to turn. You need to practice." I also say, "You need to do it when you are more grown up." And I say, "If you are a member of band or orchestra, you should practice." As described above, Elsa used reward systems based on age. She also used the reward systems as group rewards instead of individual assessment. As a result, each student was more likely to work together with others to improve their group's outcome.

In short, Elsa effectively managed her general music classes with cooperative learning by using these strategies. To promote cooperative learning, Elsa encouraged students to actively participate in the class and helped them negotiate their ideas. She also tried to be flexible within structured lesson plans. Consequently, throughout the group works, her students were able to develop social skills, build trust among their group members, and achieve common goals.

Chapter Summary

In this chapter, I presented the findings of two separate cases. To report in-depth study of two music teachers' understanding of cooperative learning and its application, each case was separately discussed. Based on the findings, three themes in the left-hand column emerged, shown in Figure 14. Because the chapter gives an overview of the themes, commonalities and divergences between two teachers' practices of cooperative learning are found. To address the details, a cross case analysis will be presented in the next chapter.

Three Themes		Chris	Elsa	
1.	Characteristics of	Teacher responsibilities		
1	teachers' instruction	Reward systems		
		• Give more authority to	• Make a balance between	
		students for managing	structured instruction	
		class	and the flow of lesson	
		• Provide students with	• Assign specific roles to	
		shared leadership	each group	
2.	Teachers' beliefs about	Relate to cognitive development		
	cooperative learning	• Improve student musical development and classroom		
		behavior		
		• Foster positive interpersonal relationships		
3.	Strategies for	To maximize students' learning		
(cooperative learning	Delivery of clear	• Being flexible within	
		instructions	structured lesson plans	
		• Use of tension and release	• Encouraging students to	
		• Development of his own	compromise their ideas	
		teaching practice	• Promoting students'	
		• Choice of student-friendly	active participation in	
		words and ideas	class	
		Self-reflections		

Figure 14. Three Themes that Emerged from each Case

CHAPTER V

CROSS-CASE ANALYSIS

In this chapter, I present a cross-case analysis of Chris and Elsa's enacting cooperative learning. Based on the research questions, three aspects of the subjects are discussed: characteristics of teachers' instruction, teachers' beliefs about cooperative learning, and their strategies for cooperative learning.

Characteristics of Teachers' Instruction

Based on a cross-case analysis, I inventoried two teachers' instructional characteristics regarding classroom management, teacher responsibilities in cooperative learning, and reward systems.

Classroom Management

The findings revealed that both teachers sought to meet students' educational needs and that details in the two teachers' classroom management had diverged slightly. First, Chris tried to give more authority to students to manage their experience of learning. He emphasized that the music classes belonged to students, not to him. When students had conflicts during the group work, Chris facilitated the resolution of the problem. He limited his classroom management authority to arbitration. By giving the classroom management authority to students, Chris tried to promote accountability.

Chris chose to use both formal and informal cooperative learning. When students had composition activities, he implemented formal cooperative learning. Before assigning the task, Chris introduced the goal of the group work, the criteria for evaluation of task completion, as well as his general expectations of students. He monitored his

students closely and offered help when needed. Chris also employed informal cooperative learning in his instructions; for example, when he taught a musical concept such as rhythm, he encouraged students to institute short group activities.

Similarly, Elsa's classes demonstrated many aspects of cooperative learning. As a facilitator, Elsa tried to provide concrete source materials for students. In addition, Elsa valued a balance between structured instruction and the flow of each lesson. She not only assisted students' group works, but also assigned a specific role, such as a leader, to each group. With a student leader, students were able to successfully accomplish their shared goal.

Elsa mainly used informal cooperative learning when teaching rhythms, phrases, or musical terms. Since Elsa wanted students to be sure of their comprehension, she invited them to discuss the topic either before or after her lecture. She also encouraged all students to participate in group work.

Teacher Responsibilities in Cooperative Learning

Chris and Elsa sought to foster both individual and group accountability throughout group activities. Whenever they noticed a student not participating in group work, they made eye contact or called the student's name. The music teachers took care not to apply much pressure, however. The mood was always of an encouraging and helpful nature rather than oppressive monitoring. Since group activities can be less rewarding for the introverts (Ehrman & Oxford, 1990), Chris and Elsa always maintained encouraging environments for all students. For such a purpose, the two teachers frequently invited their students to discuss new ideas. When an idea was flawed, the
teachers and other students did not embarrass the student by openly correcting the thought, but rather tried to accept it as part of diverse learning experience.

The findings revealed that the two teachers' pedagogical practices were strongly related to cooperative learning. There were, however, differences in how each exercised authority. For example, Chris allowed students to create their own rules for appropriate classroom behavior, as he emphasized numerous times that the class belonged to the students, not to him. Furthermore, Chris rarely assigned leadership roles in the groups in order that they engage in self-directed group works. On the other hand, Elsa highlighted the teacher's role in providing accurate answers to students' questions based on course standards and materials. She usually assigned a specific role to members in each group, such as a musical leader. Typically, those assigned students directed their group members to accomplish the given task successfully.

Reward Systems

Chris and Elsa used reward systems to motivate students' group work. In common, the teachers generally gave positive comments to students' outcomes. A few noteworthy differences were observed, however. For example, Chris utilized a software program, ClassDojo, to give immediate feedback to students regarding the day's lesson. When the students earned a thousand points on ClassDojo, he held a pizza party for them. Such rewards strongly motivated students to engage actively in learning music. On the other hand, Elsa distributed rewards based on age. For instance, Elsa gave stamps to the third graders or younger when the students accomplished the common goal. For grades four or higher, Elsa used entertainment media, such as amusing videos, instead of tangible rewards.

Beliefs about Cooperative Learning

In this section, I present three major themes that emerged across the two teachers' beliefs about cooperative learning: cognitive development, student musical development and classroom behavior, and positive interpersonal relationships.

Cognitive Development

Both teachers strongly agreed that elementary general music teachers should have clear understanding of students' cognitive development (Piaget, 1964) when considering implementing cooperative learning. As noted in Chapter IV, Chris recalled when he used cooperative learning with students in first grade. He mentioned that since the first graders' cognition was not well enough developed to clearly understand concept of cooperation, it became challenging for students to engage in group work. Elsa also thought that it might be inappropriate to apply cooperative learning to the second graders or lower because of those children's immature cognitive development.

Student Musical Development and Classroom Behavior

Based on my interviews and observations, I gathered that both teachers' instructions mirrored their beliefs regarding student musical development and classroom behavior. Chris emphasized that cooperative learning motivated students to actively engage in their musical learning process, and he also stressed that cooperative learning encouraged students to improve classroom behavior. Chris found a relationship between the students' musical development and their behavior issues. Some students show passive behavior with minimal involvement in teacher-centered music classroom settings, which might be because students are less accustomed to interacting with their peers.

Similarly, Elsa believed that cooperative learning motivated students to learn music together. During group activities, she encouraged students to help and support each other. Throughout the peer-assisted learning, students were able to develop their musical skills. Elsa's teaching practices also revealed that cooperative learning improved student classroom behavior. Both teachers mentioned that because students looked at various models of other classmates' performance and actions in small groups, they were more likely to follow the model students during group work. Moreover, the two teachers agreed that as students recognized that the music class belonged to them they participated more actively in the class. The teachers also stressed that each student should learn how to compromise. They mentioned that students must understand a need for cooperation because they would eventually work with others as they enter society. Additionally, Elsa stated that cooperative learning could be one of the most effective strategies to improve students' classroom behavior.

Positive Interpersonal Relationships

As noted in Chapter IV, Chris encouraged students to work together. As a part of the group, students shared their ideas on how to compose better melodic lines and rhythms. Through group discussion, students chose the instruments for their piece. They offered feedback to each other in order to improve their performance, and by doing so, were motivated to achieve their common goal. Overall, students could experience cooperation, and, further, they enjoyed the process of making music together. In Elsa's classes, students tried to encourage and assist each other to accomplish an assigned task. Although Elsa often assigned one student to lead each group, all members of the group did their best to accomplish their common goal. Students asked and answered questions, listened to each other, and tried to resolve conflicts. By doing so, they were able to focus on their learning.

Strategies for Cooperative Learning

To maximize students' retention of information during cooperative learning, both teachers used their own strategies for cooperative learning. As noted in Chapter IV, Chris's strategies were: (1) delivery of clear instructions, (2) use of tension and release, (3) development of his own teaching practice, (4) choice of student-friendly words and ideas, and (5) self-reflection. By incorporating these five strategies, Chris strove to obtain positive outcomes from cooperative learning. He created a cooperative environment for students. By giving clear instructions, Chris tried to communicate well with his students in order that they fully understand what was expected during the music class. Chris also encouraged students to work together, develop their leadership, communicate with one another, and manage conflicts. In addition, Chris always added comments about self-reflection at the end of each interview. While explaining why and how he handled reflective dialogue, Chris mentioned his instructional strengths and weaknesses. By reflecting on his experience teaching, Chris was able improve the instruction in both effectiveness and productivity.

In a similar context, Elsa employed three strategies: (1) staying flexible within structured lesson plans, (2) encouraging students to compromise on their ideas, and (3)

promoting students' active participation in class. Of the three strategies, Elsa emphasized the first one, that teachers who wanted to use cooperative learning should be flexible within a structured instruction. She foresaw that unexpected situations might arise in their classrooms, and that teachers would be required to be aware of such unpredictability as students' responses, their learning outcomes, and the effects of teaching. Along with her emphasis on being flexible, Elsa applied other strategies to effectively manage her music classes.

As described above, in the two teachers' strategies diverged minutely. The commonality and the purpose of their instructional strategies were to promote cooperative learning for student achievement—musical development, motivation, relationships among students, and interpersonal skills. Accordingly, the students were able to enjoy learning in music as well as participating in group exercises.

Chapter Summary

In this chapter, I provided a cross-case analysis of two teachers' enactment of cooperative learning. Based on the findings and analysis, I discovered three topics: characteristics of teachers' instruction in cooperative learning, beliefs about cooperative learning, and strategies for cooperative learning. I summarized the similarities and differences between two teachers' practices of cooperative learning in Table 2.

Table 2.

Similarities and Differences between Two Teachers' Practices of Cooperative Learning

Similarities: Both teachers believed in (1)–(5) and performed (6)

(1) Cooperative learning helps students' academic achievement.

(2) Cooperative learning motivates students to make and learn music together.

(3) Cooperative learning refines students' social skills and positive interpersonal

relationships.

(4) Cooperative learning improves students' classroom behavior.

(5) Teachers who want to use cooperative learning should understand student cognitive development.

(6) The two monitored their class closely to promote cooperative learning, but the

mood was always of an encouraging and helpful rather than unpleasant and oppressive.

Differences	
Chris	1) Used both formal and informal cooperative learning.
	2) Gave more authority to students during the group works.
	3) Rarely assigned roles to students to share leadership during the group
	activities.
Elsa	1) Previously had employed formal cooperative learning, but in the last few
	years used more informal cooperative learning.
	2) Emphasized the teacher's role to provide accurate answers.
	3) Assigned a specific role such as a leader to each group.

As shown in Table 2, two teachers agreed on the characteristics of cooperative learning. They believed that cooperative learning enabled students to obtain positive outcomes including musical development and interpersonal skills. Although they employed differing strategies for cooperative learning, in each case the purpose was the same—to maximize the students' learning.

CHAPTER VI

DISCUSSION AND CONCLUSION

Cooperative learning is an instructional strategy in which students work together to maximize their own and each other's learning (Johnson & Johnson, 2005b). Educators acknowledge that utilizing an active learning approach, such as cooperative learning, is one of the most effective ways to engage the majority of students (Beetham & Sharpe, 2013). Since interest in student-centered pedagogical environments and cooperative learning has been growing, Kaplan and Stauffer investigated cooperative learning in music (Kaplan & Stauffer, 1994). Based on their research, other researchers have also investigated the influence or effects of cooperative learning in music on various dependent variables, such as rehearsal technique (Compton, 2015), music achievement and learner engagement (Johnson, 2013), and music performance achievement, motivation, and attitudes (Larson, 2010). Although these studies have focused on cooperative learning in music and music education, it was difficult to find research on elementary general music teachers' practices of cooperative learning.

General music education in primary schools plays a crucial role of laying the foundation in which students are exposed to core musical concepts such as melody, harmony, rhythm, and other musical elements. In addition, general music is "not exclusively focused on a singular musical activity, role, or type of music" (Abril & Gault, 2016, p. 10). Such creative musical experiences are likely to end around the sixth grade (Campbell, 1991), however, and not extend into secondary school music classrooms. Studies conducted in secondary classrooms also indicate that students rarely experience

cooperative learning (Kendall, 2011). Moreover, "when they do, classroom management often becomes a barrier to student academic engagement" (Kendall, 2011, p. vii).

Because of my own positive experiences with cooperative learning in classrooms, learning of the gradual decline in the use of cooperative learning as students advance to higher levels of education, as noted by Kendall (2011), intrigued me. In addition, I found out that some elementary music teachers considered the terms of cooperative learning and collaborative learning interchangeable because both strategies emphasize students' cooperation and learning with peers. Cooperative learning, however, centers on grades kindergarten through twelve while collaborative learning focuses on college and university educational levels (Bruffee, 1999). Since this study was intended to focus on elementary general music teachers' practices in their classrooms, the term *cooperative learning* was more suitable to use in this study.

To perform an in-depth study of elementary general music teachers' practices of cooperative learning, I designed my research questions to identify their perspectives on cooperative learning, beliefs about cooperative learning, and challenges they faced in creating and implementing cooperative learning. Because I wanted to examine a particular phenomenon in a bounded setting—general music teachers' teaching practices of cooperative learning in elementary music classrooms—a qualitative case study was appropriate. Specifically, the intrinsic case study design discussed by Stake (1995) was selected to use as a research method because the case being studied was of primary interest. Two elementary general music teachers—each from a separate school in Boston—participated in this study. I collected data throughout a total of eight class

observations and three interviews in the fall semester of 2016. As a non-participant observer, I found apparent evidence that the music teachers' teaching practices of cooperative learning motivated students to learn music together; cooperative learning promoted social interpersonal relationships; and such an approach enhanced individual accountability and group accountability. I conclude this intrinsic case study with the discussion of the findings, implications, and suggestions for further research.

Discussion of the Findings

Application of the Theoretical Framework

Along with a unique lens of social interdependence, I was able to explicate how elementary general music teachers used cooperative learning in their music classrooms. To examine their practices, I addressed the following research questions:

- 1. What are elementary general music teachers' perspectives on cooperative learning?
- 2. How do the elementary music teachers implement cooperative learning in their general music classrooms?
- 3. What are the challenges the music educators face in creating and implementing cooperative learning into their classrooms?

Seen through the lens of social interdependence, the findings were interpreted as apparent evidence that two social interdependences occurred in the elementary general music classrooms of Chris and Elsa. Although the purpose of this study was to examine general music teachers' practices of cooperative learning in their music classrooms, I was able to observe how the students worked together for their educational achievements during the data collection period. For example, when students in Chris's class had compositional activities, positive social interdependence existed. Students actively participated in the group activities and often shared their ideas to achieve their common goals. Since they freely communicated with each other and enjoyed sharing their ideas, I assumed that they were comfortable working with peers during the compositional group activities. Negative social interdependence, sometimes, also occurred. A few students had conflicts and competitions within the group because they wanted to keep their personal opinions. Nonetheless, Chris considered that negative social interdependence was necessary for cooperation. He tried to mitigate the conflicts. Chris also rarely assigned roles for students—such as leader, reporter, or presenter—that could cause division and become counter-productive. Chris helped students gradually become self-aware of the conflict. According to Chris, once the students are willing to resolve the problem together, they finally participate in decision-making for their teams. Throughout the observation period, I found that Chris let students have opportunities to resolve their group problems by themselves. In doing so, his students discussed the problem with each other and tried to solve it in their own ways.

In a similar context, students in Elsa's class worked together for their educational achievements. For example, when her fourth graders practiced a main theme from Dvořák's *New World Symphony* on the recorder, students achieved musical development through peer-assisted learning. While hearing and coaching each other's playing, the students understood how to make better sounds on their recorders. They tried to read the notes together, produced a good sound quality, and finally played all lines of the main

theme together. The students also used and developed their cooperative learning skills by assisting each other. By doing so, they were able to enhance their own learning responsibility as well as that of others.

Elsa usually assigned the specific role of leader to a member of each group. While the student leader in a group checked each group member's achievement, the other members focused on their own assigned tasks rather than envying the model students. They fully participated in the group work and helped each other accomplish shared goals. It was apparent that students in Elsa's class achieved academic benefits, cultivated positive interpersonal relationships, and experienced enhanced self-esteem during group activities.

Viewed through the lens of social interdependence, the findings supported the five elements of a cooperative learning environment guided by Sharan (1990): positive interdependence, considerable promotive (face-to-face) interaction, personal responsibility (individual accountability) to achieve the group's goals, interpersonal and small-group skills, and periodic and regular group processing. The theoretical lens also provided the rationale for cooperative learning in elementary music education.

The following section shall discuss the findings within previous literature focused on: (1) the characteristics of the two teachers' instruction, (2) their beliefs about cooperative learning, and (3) their strategies for cooperative learning.

Analysis of the Teachers' Instruction in Light of Previous Literature

Classroom Management

Researchers such as Cook et al. (2007), Freiberg et al. (2009), and Kendall (2011) expressed worries about students managing a classroom because of their lack of experience. Specifically, Kendall (2011) mentioned that "when [students] do, classroom management often becomes a barrier to student academic engagement" (p. vii). The findings from Chris's classes, however, revealed that cooperative learning might help students manage their music classes successfully. Chris enabled his students to manage their learning and gave them more authority. Throughout the cases of classroom management, students were able to improve their learning responsibility, as well as their individual emotional factors such as self-esteem, motivation, and attitudes toward music and music classes.

According to Johnson and Johnson (1994, 2014), formal cooperative learning is considered as a strategy in which teachers encouraged students to engage in group work for a substantial amount of time over several classes. As noted in chapter IV, Chris's implementation of cooperative learning was in close agreement with their definition. In formal cooperative learning, teachers should decide the size of the smaller groups, teach academic knowledge, assign a task, monitor the students' groups, assist the groups when needed, and evaluate the groups' outcomes. Chris determined the size of the groups, taught musical concepts, assigned the common task, and monitored students' activities. One exception was that Chris evaluated each group's performance and actions rather than that of individual students. The findings from Chris's classes also mirrored the definition of informal cooperative learning by Johnson, Johnson, and Smith (1991) in which students engage in group work that lasts only a few minutes. Informal cooperative learning may be used to: (1) encourage student participation in the class materials, (2) set a conducive learning environment, (3) promote the expectations of the lesson, (4) ensure that students possessed sufficient maturity in cognition for learning, (5) make a summary of the day's lesson, and (6) evaluate student understanding of the class material (Johnson & Johnson, 2014). Chris employed informal cooperative learning in class, and Elsa also took a similar approach when teaching rhythms, phrases, or musical terms. Participating in occasional group work, students were able to focus more on the class materials.

Furthermore, the findings from Elsa's classes mirrored the studies by Jellison et al. (1984), Matthew et al. (1995), Regelski (2004), and Richter (2008) in that, as a facilitator, teachers needed to encourage students to develop intellectual and artistic capabilities, which closely described Elsa's classes. Elsa tried to provide accurate answers to students' questions based on course standards and materials. While she assisted students' group activities, she thought it valuable to maintain a balance between structured instruction and the flow of each lesson, and she prepared for uncertainty and unpredictability in students' educational outcomes and the effects of teaching. Additionally, Elsa assigned the specific role of leader to a member of each group. Although not every student had an opportunity to lead, each student in a group member experienced enhanced self-esteem, as well as the experience of having actively participated in the learning procedures. In doing so, each student helped accomplish shared goals.

Teacher Responsibilities in Cooperative Learning

This study corroborated the study by Hines (2008) in that teachers should know which role he or she must take in order to maximize the effectiveness of cooperative learning. Based on the analysis, I found that both Chris and Elsa recognized the importance of their roles during the student group activities. This study also aligned with McNair's (2006) study. McNair's participants—elementary music teachers—gave lectures prior to cooperative learning and monitored their students closely. Similarly, Chris and Elsa also gave a lecture about the task before starting group activities. This study did not support the conclusion of McNair (2006) that certain characteristics of cooperative learning—positive interdependence, promotive interaction, group or individual accountability, and collaborative skills—were not observed in the public school classrooms. As described in Chapter IV, both Chris and Elsa sought to foster individual accountability.

I also found that Chris and Elsa carefully avoided creating an oppressive atmosphere while monitoring their students, which supported the conclusion of Ehrman and Oxford's (1990) study. Introverted students, as defined by Jung (1990), may not prefer cooperative learning. Group activities may be risky for the introverts because the students "need time to internally process the instructions or have difficulty expressing themselves in a group discussion" (Pantaleon, 2016, p. 1). However, if a teacher creates a relatively safe climate in the classroom, group activities could help students practice

language, try out new behavior, and make mistakes (Ehrman & Oxford, 1990). Since Chris and Elsa always tried to make the mood an encouraging and helpful nature, their students were able to actively participate in class.

Similar to the findings of Hilk (2013), two teachers in this study encouraged students to work toward academic development and improve social skills. When some groups competed against other groups, Chris and Elsa encouraged students to work toward their collective goal. Rather than envying another group's achievement, students were able to work harder on their own assigned tasks. As a result, students were able to achieve positive outcomes in addition to enhancing their individual and group accountability.

Chris and Elsa acknowledged that competitive learning situations could exist during the group activities (Henderson & Dancy, 2007; Kendall, 2011; Zbikowski & Long, 1994). While I conducted the second interview, I shared the definitions of competition given in two studies (Johnson & Johnson, 1988b, 2005, 2016; Johnson &. F. Johnson, 1991). Then I asked Chris and Elsa about the value of competition. (see Appendix C). Although they did not support these two sources' definitions, Chris and Elsa thought that students' competition or conflicts were not characterized in the form of negative interdependence or the absence of interdependence.

Chris and Elsa also mentioned that individualistic learning could occur when students work by themselves to complete learning goals without other students' assistance (Johnson, Johnson, & Smith, 2014). Chris said, "Individual working can be much easier for both students and teachers." Nonetheless, he supported the study of Kim

(2007) who argued that individualistic learning may cause problems in the classrooms because only the best learners are rewarded and students in general have fewer opportunities to interact with each other and the teacher.

Reward Systems

Based on separate and cross-case analyses, I found that Chris and Elsa utilized rewards to encourage students' active participation, the teaching practices supportive of Zbikowski and Long's (1994) study. They emphasized the importance of rewards to motivate students to overcome resistance to acting in a group. Similarly, Chris and Elsa commented positively on students' outcomes, such as "good" and "excellent," for encouragement. Elsa also presented amusing videos, as well as tangible rewards. Chris used a software program, ClassDojo, to give immediate feedback to students regarding the day's lesson. These various rewards were important in motivating students in both teachers' classes to engage in making and learning music together.

Analysis of Teachers' Thoughts on Cooperative Learning Based on Previous Literature

Cognitive Development

Chris and Elsa believed that teachers who want to utilize cooperative learning must have an understanding of students' cognitive development as guided by Piaget (1964). Their beliefs were remarkably similar to those of Pope (2016) who mentioned that understanding of students' cognitive development provided a framework when teachers needed to determine students' grasp of class material and improve the educational environment. Similarly, Chris and Elsa strongly agreed that if teachers do not

understand students' cognitive development, it becomes extremely challenging to present essential class materials. They also thought that teachers need to use scaffolding (e.g., zones of proximal development) based on the level of students' cognitive development; that the teachers should check whether the prepared lesson plans and activities were matched to cognitive development; and that they must revise their class materials when needed to accommodate students' cognitive engagement.

Student Musical Development

This study was closely related to the study of Holloway (2001) who found that college students in music appreciation classes significantly improved their musical skills. Holloway compared cooperative learning to a traditional lecture model and concluded that students were able to develop listening skills for melody, meter, and timbre. In a similar context, the findings of this study revealed that the two teachers believed that cooperative learning encouraged students to develop their musical skills. Throughout all observations, I found that students in both teachers' classes actively participated in the group works and engaged in the process of learning music. Although this study was undertaken in elementary general music classrooms, the results still supported Holloway's (2001) study.

Although I focused on the teachers' practices of cooperative learning, the findings of this study mirrored the concept of peer-assisted learning by Johnson, Johnson, and Smith (2014) and Topping (2005), a skill developed through active support from sameage student peers of comparable ability. All of my interviews and observations revealed that the two teachers believed that cooperative learning encouraged to students to assist

each other during group activities. In doing so, students were able to develop their musical skills such as differentiating between quarter notes and eighth notes, making better sounds on the recorder, choosing rhythms and melody for their group songs, and matching musical terms and their definitions.

Student Classroom Behavior

Similar to the previously reviewed literature (Bandura, 1985; Barrett, 2000; Dyson & Casey, 2016; Johnson, Johnson, & Smith, 1991), two teachers in this study believed that cooperative learning helped students improve their classroom behavior. According to Bandura (1986), learning primarily occurred through observation or modeling of others. Throughout classroom observations and interviews, Both Chris and Elsa clearly described that their students learned appropriate classroom behavior and, further, improved their actions through observation of the model students. Moreover, the two strongly agreed with the definitions of learning by Johnson, Johnson, and Smith (1991) that learning was a personal interaction among other students and also between teachers and students as they worked together. With these beliefs, each teacher encouraged students to actively interact with others during work in the group.

This study was also linked to the study Dyson and Casey (2016) who argued that students could improve inappropriate behavior or social miscues through immediate and frequent feedback from their peers. I observed students in Chris's classes who were encouraged to give feedback to each other in order to improve their performance. When students reviewed their behavior and performance, they were not allowed to point fingers or call others names. I also found that students in Elsa's classes improved their behavior

by following the model students. By presenting appropriate behavior, students were able to enhance their self-awareness.

These findings provided apparent evidence of the relationship between the teachers' beliefs and their practices. The findings also showed an important connection between the teaching practice and student classroom behavior.

Positive Interpersonal Relationships

When students share their ideas and help each other to complete their assignments, they can experience promotive interaction (Johnson, Johnson & Smith, 1991, 2014). Working together, they are also able to support dialogue with others (Dyson & Casey, 2016). By doing so, students learn to hold positive attitudes toward the group work and to enjoy group discussions (Djordjevic, 2007). Based on separate and crosscase analyses, I found that Chris and Elsa enabled students to freely communicate with their group members. Such activities were intended not to leave students on their own, but rather for them to enjoy emotionally supported freedom. Although students sometimes diverged from class materials, they listened carefully to their peers and shared their ideas for most of the time. When students found it difficult to work together, such as in decision making, each of the teachers in this study assisted in solving the problem. The teachers also encouraged them to support each other's view. Furthermore, both Chris and Elsa encouraged students not to give up. In the end, students in both teachers' classes successfully completed their group activities.

Strategies for Cooperative Learning within Previous Literature

Teachers' practices can impact on student learning environment (Pitler, 2012). Although the details of two teachers' strategies for cooperative learning differed somewhat, this study supported Zbikowski and Long's (1994) research that showed how cooperative learning enabled teachers to design their own instructional strategies. Both teachers designed their own strategies. Specifically, Chris utilized the following strategies: (1) delivery of clear instructions, (2) use of tension and release, (3) development of his original teaching practice, (4) choice of student-friendly words and ideas, and (5) self-reflection. By giving clear instructions, Chris communicated well with his students so that the students better understood what was expected during the music class. In addition, the strategies of delivery of clear instructions and self-reflection were aligned to the study of Bloomberg et al. (2014), who argued that teachers should reflect on their class as an instructional strategy. Chris explained importance of self-reflective dialogue and stated that he always tried to be aware of his instructional strengths and weaknesses and to improve his instruction for effectiveness and productivity. Although Chris did not highlight any one of his five strategies, he concluded every interview by mentioning self-reflection.

In a similar context, Elsa employed three strategies: (1) being flexible within structured lesson plans, (2) encouraging students to compromise their ideas, and (3) promoting students' active participation in class. Of the three strategies, Elsa valued the first strategy most: teachers who wanted to use cooperative learning needed to be flexible within structured instruction. According to her, since unexpected situations might arise in

their classrooms, teachers were required to be aware of unpredictability such as students' responses, their learning outcomes, and the effects of teaching. Arguments and conflicts may also arise among the group members (Johnson & Johnson, 2005, 2016; Johnson &. F. Johnson, 1991). Since Elsa considered such arguments and conflicts as necessary during the group work, she encouraged students to compromise on their ideas whenever the conflicts arose. Furthermore, it is generally accepted that individualistic learning occurs when students work by themselves to complete learning goals without other students' assistance (Johnson, Johnson, & Smith, 2014).

In addition, introverted students, as defined by Jung (1990), may not prefer cooperative learning. Group activities may be risky for the introverts; however, if a teacher creates a relatively safe climate in the classroom, group activities could help students practice language, try out new behavior, and make mistakes (Ehrman & Oxford, 1990). Additionally, individualistic learning may cause problems in the classrooms because only the best learners are rewarded and students in general have fewer opportunities to interact with each other and the teacher (Kim, 2007). To prevent such cases, Elsa tried to encourage students to actively participate in class. To keep students' attention during the group activities, she enabled students to help one another to complete their common goals. In doing so, students were not only motivated to work harder, but they also enjoyed their tasks in cooperative learning situations.

Implications of this Study

The results of this intrinsic case study yield insights into how general music teachers used cooperative learning in elementary general music classrooms. This study

not only supports the previous studies, but it presents the teachers' perspectives on cooperative learning, beliefs about cooperative learning, and challenges that they faced in implementing cooperative learning. Although this study was subject to a number of limitations due to its scope, it brings into focus some important implications for music educators and school administrators.

First, music teachers hesitant to introduce cooperative learning need to consider the positive impact on student musical development. In this study, both teachers acknowledged that cooperative learning could be beneficial to students' academic achievement, as well as to their interpersonal relationships. Although this qualitative case study included few participants, the findings corroborated research in the field of music education, such as students' composition skill development (Cornacchio, 2008), social interactions (Jellison et at., 1984), and interpersonal relationships and psychological health (Whitener, 2016).

Second, music teachers who wish to use cooperative learning should be aware of the students' cognitive development. Chris and Elsa tried to match their practices and cognitive development. If the students' cognition was not sufficiently developed for a given activity, the teachers need to revise their lesson plans. Johnson and Johnson (1998), Anderson (2016), and Pope (2016) revealed the relationship between cognitive growth and learning. Both teachers also checked students' understanding of the subject matter and confirmed that they fully understood the material before the teacher ended the class. In addition, they tried to make an explicit connection between previous lessons and the current lesson. By doing so, the teachers were able to meet the students' particular needs

while using cooperative learning in their general music classes.

Next, music educators should have confidence in using cooperative learning, as well as flexibility in structured instruction. Unexpected situations may occur in class even if teachers are aware of this unpredictability. Students' responses, their learning outcomes, and the effects of teaching may differ from what teachers expect. Arguments and conflicts may also arise in group activities. Furthermore, introverted students may not prefer cooperative learning because the introverted may want to have their own time to understand instructions or have troubles to express themselves during group activities. Nevertheless, if teachers provide comparatively safe and cooperative learning environments, group activities during cooperative learning can help students' musical development and interpersonal relationships. Therefore, teachers should be aware of positive influences and benefits from cooperative learning.

As described in this study, students are able to learn what they can or cannot do during the group work by observing other students. Moreover, if students experience conflicts, they may learn to resolve the problem together. Such actions may serve to improve classroom behavior, which in turn helps students complete the assigned task. Perhaps, experience of conflict resolution makes students feel a sense of ownership of the classroom. Such a sense of commitment may be the primary incentive to improve their classroom behavior.

Last, music educators and school administrators should acknowledge how cooperative learning helps students develop academically, as well as enhance the students' sense of individual and group accountability. They also consider to design

professional development programs focused on cooperative learning strategy. According to Johnson et al. (1998) and Onwuegbuzie (2001), students are able to promote their group and individual responsibilities when they accomplish the common task or goal. Students in this study were observed to build trust among other group members. Moreover, they helped each other achieve group success, realizing that they were linked to each other. Cooperative learning skills—such as leadership skills, social skills, decision-making skills, and communication skills—can potentially benefit the students in the long term. Therefore, music educators and school administrators interested in classroom strategies need to bear in mind incorporating cooperative learning for their schools and music classrooms. If they provide more opportunities to in-service teachers for professional development focused on cooperative learning, the teachers could be assured to utilize cooperative learning with full of trainings and experience.

Suggestions for Further Research

This study shed insight on the perspectives of general music teachers, their use of cooperative learning, and the challenges faced during the group work. It also supported the view that cooperative learning promoted student musical development as well as interpersonal relationships. This study was, however, limited to elementary general music teachers in two different schools in the Boston metropolitan area.

First, a useful area of future research might be to investigate pre-service music teachers' perspectives on cooperative learning. It is known that general music teachers are hesitant to utilize cooperative learning for a variety of reasons, including, but not limited to, their lack of teaching experience with cooperative learning. Chris and Elsa

reminded their undergraduate programs in which they did not receive much training focused on cooperative learning. If further studies investigate the relationship between application of cooperative learning and pre-service teachers' education, teacher preparation, and expectations of cooperative learning, the results might yield positive outcomes in enacting cooperative learning in music.

Next, further studies might be conducted with elementary general music teachers working with students of a different demographic, various other cultures, or applied to another research site. Their instruction and practices of cooperative learning might be different based on their students' cultural backgrounds. If researchers examine whether such a study can be applied to another research site with similar results, the results might provide valuable data that could support cooperative learning strategy in the field of music and music education.

Finally, future researchers could benefit from studies with more participants as part of a multiple or collective case study, or even quantitative research approaches. As an intrinsic case study, this research focused on the case itself as primary interest rather than obtaining statistical results. If further studies are conducted with multiple participants, results from such studies might provide additional conclusive insights and a broader source of information. Additionally, collecting data over a longer period of time would be more beneficial because a long-term data collection can provide additional evidences, present a process over the long period, and yield different results.

Conclusion

In concluding this study, I recalled my own positive experiences with cooperative learning and original assumptions that cooperative learning—regardless of grades—could be modified and adapted to all learning environments with any curriculum; and it could serve as an effective strategy to introduce foundational musical concepts by increasing positive interaction among students and allowing them to engage actively with music. Throughout this intrinsic case study, I was able to prove my assumptions, and, further, understand how elementary general music teachers implemented cooperative learning in their classrooms. Seen through the lens of social interdependence, separate and cross-case analyses of the data revealed that Chris and Elsa had similarities and differences in three categories: characteristics of teachers' instruction, teachers' beliefs about cooperative learning, and strategies for cooperative learning. For example, both teachers acknowledged that cooperative learning helped students' musical skills such as differentiating rhythms, understanding musical terms, and compositional skills. They also agreed that cooperative learning motivated students to make and learn music together. Chris and Elsa strongly agreed that cooperative learning encouraged students to improve their classroom behavior by modeling other students, but felt that teachers needed to monitor students in order to encourage them to promote individual and group accountability. At the same time, the teachers warned of possibility that group activities might be risky for introverted students because the students need their own time to understand the instructions or have difficulty expressing themselves in a group discussion. Nonetheless, if a teacher creates a relatively safe classroom, group activities

could help the students practice language, try out new behaviors, and make mistakes (Ehrman & Oxford, 1990). Indeed, Chris and Elsa took care to create a helpful and encouraging, rather than an oppressive, atmosphere while their students worked together. By doing so, they encouraged the students to actively participate in group activities.

Both teachers also used reward systems to motivate students. They frequently gave positive comments, praised student performance, and clapped to show their satisfaction regarding the outcomes. Chris and Elsa, on the other hand, diverged in some areas. For instance, Chris used a software program, ClassDojo, to give immediate feedback to students regarding the day's lesson. Elsa gave tangible rewards such as stamps to students in third grade or younger. She rewarded older students with positive reinforcement such as showing funny videos from online resources.

While Chris thought assigning specific roles could be counter-productive, he provided opportunities for students to share leadership, Elsa believed that one of teacher's responsibilities was to provide more concrete resources. Chris tried to give more authority to students for managing the music class, but Elsa assigned specific roles for students, such as leader, to complete the common goal successfully.

Compared to individualistic learning, cooperative learning may provide less opportunities to students for self-improvement, self-comparisons, and self-reflection on their effort and task performance. This study, however, suggests that cooperative learning would be helpful for teachers and students in elementary general music classrooms. The findings of this study provide evidence that cooperative learning engages students in music making and learning, and it also fosters positive interpersonal relationships.

Moreover, this study suggests that music educators should make an effort to thoroughly understand students' cognitive development when utilizing cooperative learning. School administrators may opt to design professional development workshops focused on cooperative learning. This study, of course, was subject to a number of limitations due to its scope. Nonetheless, I believe that the findings will contribute to the body of research on cooperative learning in elementary music education.

Appendix A. Recruitment Letter

Ji Hyun Kim Department of Music Education Boston University 855 Commonwealth Avenue Boston, MA 02215

Date [Month, day, Year]

Dear. [Music Educator's Name],

My name is Ji Hyun Kim. I am a doctoral student in music education at Boston University. I will be conducting a research study entitled "General music teachers' practices of cooperative learning in two elementary music classrooms."

The purpose of the study was to examine general music teachers' practices of cooperative learning in elementary music classrooms in two elementary schools in Boston, Massachusetts.

Teachers will participate in qualitative case studies that involve oral interviews and classroom observations. If you choose to participate, you will be asked for three interviews: the beginning, middle and end of the observation period. Each interview will last approximately 30 minutes. If necessary, you will have follow-up conversations. In addition, I would like to visit your classroom to observe how you utilize cooperative learning strategies in your general music classes.

Findings from this study will be presented in a dissertation to be submitted to the faculty of the Department of Music Education of the School of Music in the College of Fine Arts at Boston University in partial fulfillment of the requirements for the degree of Doctor of Musical Arts.

If you are interested and additional information, please reply to this email: jihyunk@bu.edu.

Thank you so much for considering participation in this study. I look forward to hearing from you, and working with you in the future.

Sincerely, Ji Hyun Kim Doctoral Student Department of Music Education, Boston University jihyunk@bu.edu

Appendix B. Consent Form: Teacher

Introduction

Please read this form carefully. The purpose of this form is to provide you with important information about taking part in a research study. If any of the statements or words in this form are unclear, please let me know. I would be happy to answer any questions.

If you have any questions about the research or any portion of this form, please ask me. Taking part in this research study is up to you. If you decide to take part in this research study, I will ask you to read this form. I will give you a copy of the form.

The person in charge of this study is Ji Hyun Kim, principal investigator and student at Boston University, and Dr. Kinh Vu, dissertation advisor. Ji Hyun Kim can be reached at jihyunk@bu.edu. Dr. Vu can be reached at kvu00001@bu.edu.

A. Purpose and Background

The purpose of the study was to examine general music teachers' practices of cooperative learning in elementary music classrooms in two elementary schools in Boston, Massachusetts.

I'm asking you to take part in this study because you are (1) an elementary general music teacher who utilize cooperative learning strategies, (2) certified full-time faculty, and (3) a music teacher who incorporate forms of cooperative learning instruction.

B. Procedures

I expect that you will be in this research study for 8 weeks. During this time, I will visit your classes once a week for class observations. If you agree to take part in this study, I will ask you to read the consent form before I do any study procedures.

If you agree to assist with this study, the following will occur:

- 1. I will interview you about your teaching practices, belief systems, and classroom activities. The interview should take approximately 30 minutes. You may be asked to allow me to observe and audio-record your classroom teaching and activities.
- 2. Observation and audio recording will take place during the classes. I will not participate in the classroom activities. Observations will occur once a week for 8 weeks. All recording files will be password protected on my personal computer. After the completion of the final research paper, I will discard these files.

3. You may also be asked to share class descriptions, class syllabi, and lesson plans with me. These written sources will be helpful to me in gaining an understanding of the music education practices in your school.

C. Audio/Videotaping

I would like to audiotape you during this study. If you are audiotaped, it will not be possible to identify you in the video. I will store these tapes in a locked cabinet and only approved study staff will be able to see the tapes. I will label these tapes with a code instead of your name. I will keep the key to the code in a password-protected computer. This files will be store 7 years, then discarded.

D. Storing Study Information for Future Use

I would like to store your study information for future research related to cooperative learning. I will label all your study information with a code instead of your name. I will keep the code in a password-protected computer.

E. Confidential

I will keep the records of this study confidential by a loss of confidential. I will make every effort to keep your records confidential. However, there are times when federal or state law requires the disclosure of your records. The following people or groups may review your study records for purposes such as quality control or safety:

- The Researcher and any member of research team
- The Institutional Review Board (IRB) at Boston University. The IRB is a group of people who review human research studies for safety and protection of people who take part in the studies.
- Federal and state agencies that oversee or review research
- Central University Offices

The study data will be stored in locked files on my personal computer. The results of this research study may be published or used for teaching. I will not put identifiable information on data that are used for these purposes.

F. Study Participation and Early Withdrawal

Taking part in this study is your choice. You are free not to take part or to withdraw at any time for any reason. No matter what you decide, there will be no penalty or loss of benefit to which you are entitled. If you decide to withdraw from this study, the information that you have already provided will be kept confidential.

G. Risks/ Discomforts

You may feel emotional or upset when answering some of the questions. Tell me at any time if you want to take a break or stop the interview. You may be uncomfortable with some of the questions and topics I will ask about. You do not have to answer any questions that make you feel uncomfortable.

H. Loss of Confidentiality

The main risk of allowing us to use and store your information for research is a potential loss of privacy. I will protect your privacy by labeling your information with a code and keeping the key to the code in a password-protected computer.

I. Benefits

There are no benefits to you from taking part in this research. Others may benefit in the future from the information that is learned in this study.

J. Costs and Payment

There are no costs to you for taking part in this research study. This is voluntary. There will be no payment made to you as a participant.

If you have any questions or concerns about this research study, you can call us with any concerns or questions. Our telephone numbers are listed below:

- PI: Ji Hyun Kim Email: <u>jihyunk@bu.edu</u> Telephone: 617-651-2552
- Dissertation Advisor: Dr. Kinh T. Vu Email: <u>kvu0000@bu.edu</u> Telephone: 617-358-3176

If you have questions about your rights as a research subject or want to speak with someone independent of the research team, you may contact the Boston University IRB directly at 617-358-6115.

Statement of Consent

I have read the information in this consent form including risks and possible benefits. I have been given the chance to ask questions. My questions have been answered to my satisfaction, and I agree to participate in the study.

Appendix C. Teacher Interview Protocol

1st interview Session: Training, Prior Experiences

- 1. What is your educational background? (Undergraduate, graduate degrees, certifications, etc.)
- 2. How many years have you taught?
- 3. What grades/ages have you taught?
- 4. What grades/ages do you currently teach?
- 5. How long have you taught at this school?
- 6. Have you always taught the general music class?
- 7. Have you taught any other music courses? If so, what were they? And, how does that work relate to and/or facilitate your general music teaching?
- Do you have special training in music education? If so, describe your training (Degrees, certificates, etc.).
- Do you have prior experience in learning about and/or teaching in cooperative learning settings? If so, describe those experiences.
- 10. Has/does that background facilitate or relate to your present teaching?
- 11. Is there anything else about your educational background, training, or prior experience that may facilitate or relate to your teaching practice that we haven't covered?

2nd Interview Session: Teaching Practice

1. Would you describe your routine pattern of general music teaching practice when you barely have cooperative learning approach? Could you give me details with an

example such as specific day's teaching practice?

- 2. When did you begin to use/include cooperative learning activities in your general music curriculum?
- 3. What prompted you to do so? Why did you start to use the cooperative learning into your general music classes?
- 4. How has your use of the cooperative learning activities in general music classes evolved since?
- 5. Would you describe the cooperative learning activities currently included in your general music classroom/curriculum? Could you tell me details/specific examples?
- 6. How do you assign the roles for students while they work together?
- 7. How do you compare and contrast the value of cooperation, competition, and individual work?
- How long and in what part of the class session do you include such activities? (E.g., during the entire class session, near the beginning, in the middle, or toward the end.)
 How often? (E.g. once, weekly, or monthly.)
- 9. By the end of the semester (or academic year), what would you expect to your students from your general music classes?
- 10. Do you think there are any specific individual benefits from cooperative learning?What about group benefits?
- 11. Have you ever seen any connections of cooperative learning and students' motivations, students' academic development, and/or students' social skills?
- 12. Have you ever had any challenges you face in creating and implementing cooperative

learning into your curriculum?

- 13. What is your belief about the effectiveness of cooperative learning?
- 14. Is there anything else about your teaching practices and cooperative learning that we haven't covered?

Last Interview Session: Reflection

- 1. Describe an activity or strategy that you thought was particularly successful in utilizing cooperative learning in your general music classes. Why do you think it was effective?
- 2. Describe an activity or strategy that you thought was less than successful. Why do you think it worked out poorly?
- 3. Is there anything else about your opinions or thoughts that may relate to cooperative learning strategies that we haven't covered?
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