DRAWING OUT THE SINGERS' MUSICALITY: COLLABORATIVE REHEARSAL METHODS FOR ADULT CHORAL ENSEMBLES

by

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Introduction

First we must look at what WE are already doing. WE model. WE lead. WE prepare. WE give. WE make. WE take. Yes, WE do everything! What does the student do? If we are truly concerned with providing our students an opportunity for lifelong musical experiences, then we must prepare them to discover music and music-making for themselves.¹

The ensemble conductor's primary job is to lead the ensemble to a musical performance that is insightful and inspiring, both for the performers in the ensemble and for the audience. The rehearsal process leading to that performance is planned and executed with a myriad of techniques at the conductor's fingertips. However, these techniques are largely developed with the communication flowing in just one direction, from the conductor to the ensemble. This is somewhat unsurprising in that a conductor's training is devoted to developing their individual gestural and rehearsal skills. This training shapes the techniques a conductor chooses to use in accomplishing their musical objectives with an ensemble. A conductor's job is to draw musicality and meaning out of the performers, but what if instead of relying on just the conductor's musical interpretation and intuition, we could draw on the musical experiences and background of the entire ensemble to create that performance? This is the goal of collaborative rehearsal techniques. Considering the particular setting of adult amateur choirs, collaborative learning may be used as one way to mobilize the previous experiences and knowledge of the singers in order to deepen the performance beyond the singular experiences of the conductor. There is no question that this approach, while may be argued as more effective than the traditional process, is more time intensive for the conductor to prepare for and implement during rehearsal. To this end, a few of the authors recommend that these collaborative methods be

¹ Michele E. Kaschub, "The Choral Rehearsal Reconstructed: Meeting Curricular Goals Through Collaborative Interactions." *The Quarterly* 7, no. 2–4 (1996/1997): 91–101.

balanced with the more traditional teacher-centered approach. This caveat to the effectiveness of collaborative learning is discussed at length below.

Beginning with the theoretical foundations upon which collaborative learning is based, this paper will provide an explanation of collaborative learning relative to the traditional teacher-led classroom environment. Additionally, it will include a review of the literature that discusses collaborative learning within music education in order to establish the efficacy and applicability of collaborative learning techniques. Due to the fact that research is limited largely to K-12 education environments, much of the discussion will be bound to that context. It is the goal of the paper's final section to transition this research to the adult amateur choir rehearsal.

Additionally, the final section provides a list of gathered techniques from the literature that were created for both instrumental and choral ensembles of various experience levels. This discussion will demonstrate that with some adjustments, these techniques are transferable to the adult amateur choir rehearsal as a way to augment the rehearsal process, creating a performance that is informed by all the musicians involved rather than solely being dependent upon the conductor's musical preparation.

Competition, Collaboration, and Individualistic Approaches: A Theoretical Basis

In an entry of the *International Encyclopedia of the Social and Behavioral Sciences* entitled "Cooperation and Competition," educational psychology researchers David Johnson and Roger Johnson present the differences between these two concepts to be best defined by four theoretical frameworks: cognitive developmental, behavioral learning, social cognitive, and social interdependence. While the former three form the basis of various pedagogies and methods, it is the fourth, social interdependence theory, upon which collaborative learning and

cooperative learning (and therefore this investigation) rest. For the following discussion of social interdependence, we will use "cooperation" to represent both of these pedagogies. However, later it will become clear that while built on the same theoretical foundation, they are separate pedagogies with different instructional processes and expected learning outcomes.

The term "social interdependence" was coined by psychologist Morton Deutsch in the mid-twentieth century and is defined as existing "when individuals share common goals and each individual's outcomes are affected by the actions of the others." There are two types of social interdependence: positive, which can be named as "cooperative," and negative, which can be named as "competitive." A third type of interdependence can be understood as simply the absence of interdependence. The practical manifestations of social interdependence theory, being cooperative, competitive, or no interaction, are found in the general outcomes resulting from positive, negative or no interdependence.

When a situation is cooperatively structured, individuals' goal achievements are positively correlated; individuals perceive that they can reach their goals if, and only if, the others in the group also reach their goals. Thus, individuals seek outcomes that are beneficial to all those with whom they are cooperatively linked. [...] When a situation is structured competitively, individuals' goal achievements are negatively correlated; each individual perceives that when one person achieves his or her goal, all others with whom he or she is competitively linked fail to achieve their goals. Thus, individuals seek an outcome that is personally beneficial but detrimental to all others in the situation. [...] When a situation is structured individualistically, there is no correlation among participants' goal attainments. Each individual perceives that he or she can reach his or her goal regardless of whether other individuals attain or do not attain their goals. Thus, individuals seek an outcome that is personally beneficial without concern for the outcomes of others.³

²David W. Johnson and Roger T. Johnson, "Cooperation and Competition," in *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)*, ed. James D. Wright (Oxford: Elsevier, 2015), 857.

³ Johnson and Johnson, "Cooperation and Competition," 857.

Application of social interdependence theory to education has given way to cooperative, competitive, and individualistic methodologies at all school levels. However, the most prevalent format found in schools, both in K-12 and higher education, is the competitively and individualistically grounded teacher-centered model. Imagine walking into a typical core subject area classroom. The teacher stands at the front of the room presenting information to be consumed by the students sitting in desks facing toward the teacher. The teacher asks a question and a few hands raise to answer, but only one is called on to respond. This common scenario is an inherently competitive and individually-focused environment; it is up to each student to receive and comprehend the information being received. In the context of social interdependence theory, it is clear that this is not ideal for the classroom where all students are working toward the same outcome, and yet, this teacher-centered process is not unlike what we often find in the ensemble music classroom. The difference between a general education classroom and a music classroom is that teamwork is a regularly emphasized principle of the ensemble rehearsal. However, social interdependence theory also provides a foundation for collaborative learning and cooperative learning techniques that are aligned more closely with an ensemble music classroom's expected outcomes. As a point of clarity, many of the quoted articles use the word "cooperative" to refer to any pedagogy that requires students work together to construct knowledge. Before continuing an in-depth discussion about the application of these methods to music education, it is important to acknowledge the breadth of research that has explored collaborative learning and cooperative learning within general education.

"Over 305 studies have compared the relative efficacy of cooperative, competitive, and individualistic learning in college and adult settings. While the first study was conducted in

1924, 68% of the studies have been conducted since 1970." Johnson et al.'s summary of the research in 2007 shows that cooperative learning practices consistently show student improvement in three categories: effort to achieve, interpersonal relationships, and psychological health. Johnson et al.'s review of the literature is exhaustive and shows that these methods are viable in a wide range of education. 12 years later, it is probably safe to assume that studies with a similar focus have continued to support the conclusions of nearly a century of research. Later in this essay, the established efficacy of these methods in music education specifically will be discussed at length.

Collaborative Learning versus Cooperative Learning

Collaborative learning and cooperative learning were developed under a similar overarching goal: to give students a larger more experiential role in their own learning. While the above sections used the word "cooperative" to refer to both pedagogies, the following section will discuss collaborative learning and cooperative learning specifically. Each asks students to become deeply engaged with the construction of knowledge through teacher-prescribed substantive tasks that require them to work together. However, the age-group being approached and the knowledge resulting are discretely different. In essence, they are two approaches to the same educational ideals, whose origins can be traced back to the early twentieth century.

In his landmark publication, *Democracy in Education*, John Dewey made an argument for what teaching and learning is not: the heart of teaching is not simply presenting new

⁴ David W. Johnson, Roger T. Johnson, and Karl Smith, "The State of Cooperative Learning in Postsecondary and Professional Settings," *Educational Psychology Review* 19, no. 1 (2007): 18. The use of the word "cooperative" here is all-encompassing to include both collaborative learning and cooperative learning.

information, and the heart of learning is not simply students swallowing that new information.⁵ Learning is instead a social activity that is defined by experiences in which new knowledge is constructed. The environment for those experiences is in small groups and dyads, which are also known as transitional groups or consensus groups. Kenneth Bruffee, a professor emeritus of writing and English at Brooklyn College who spent his career developing collaborative learning techniques, further explains that

Proponents of collaborative learning and those of cooperative learning alike claim that we can now say what the particular social experience *is* that educates. [...] We claim that students learn by joining transition communities in which people construct knowledge as they talk together and reach consensus. What teachers do in both collaborative and cooperative learning is set up conditions in which students can learn together.⁶

To understand the differences, and why it is that collaborative learning techniques rather than cooperative learning techniques are applied to the adult amateur choir context, there are two concepts that ought to be clearly defined: the delineation of foundational versus non-foundational knowledge and the authority of knowledge.

Over the course of our long educational lives, knowledge is constantly constructed, questioned, reassessed, and redefined. Foundational knowledge is that which forms the social and cultural basis upon which non-foundational knowledge builds. Foundational knowledge is always constructed anew and therefore is almost entirely constructed in primary school and before. Bruffee explains:

Primary school education initiates us into established knowledge communities constituted by languages such as raising our hand to be heard, spelling "sauce"

⁵ John Dewey's contributions to educational theory is particularly discussed and clarified by Kenneth Bruffee in his book *Collaborative Learning: Higher Education, Interdependence, and the Authority of Knowledge*.

⁶ Kenneth A. Bruffee, *Collaborative Learning: Higher Education, Interdependence, and the Authority of Knowledge*, 2nd ed (Baltimore: Johns Hopkins University Press, 1999), 84.

correctly, stealing second base, knowing what Hamlet says in the first scene, the battlegrounds of the Revolutionary War, and the Bill of Rights.⁷

Earlier in this same essay, Bruffee explains that another way to describe foundational knowledge is that it is "basic." These examples follow this description. Foundational knowledge is information that does not require preliminary background information to be understood (excepting the linguistic background one may need to interact with others and so access that "basic" knowledge). A final way to understand foundational knowledge is to ask the question "is it arguable?" Going on from the above quotation, Bruffee states that

not many people would bother to disagree that "sauce" is spelled with an "s" and a "c," that George Washington's army camped at Valley Forge, that the Fifth Amendment is the right not to bear witness against oneself, that 2 + 2 = 4, and that Hamlet's first line is "A little more than kin and less than kind. Because agreement is so widespread, this knowledge counts as foundational.⁸

In understanding non-foundational knowledge, one could say that in many ways it is the opposite of foundational knowledge. It is not "basic" and it requires preliminary background information to access. While fact-based, it is also arguable and consensus may not be a given. It is more nuanced than simply being the opposite. Non-foundational knowledge may lead students to question and verify their foundational knowledge. Students may be required to recategorize and re-construct their understanding of the world around them. Bruffee calls this process "reacculturation."

The initial acculturation of all our lives is in the understanding of our role in our family; understanding our role in the family as child and sibling, and the role that our family members play in our lives. The first reacculturation takes place when we enter primary school; entering

⁸ Bruffee, "Sharing Our Toys," 15.

⁷ Kenneth A. Bruffee, "Sharing Our Toys: Cooperative Learning Versus Collaborative Learning," *Change: The Magazine of Higher Learning* 27, no. 1 (February 1, 1995): 15.

this new environment we are required to learn a new set of social cultural norms within which to exist and learn. It is in these earlier educational environments that the origins of *cooperative* learning is found. The next major reacculturation occurs in the college and university setting and is a near constant process through the rest of adulthood. Due to the nature of non-foundational knowledge mostly being constructed in the college and university setting, professors must then set up new approaches to encourage students into different mindsets and conversations than they had before. This is the goal of the *collaborative* learning techniques that were developed for the college and university setting.

A hallmark of both collaborative learning and cooperative learning is the authority of knowledge that is vested in students through the process. Rather than knowledge being "given" to students by the teacher, it is an included power that comes with their own construction of knowledge within a small consensus group, a primary vehicle of both collaborative learning and cooperative learning pedagogies. Bruffee explains:

Each group in the series constructs knowledge in conversation with knowledgeable peers. That is, the knowledge that group members wind up with was not "given to them directly by the teacher. They constructed it in the course of doing the task that the teacher supplied.⁹

One might say that the students ownership of constructed knowledge gives them an "authority of knowledge." At this point in the process, the student's level of authority is only as far as the small group's collective construction has gone. This knowledge is then gathered with the other groups of the class, and the authority is grown further. The effect is powerful enough that the teacher's role is shifted away from sole expert, and absolute authoritarian of knowledge, to one who is facilitating many conversations and is sharing that authority of

⁹ Bruffee, Collaborative Learning: Higher Education, Interdependence, and the Authority of Knowledge, 50.

knowledge. The teacher is no longer the only one capable of constructing and purveying the knowledge in question.

In place of this traditional pattern of one-to-one social relations, collaborative learning substitutes a pattern in which the primary focus of students' actions and attention is one another. [...] Students converse among themselves with the professor standing by on the sidelines, for the time being mostly ignored. ¹⁰

Bruffee is speaking here about the expectations of the teacher's role in collaborative learning. The teacher's distance from the conversation and the structure of that conversation creates a disadvantage: the teacher cannot guarantee accountability. And so it is the level of authority vested in students where the second key difference between collaborative learning and cooperative learning lies.

In short, *cooperative* learning was developed for use with students who are regularly constructing foundational knowledge (ie: primary school-aged students). In approaching that purely fact-based foundational knowledge, the teacher is asked to create accountability by assigning students specific social roles within the small group, by "interven[ing] frequently and randomly in the work of the groups," and by assessing the progress and process of students' conversations regularly. This is different from *collaborative* learning where the insurance of accountability is all but completely absent, relying instead on the structure and design of the activity to guide students in constructing knowledge. Where there is less accountability required by the teacher, there is a larger authority of knowledge, giving students the space to approach and construct non-foundational knowledge.

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¹⁰ Bruffee, *Collaborative Learning*, 25.

¹¹ Bruffee, "Sharing Our Toys," 16. While Bruffee's distillation of collaborative learning's core tenets seem to be based on his own experiences and research as a university professor, Bruffee's opinions of cooperative learning is largely defined by Shlomo Sharan's 1995 *Handbook of Cooperative Learning Methods*.

In the context of the music ensemble, dispersing the conductor's authority of knowledge is a challenging prospect. An ensemble's trust in a conductor typically depends upon the ensemble's belief in their expertise and knowledge. Using techniques that impart the conductor's authority to the musicians may sound like a risky endeavor to the musical success of the conductor and therefore of the larger ensemble. However, one could also argue that these techniques bestow a conductor's trust back to the ensemble; a conductor's ability to facilitate music making among its members could more directly engage them in the composition and interpretation. David Luce, who's 2001 investigation of collaborative learning techniques in music education argued their possible viability in the large ensemble context:

The teacher or conductor must be willing to share the authority of knowledge. This does not mean abdicating responsibility. It may mean engaging in shared discussion of the music to develop playing style, identify areas for further discussion or practice, and explore possibilities in the re-creation or composition of music. Students would thus become engaged in the exploration of the knowledge and processes involved in the evolution of a music that enlivens and motivates them to participate in music, rather than to be told about music, how to appreciate it, or how to play it.¹²

In short, key differences between collaborative learning and cooperative learning become apparent when considering the age of the students for which each was originally developed. The differences are two fold. First, as a result of this age group, the type of knowledge being constructed, whether it be foundational or non-foundational, is the goal of each pedagogy's expected outcomes. This in turn determines the amount of authority of knowledge that is vested in students versus the authority of knowledge that the teacher retains as well as the level of guaranteed accountability to which a teacher can hold students. It is these two aspects of their

¹² David W. Luce, "Collaborative Learning in Music Education: A Review of the Literature." *Update: Applications of Research in Music Education* 19, no. 2 (2001): 23.

expected environmental origins that defines the differences between collaborative learning and cooperative learning. Bruffee states it another way:

What distinguishes cooperative and collaborative learning are their disadvantages. The major disadvantage of collaborative learning is that in nurturing the educational rewards to be gained from self-governed student peer relations, it sacrifices guaranteed accountability. The major disadvantage of cooperative learning is that in guaranteeing accountability, it risks maintaining authority relations of traditional education both within each small working group and in the class as a whole ¹³

Which then is more appropriately considered for use with an adult amateur choir? Considering the age group of the choir, *collaborative* learning, being that the origins more closely align with the considered context, becomes the clear choice. The next section will discuss the efficacy of collaborative learning as it has been applied to music education, and in particular the large ensemble classroom. From here forward, only *collaborative* learning and its application in music education and ensemble rehearsals will be discussed

Review of the Literature concerning Collaborative learning in Music Education

The potential for music education to engage more people in ways democratic, meaningful, and worthwhile is too great to continue to ignore collaborative learning as an essential teaching methodology in music education.¹⁴

As stated in the above sections, collaborative learning has been studied in general and higher education since the beginning of the twentieth century with the bulk of that research occurring after 1970. Being that the outcome of musical performance depends on the successful collaboration of its members, it is interesting that collaborative learning techniques were not a consistent focus of study in music education until well after collaborative learning had been established as an effective pedagogical model.

¹³ Bruffee, *Collaborative Learning*, 92.

¹⁴ Luce, "Collaborative Learning in Music Education: A Review of the Literature," 24.

The traditional teacher-centered model is the mainstay format for ensemble rehearsals of all ability levels. Collaborative learning models have garnered the attention of music education researchers as an alternative method since the late 1980's. In 2001, David Luce identified just three studies in his own review of the literature that focused on collaborative and cooperative learning methodologies within the realm of music education. However, since those three articles that Luce identified, there have been dozens of studies and articles exploring the efficacy and applicability of collaborative learning in music classrooms. Below is a selection of those studies and articles aimed at summarizing their findings. This summary of the research establishes the current general attitude toward collaborative learning in large and small ensembles, and in applied music lessons. Further, limitations of the literature show that practical aspects of the classroom such as the size of class, space requirements, and time requirements are not discussed.

The earliest essay Luce collected was published in 1987 by Charles Keil. In it, making the same case that Luce does in the quote that begins this section, he recommends investigations take place to draw connections between culture and music for students through collaborative learning. Luce summarizes Keil's argument that "music is an essential creative communication [that] permeates all cultures as a collaborative, communally-based expression of humanity." ¹⁶ If this holds true, then the collaborative methods may be the clearest method for students to explore music's role in a variety of cultures including their own.

The other two studies that Luce gathered continue to make philosophical arguments for collaborative learning's role in music education but edge toward more practical issues. James Hoffman's study in 1991 considered the computer-aided application of collaborative learning in

¹⁵ Luce, "Collaborative Learning in Music Education: A Review of the Literature," 23.

¹⁶ Luce, "Collaborative Learning in Music Education: A Review of the Literature," 24.

a written theory course. Hoffman concluded that through these interactions, "the learning of harmony becomes a shared, ongoing, and externalized learning process comparable to performance." Through blind questionnaires submitted by students, Hoffman summarizes the responses the collaborative processes as "overwhelmingly positive."¹⁷

Merryl Goldberg's 1990 case study reviews three instances where collaborative learning strategies were used as the central methodology. While Goldberg's cases are all more examples of student-led learning rather than 'pure' collaborative learning, her research shows that "because the students are actively engaged in constructing their own musical frameworks, their understandings have depth and breadth." Goldberg's research has implications for an alternative approach to applied music lessons and small chamber ensemble work where students and professors work closely and individually. This is the only study found in this review that reports a student teacher collaboration in this manner. The remainder of the studies that qualified for discussion here, focus on large ensemble and standard classroom instruction, but Goldberg's research provides an important example of collaborative processes in music education outside of the ensemble setting.

Beyond Luce's review, dozens of studies have continued to establish collaborative learning's application in music education. A study from 2000 by Lee Bartel and Linda Cameron combined survey results from two separate studies which gathered into a pool of almost 200 respondents. From these surveys, Bartel and Cameron distilled seven important elements that drive student engagement in the music classroom: students are given clear expectations to achieve, students feel responsibility for their learning, students have opportunities to employ

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¹⁷ James A. Hoffmann, "Computer-Aided Collaborative Music Instruction," *Harvard Educational Review* 61, no. 3 (August 1991): 276.

¹⁸ Merryl R. Goldberg, "Teaching and Learning: A Collaborative Process," *Music Educators Journal* 76, no. 5 (1990): 41.

developing control, students have the freedom to approximate the desired model, they receive relevant and timely responses, there is a supportive emotional tone of the classroom, and there is a developed sense of community between the students and teacher. ¹⁹ Each of these elements points directly to the expected outcomes of collaborative learning.

While being rooted in the philosophical arguments from above, a number of studies venture completely into practical questions about implementation. Two studies by Erik Johnson, more recently published in 2011 and 2017, show different dimensions of collaborative learning techniques' effectiveness in musical ensembles. The first study focuses on the acquisition of skills, specifically rhythm-reading achievement in high school instrumental and choral music students. Students are divided into two classroom conditions with the first being a teacher-led instruction, and the second being a reciprocal peer-based instruction. The students who received peer-based instruction "performed significantly better than the students receiving traditional teacher-led instruction." This comparative study shows that collaborative learning can benefit an ensemble's acquisition of musical skills in addition to deepening their performance's musical expressivity.

Johnson's 2017 study compares various compositions of ability-matching in pairs for peer-assisted learning (a specific form of collaborative learning) across seven different schools. Student pairs were labeled as "symmetrical" where the students were of like ability level, and "asymmetrical" where students were of divergent ability levels. The goal of the study was to examine and compare whether students' achievement in three categories varied between the symmetrical and asymmetrical pairs. The three categories that were measured were sight-reading

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¹⁹ Lee R. Bartel and Linda Cameron, "Engage or Disengage: An Inquiry into Lasting Response to Music Teaching." *Orbit* 31, no. 1 (2000): 24–25.

²⁰ Erik Johnson, "The Effect of Peer-Based Instruction on Rhythm Reading Achievement." *Contributions to Music Education; Columbus* 38, no. 2 (2011): 54.

achievement, music theory knowledge, and learner engagement. The results are intriguing in that instead of showing significant differences, it instead suggested that the inclusion of peer-assisted learning strategies possibly led to overall improvement in all three examined categories:

Results pertaining to achievement outcomes indicate that, overall, students made significant gains regardless of treatment condition. [...] Students in all schools experienced relatively similar pre-/posttest improvements, suggesting that peer-assisted learning may be an effective way to improve achievement in all domains.²¹

Johnson's research into collaborative learning methods in seven seventh grade classrooms across an urban/suburban school district shows their effectiveness in two realms. For one, collaborative learning can have an impact on the acquisition of musical skills in addition to the deepening of musical expression in performances. Both studies show an improvement in musical skills and knowledge achievement suggesting that collaborative learning may be used to emphasize either. Additionally, the second study shows that heterogeneity in ability level may not be a necessity for collaborative learning techniques to be successful. While many articles focus on the effectiveness that collaborative learning could bring to an ensemble's musical expressivity, Johnson's comparative experimental studies in collaborative learning give practical credibility to these methods.

In 1995, John di Natale and Gordon Russell submitted yet another argument similar to Luce. Di Natale and Russell's argument draws commonalities between a great musical performance, and the qualities and outcomes of positive interdependence (as discussed above) found in collaborative learning: "The difference between a good musical group and a great musical group comes down to attitudes that encompass positive interdependence and its

²¹ Erik Johnson, "The Effect of Symmetrical and Asymmetrical Peer-Assisted Learning Structures on Music Achievement and Learner Engagement in Seventh-Grade Band." Journal of Research in Music Education 65, no. 2 (2017): 172.

application through interpersonal qualities."²² Positive interdependence cultivated in music ensembles constructs close-knit social bonds, which in turn affects the depth of expression in the music made. DiNatale and Russell also suggest that the conductor act as a model for the listening practices that collaborative learning groups might use. In addition to close listening, and giving appropriate feedback in response to what they hear, the conductor can then analyze the effect of those instructions, therefore acknowledging the effectiveness of the rehearsal technique. In this way, the conductor's teaching models the conversations that could be had within a small group: the group plays and listens, gives feedback to each other, plays and listens again, and finally discusses the outcome and effectiveness of the feedback.

However, di Natale and Russell warn that "the conductor should maintain a degree of balance by nurturing cooperative practices alongside a mastery teaching framework." An article by Neil Davidson and Pat O'Leary arguing for the combining of traditional mastery teaching practices with collaborative learning practices supports this argument:

Mastery teaching synthesizes the most rewarding aspects of expository instruction and clarifies what the best traditional teachers do so well, and cooperative learning breathes creative life into that teaching by inviting students to become co-producers of ideas with their teachers.²⁴

The argument that collaborative learning is best executed when intermingled with traditional teaching techniques is also found in a study by Susan Conkling from 2000. Conkling's theoretical case study of three situations presents a context for her essential advocacy of collaborative learning. Her final conclusion is

²² John J. DiNatale, and Gordon S. Russell, "Cooperative Learning for Better Performance: John J. Di Natale and Gordon S. Russell Make a Case for Introducing Cooperative Learning Principles into the Music Classroom." *Music Educators Journal* 82, no. 2 (September 1995): 28.

²³ DiNatale and Russell, "Cooperative Learning for Better Performance," 28.

²⁴ Neil Davidson, and Pat Wilson O Leary, "How Cooperative Learning Can Enhance Mastery Teaching." *Educational Leadership* 47, no. 5 (February 1990): 32.

When we get out of the way, even temporarily, the singers may find value in their own knowledge and self-confidence in their ability to successfully solve a musical problem. Moreover, the singers may discover that their peers' ways of knowing illuminates their own, and that a musical outcome to which everyone contributes is richer and more satisfying than one brought about by any individual.²⁵

In just one paragraph earlier, Conkling limits this strong conclusion. Her concern with completely converting a rehearsal to one dominated by collaborative learning techniques is practical in nature.

Collaborative learning is not a musical or educational panacea. Though much of what we read about collaborative learning is positive, it requires a great amount of time and psychological energy on the part of the conductor/teacher to create an ensemble environment where collaborative learning can thrive. Similarly, though collaborative learning activities may foster deep and enduring musical understandings, they take time to implement. If the concert calendar is full of performance dates, and if each of those performances requires that the ensemble learn entirely new repertoire, the need to cover new material in rehearsal may outweigh the need to understand that material deeply.²⁶

Conkling's points of practicality underscore the balance that ensemble teachers must strike in preparing ensembles through the multiple performance of a season or school year.

A 2015 study by Brian Brandler and Zehra Peynircioglu takes Conkling's concerns with learning music efficiently one step further. While conceding that "collaboration is essential in learning ensemble music," Brandler and Peynircioglu wonder when in the learning process a collaborative approach might be best suited. They specifically examine the earliest stage of music learning, when the emphasis of rehearsals is on learning the pitches and rhythms accurately. The participants in the study were adults ranging from ages 18 to 64 with a mean of

²⁵ Susan Wharton Conkling, "Collaboration in the Choral Ensemble." *Choral Journal* 41, no. 2 (September 2000): 15.

²⁶ Conkling, "Collaboration in the Choral Ensemble," 15.

²⁷ Brian J. Brandler and Zehra F. Peynircioglu, "A Comparison of the Efficacy of Individual and Collaborative Music Learning in Ensemble Rehearsals." *Journal of Research in Music Education* 63, no. 3 (October 2015): 281.

approximately 13 years of musical experience in ensembles. The participants were divided into two groups with each group participating in one solo learning session (there were two conditions for the solo learning session, one in which participants were supplied a MIDI recording of their part and a keyboard, and one in which they were supplied a recording of the accompanying two voice parts and a keyboard) and one collaborative learning session (students were put in groups of three, assigned one of three voice parts to learn, and asked to collaborate in learning the song). In each condition, singers were given a different song to learn. The evaluation of the singers focused on pitch and rhythmic accuracy both with sheet music and without sheet music. The goal was to examine their ability to learn the music physically and retain the music mentally. Interestingly, Brandler and Peynircioglu's study was apparently the first experimental study that had come to the same conclusion that previous case studies had in comparing solo learning in comparison to collaborative learning:

we observed that participants learned new pieces of music more successfully when in an individual learning environment than in a collaborative one. [...] the current results suggest that musical ensembles should remain mindful that although it is critical to work collaboratively for successful performance, the initial learning of pieces may be the most effective if completed on an individual basis.²⁸

The traditional teacher-focused and individualistically-based model that exists has clear advantages, but a place for collaborative learning in the rehearsal is supported nonetheless. In short, there is a balance to be found.

Similarly to the allusions of Conkling's argument and Brandler and Peynircioglu's findings, Pandora Bryce states that the traditional rehearsal model "is clearly effective for producing performance results, and there is a large body of research that explores how this style

²⁸Brandler and Peynircioglu, "A Comparison of the Efficacy of Individual and Collaborative Music Learning in Ensemble Rehearsals," 293-294.

of program can be delivered more effectively."²⁹ With this concession and the possible benefits of collaborative techniques equally stated, Bryce's 2001 article provides collaborative learning techniques that can be introduced into the traditional rehearsal model in order to enrich a rehearsal without entirely redefining the process. Bryce's methods are mindful of Conkling, Brandler, and Peynircioglu's concerns while also presenting some methods for expanding. The activities she suggests are included in the following section and are designed to help teachers expand their pedagogical toolbox. Collaborative learning strategies are not without their disadvantages, but Bryce's ideas present a compromise with actionable techniques. She states:

I am not advocating immediate, radical restructuring, because I do not see that as a practical goal. [...] I would instead argue for expanding our pedagogical repertoire—finding a variety of ways to help students own their musicianship, and to understand it as one of life's meaningful and engaging experiences.³⁰

This is the lens through which the following techniques are best viewed. Not as a cure-all or "better way" than the traditional model, but rather as a category of additional rehearsal methods that aim to draw on the ensemble's collective musicianship, previous experiences, and learned skills to perform with a deeper musical expression.

Collaborative Techniques for Ensemble Rehearsals

With a backdrop of their effectiveness and applicability in place, this section will present a summary of actual teaching techniques specifically designed for use in ensemble rehearsals. A summary of the techniques, sorted alphabetically by the creator's last name, can be found in Table 1 at the end of this section. While the majority of these techniques were created with K-12 or higher education classrooms in mind, many are directly applicable to the adult amateur choir

²⁹ Bryce, Pandora, "Enriching the Rehearsal Model through Collaborative Music Learning." *The Canadian Music Educator; Edmonton* 43, no. 1 (Fall 2001): 19.

³⁰ Bryce, "Enriching the Rehearsal Model through Collaborative Music Learning," 19.

rehearsal. For those that are not directly applicable, a number of possible adjustments are recommended in the fourth column of Table 1. Ahead of Table 1 are two overarching discussions that interact with each other directly. The first explains the basic elements that many of these techniques draw on similarly and the second speaks to the limitations and gaps that the literature as a whole currently have.

A central vehicle of the collaborative learning process is the division of the class into smaller groups. As discussed further above, small groups allow students to feel more authority and agency over the knowledge and conversation, and so provide more opportunity to contribute to the rehearsal process. Many of the following techniques rely on this as a starting point. Other techniques divide the ensemble into dyads absolutely requiring the musicians to participate in a one-on-one reciprocal discussion. Finally, there are those that never divide the ensemble, relying on a certain level of individual accountability to engage in the collaborative effort. One author presents a technique using all of these levels of ensemble division.

Erik Johnson suggests a procedure that breaks down musical concepts through three levels of attentive listening: level 1 listening includes anything in the music that requires collaboration between just two musicians. Level 2 is anything that requires listening to an entire section. Level 3 is anything that requires listening to the whole ensemble. Each of these levels require the members of the ensemble to engage in a specific type of listening that requires them to collaborate with one another. Using these levels of listening as a structure for dyad, small group, and whole ensemble interaction gives them a specific set of parameters within which to work. Johnson implies that an ensemble that understands these various levels of listening can then be asked to turn to a partner or toward their section to address a phrase or section of a piece. Then "to facilitate reciprocal input, students are asked to turn in a short individually completed

slip—to be stapled to their partner's slip—with details about what was discussed."³¹ Johnson's technique is specifically focused on exercising listening skills, and his is not the only one to use this as a primary vehicle for the collaboration.

Susan Conkling and Pandora Bryce provide techniques that require the members of small groups and dyads to listen either to recordings of the full ensemble, or to each other's performances as a starting place for discussion. The central importance of listening in these techniques requires the teacher to set up clear parameters and to prepare students for the type of listening they are doing. While this sort of detailed listening is a central part of a conductor's training to lead ensembles, it is not necessarily emphasized in the traditional role of an ensemble member. Some preparatory teaching to develop detailed listening skills will be required in order for many of these techniques to be effective. This is similar to the interpersonal rapport that is necessary for collaborative learning in any subject to be successful.

Johnson, Conkling, and Bryce's techniques have a secondary outcome of developing the individual musician's larger ensemble awareness. However, it is the primary goal of the techniques that William Harrington presents in his case study of chamber ensembles. The students in the case study have the idea to play each other's parts in order to improve the ensemble coordination. A secondary outcome of improved coordination between parts is achieved when students become aware of the larger musical picture. This is a key outcome for successful collaboration in a musical rehearsal (and the resulting performance), yet it is only tangentially discussed in any literature that presents these techniques. There is a need for further research in this area, but before this is possible, additional distinct techniques for the ensemble must be presented.

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³¹ Erik Johnson, "Developing Listening Skills through Peer Interaction." *Music Educators Journal* 98, no. 2 (2011): 52.

The techniques provided below range from specific to general. It is necessary that these techniques be further developed and presented into various musical contexts so that experimental procedures can be carried out to understand their effectiveness. A weakness in the literature can be found in the idea that ensembles are inherently collaborative, and therefore specific methods to cultivate collaboration aren't necessary. This provides space for practitioners to be overly general. Roberta Jackson and Debra Burgess provide an argument for continuously interactive rehearsals, explaining that students then feel more connected to the music being made. This is something that educators are asked to do regularly in their professional reflection practices; interacting with students about the musical progress of a rehearsal is all but automatic. Jackson and Burgess's argument has been corroborated by the studies discussed in the previous section of this document, but in looking for these specific collaborative practices for ensembles it is clear that there is a need for more specificity in this arena. To state the point even more clearly, only five resources were found that detail specific ways that collaborative learning might be employed in ensemble rehearsals.

Students' discoveries of knowledge from collaborative learning techniques is best described by Pandora Bryce in her description of a small group rehearsal technique: "The small ensemble's relation to the larger group is to spark the discovery process in others." This same statement can be applied to the five resources with specific techniques reviewed here. This small group of practitioners have supplied the beginning of a body of techniques that will hopefully be only the foundation of a larger body of work. These techniques are effective, and arguably essential, in creating a deeply cohesive ensemble performance because these techniques build upon the goals that are inherent in a successful performance. Beautiful and meaningful music is

³² Bryce, "Enriching the Rehearsal Model through Collaborative Music Learning," 19.

possible when we realize the potential expressive sum of an ensembles individual parts, and it is inevitable when collaboration is a cornerstone of the rehearsal process.

Table 1. List of collaborative rehearsal techniques and their application to adult amateur choirs.

| Author | Description of technique | Expected Outcomes | Possible Adjustments to adult amateur choir context |
|------------------|---|--|--|
| Pandora Bryce | Developed for use with instrumentalists. "Students need to be 'at the table' when decisions are made about when, how, and what to learn. [] A small step in this direction might be to involve students seriously in repertoire decisions for public performances." | Students may find more expressive commitment to the program that includes their opinions from the outset. | -Create a program with a "skeleton" of pieces to define each section and direct the larger scope of the program. Then ask the ensemble to make recommendations about the remainder of the program. |
| Pandora Bryce | Developed for use with vocalists. "Another might ask students to analyze a music-making attempt, identify problems, and to meet as a section or sub-section to find solutions, and then defend these suggestions to the larger group." 34 | "In a collaborative classroom, the small ensemble is a means to have students find appropriate learning problems for themselves. The small ensemble's relation to the larger group is to spark the discovery process in others. The teacher's role would be seen more as one of guiding students toward appropriate learning problems rather than as the problem solver." 35 | -Create small groups that regularly meet during rehearsal to approach consistent issues in a certain section of music. Small groups may submit their ideas in writing or in a discussion setting during rehearsal. -Make recordings during rehearsal for the same small groups to evaluate and give feedback about. |

^{43,} no. 1 (Fall 2001): 18. ³³ Pandora Bryce, "Enriching the Rehearsal Model through Collaborative Music Learning." The Canadian Music Educator; Edmonton

| Ask all voice parts to sing a single part to the same outcomes that Harrington details. Additionally, ask questions about what the ensemble notices about the part that is other than their own. Let them come to understand how it might relate to their own part. | Developing awareness of other sections' parts allowing for a more complete understanding of the whole piece. "When ensemble problems became extremely problematic, Michelle and Athena developed a rehearsal strategy that enabled them to work out the ensemble themselves without the rest of the strings." 39 | Developed for use with instrumentalists. "Due to the problems of playing with a larger group, the leaders of the Gold Sextet developed a strategy where they doubled or played along with other members' parts." | William Harrington |
|---|--|---|-----------------------|
| The rubric is a template built for the middle school ensemble (see Figure 1 below). Some adjustments may be made according to the general knowledge level of the ensemble as well as to target specific musical elements or questions. Asking for input via 'exit tickets' is another way to receive singer feedback about passages for which they have musical ideas. Asking further questions that target specific sections within pieces can create a discussion point for a future rehearsal. | "It is through the crafting of this rubric that the conductor/teacher represents mature musical practice to the students. [] The students make their own musical judgments as they apply the rubric that the conductor/teacher gives them." 37 | Developed for use with vocalists. "The ensemble is divided into dyads [] dyads work together over a fairly long period of time, perhaps throughout an entire semester or more. [] The musical problems the students will solve are evident in the rubric they will apply." 36 | Susan Conkling |

³⁶ Susan Wharton Conkling, "Collaboration in the Choral Ensemble." Choral Journal 41, no. 2 (September 2000): 12.

³⁷ Conkling, "Collaboration in the Choral Ensemble," 12.

³⁸ William James Harrington, "Collaborative Learning among High School Students in a Chamber Music Setting." Ed.D., Boston University, 2016, 161.

³⁹ Harrington, "Collaborative Learning among High School Students in a Chamber Music Setting," 161.

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| Developed for use with instrumentalists. Approach musical elements of performance through attentive listening. Dividing listening into three levels creates an approach for musicians to examine the different musical elements: 1. Small group 2. Section 3. Whole ensemble | Developed for use with vocalists. "Regularly soliciting singer input in music need attention, appropriate dy the text engages each singer as a par the music and music making." |
| "I have tried to distill approaches to peer interaction suggested in modern pedagogical literature and apply them to the ensemble rehearsal. Use of this rather straight-forward technique, in my experience, can improve not only the "product" of the ensemble—its performance in concert—but also the quality of musicianship developed by each member of the group." ⁴¹ | Developed for use with vocalists. "Regularly soliciting singer input in all ensembles as to what places in the music need attention, appropriate dynamics and tempo fixes, and insight into the text engages each singer as a partner in the exploration and discovery of the music and music making." |
| May be applied in any number of ways. Some suggestions are below. Level 1 - The sopranos are asked to hold a single note for 12 counts in a slow tempo. Each pair of sopranos must decide how they will stagger their breaths in order to create a seamless note for 12 counts. Level 2 - The tenors must all modify an "ah" vowel through their passaggio and that modification must be coordinated. Level 3 - A fugue subject must be passed from one section to another. A coordinated dynamic shape between the voice parts is required. | A specific method for asking or singer feedback will always create a streamlined rehearsal process. Asking for input via 'exit tickets' is a way to receive singer feedback about passages for which they have musical ideas. Asking further questions that target specific sections within pieces can create a discussion point for a future rehearsal. |

⁴⁰ Roberta Q. Jackson and Debra D Burgess, "Building Community through Collaboration." *Choral Journal* 56, no. 8 (March 2016):

⁴¹ Erik Johnson, "Developing Listening Skills through Peer Interaction." Music Educators Journal 98, no. 2 (2011): 51.

| Jeff Reynolds | Jeff Reynolds |
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| Developed for use with instrumentalists. On eye contact: "If the conductor looks at the play during a performance, sharing feelings about the mutual responsibility and enjoyment is fostered." "44" | Developed for use with instrumentalists. On conductor cueing: The conductor should not cue every entrance. Clarifying responsibility: Give the musicians clear responsibility over a variety of musical elements: intonation, rhythmic integrity, and tempo. |
| Developed for use with instrumentalists. On eye contact: "If the conductor looks at the players most of the time during a performance, sharing feelings about the music, an atmosphere of mutual responsibility and enjoyment is fostered." **A** The players most of the time of the players most of the players most of the time of the players most of the time of the players most of the players most of the players most of the time of the players most of the players m | "By not cuing every entry, the conductor gives up some of the control that traditionally goes with the position, empowering the students to be more involved and more responsible for their own parts." "If musicians consider it their responsibility to tune and play in rhythm, the ensemble will be able to focus on deeper aspects of musicality and will not regard playing in tune or rhythmically as conductor-controlled requirements." |
| Eye contact between the singers can also foster similar feelings that Reynolds describes. As singers to stand in circles (either in voice parts or in smaller groups), and ask them to sing sections of the piece aiming them to notice specific moments or to comment on general things they notice about the music-making. This can also be done with the entire ensemble standing in a circle, or any formation that allows the musicians to face each other. | There are no adjustments necessary to these techniques. It should be noted that each of these ideas takes consensus from a discussion with the ensemble answering the question, 'What musical elements <i>could</i> the ensemble in charge of and what musical elements <i>should</i> the conductor be responsible for?' |

Association; Toronto, Ont. 4, no. 1 (Fall 2005): 11. ⁴² Jeff Reynolds, "Focus on Rehearsal: The Collaborative Music Room." Canadian Winds: The Journal of the Canadian Band

 ⁴³ Reynolds, "Focus on Rehearsal: The Collaborative Music Room," 12.
 ⁴⁴ Reynolds, "Focus on Rehearsal: The Collaborative Music Room," 11.

 ⁴⁵ Reynolds, "Focus on Rehearsal: The Collaborative Music Room," 11.
 ⁴⁶ Reynolds, "Focus on Rehearsal: The Collaborative Music Room," 12.
 ⁴⁷ Reynolds, "Focus on Rehearsal: The Collaborative Music Room," 12.

Figure 1. Susan Conkling, "Collaboration in the Choral Ensemble," page 13.

| Passage being evaluated: Today's date: Directions: Listen to your peer sing through the designated passage. Circle the number to the left of each criteria to best describe your peer's performance (1 = never, 2 = seldom, 3 = sometimes, 4 = often, 5 = always). Written comments may help target your peer's attention to a specific aspect of his/her performance. VOCAL PRODUCTION: My peer's body position will help support the vocal tone. 1 2 3 4 5 My peer's breath supports the vocal tone at the beginning, middle, and end of each phrase. My peer's vocal tone sounds free and flexible. 1 2 3 4 5 My peer sounds like he/she is singing with the same voice in high, middle, and low ranges. 1 2 3 4 5 My peer performs the correct pitches in this passage. 1 2 3 4 5 My peer performs the correct rhythms in this passage. 1 2 3 4 5 My peer performs the correct text in this passage. 1 2 3 4 5 My peer performs with a range of dynamics appropriate for this passage. 1 2 3 4 5 My peer emphasizes particular words so I understand the meaning of the text. 1 2 3 4 5 My peer takes breaths at appropriate points, so I hear | Peer Evaluation | | | | | |
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| Directions: Listen to your peer sing through the designated passage. Circle the number to the left of each criteria to best describe your peer's performance (1 = never, 2 = seldom, 3 = sometimes, 4 = often, 5 = always). Written comments may help target your peer's attention to a specific aspect of his/her performance. VOCAL PRODUCTION: My peer's body position will help support the vocal tone. 1 2 3 4 5 My peer's breath supports the vocal tone at the beginning, middle, and end of each phrase. My peer's vocal tone sounds free and flexible. 1 2 3 4 5 My peer sounds like he/she is singing with the same voice in high, middle, and low ranges. Comments: ACCURACY: My peer performs the correct pitches in this passage. 1 2 3 4 5 My peer performs the correct rhythms in this passage. 1 2 3 4 5 Comments: VOCAL EXPRESSION: My peer performs with a range of dynamics appropriate for this passage. 1 2 3 4 5 My peer emphasizes particular words so I understand the meaning of the text. 1 2 3 4 5 My peer takes breaths at appropriate points, so I hear logical, musical phrases. 1 2 3 4 5 | Peer's name: | | _ | _ | _ | _ |
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Concluding Thoughts and Implications for Future Investigations

The body of research reviewed in this paper shows a strong argument for the general efficacy found in applying collaborative learning pedagogies to the music classroom. Further, the research supports this argument specifically in application to music ensembles in K-12 and higher education settings. However, as stated in the previous section, further development of actual rehearsal techniques that are rooted in collaborative principles is needed. In addition to rehearsal techniques that are published similarly as in those sources discussed above, techniques might be gathered and examined from professional chamber ensembles, who are typically absent a conductor and so rely on its members to direct the rehearsal process.

Professional chamber ensembles rehearse just as school and amateur community ensembles do. Study could be made of their rehearsal process in order to develop techniques for conductors to employ with their ensembles. Professional chamber ensembles, both instrumental and vocal, are commonly found throughout the United States. Instrumentally, ensembles such as the Takacs quartet and the Canadian Brass have been active for many years, developing a rehearsal process to perform expressively at the highest levels. Vocally, ensembles such as Chanticleer and Cantus have been extremely successful in creating performances that are musically nuanced and meaningful, all without a conductor to lead them in performance. In recent years, the professional choral scene has proliferated yielding summer programs and graduate degrees that focus on the development of musical skills needed in order to perform with professional choral ensembles both conductor-led and otherwise. Many of the ensembles finding national acclaim in recent years are specifically led by the entire membership rather than by a single conductor; the Lorelei ensemble and Roomful of Teeth are just two examples. There is an apparent difference in the level of training and difficulty of repertoire that professional

ensembles and amateur ensembles experience. However, their foundational goal is the same: to create meaningful and expressive musical performances. As such, their rehearsal process may still be examined and codified in order to develop a resource of collaborative rehearsal techniques.

After the collection of collaborative techniques has been expanded, further study of those techniques' efficacy in a variety of settings and circumstances should be made. The current research foundation is provided from a general viewpoint, but with an expanded resource of teaching techniques and methods in place, further studies of all types (comparative, quantitative, and qualitative) examining not only there efficacy, but their efficiency in more specific settings will be required. These studies will hopefully bring collaborative techniques further into the mainstream, building their credibility and more widespread usage in amateur and school ensembles.

Anecdotally speaking, the more traditional model of conductor leadership seems pervasive today. This is likely due to the small amount of resources detailing specifically how to employ this style of rehearsal. Teachers and conductors in all settings today have little time to develop new techniques beyond those they learned in their education and have experienced in the ensembles in which they participate. Therefore, resources that are developed need to be efficiently applied and easily adjusted to the wide variety of circumstances that exist in music education and community ensembles.

In ensembles that regularly include collaborative techniques, the musicians find more interpersonal connection to each other through the rehearsal process. These techniques give an opportunity for musicians to add to the music beyond just the sound of their instrument. They draw on their past experiences and gathered knowledge to inform their expressivity. Their

musicianship is more immediately and consistently applied in rehearsal and performance. The result is a musical outcome that is informed by the ideas and knowledge of all the ensemble's members rather than relying principally, if not entirely, on the conductor's.

Bibliography

- Bartel, Lee R., and Linda Cameron. "Engage or Disengage: An Inquiry into Lasting Response to Music Teaching." *Orbit* 31, no. 1 (2000): 22–25.
- Brandler, Brian. "Learning Music Collaboratively." M.A., American University, 2013.
- Brandler, Brian J., and Zehra F. Peynircioglu. "A Comparison of the Efficacy of Individual and Collaborative Music Learning in Ensemble Rehearsals." *Journal of Research in Music Education* 63, no. 3 (October 2015): 281–297.
- Brown, Daniel James. "The Collaborative Rehearsal: Blogging as a Reflective Paradigm for Band." Ed.D., Teachers College, Columbia University, 2012.
- Brown, Julie K. "Student-Centered Instruction: Involving Students in Their Own Education." *Music Educators Journal; Reston* 94, no. 5 (May 2008): 30–35.
- Bruffee, Kenneth A. Collaborative Learning: Higher Education, Interdependence, and the Authority of Knowledge. 2nd ed. Baltimore: Johns Hopkins University Press, 1999.
- ——. "Sharing Our Toys: Cooperative Learning Versus Collaborative Learning." *Change: The Magazine of Higher Learning* 27, no. 1 (February 1, 1995): 12–18.
- Bryce, Pandora. "Enriching the Rehearsal Model through Collaborative Music Learning." *The Canadian Music Educator; Edmonton* 43, no. 1 (Fall 2001): 17–19.
- Conkling, Susan Wharton. "Collaboration in the Choral Ensemble." *Choral Journal* 41, no. 2 (September 2000): 9–15.
- Davidson, Neil, and Pat Wilson O Leary. "How Cooperative Learning Can Enhance Mastery Teaching." *Educational Leadership* 47, no. 5 (February 1990): 30–34.
- Di Natale, John J., and Gordon S. Russell. "Cooperative Learning for Better Performance: John J. Di Natale and Gordon S. Russell Make a Case for Introducing Cooperative Learning Principles into the Music Classroom." *Music Educators Journal* 82, no. 2 (September 1995): 26–28.
- Goldberg, Merryl R. "Teaching and Learning: A Collaborative Process." *Music Educators Journal* 76, no. 5 (1990): 38–41.
- Goodsell, Anne S., Michelle R. Maher, and Vincent Tinto. *Collaborative Learning: A Sourcebook for Higher Education*. Washington, DC: Office of Educational Research and Improvement, 1992.

- Gutiérrez, Kris D., Patricia Baquedano-López, Héctor H. Alvarez, and Chiu. "Building a Culture of Collaboration through Hybrid Language Practices." *Theory Into Practice* 38, no. 2 (1999): 87–93.
- Harrington, William James. "Collaborative Learning among High School Students in a Chamber Music Setting." Ed.D., Boston University, 2016.
- Hoffmann, James A. "Computer-Aided Collaborative Music Instruction." *Harvard Educational Review* 61, no. 3 (August 1991): 270–78.
- Holt, Michele, and James Jordan. *The School Choral Program: Philosophy, Planning, Organizing, and Teaching*. Ann Arbor, MI: GIA Publications, 2008.
- Jackson, Roberta Q, and Debra D Burgess. "Building Community through Collaboration." *Choral Journal* 56, no. 8 (March 2016): 44–53.
- Jaffurs, Sheri E. "Volume 3, Issue 3 ACT." *Action, Criticism, and Theory for Music Education* 3, no. 3 (December 2004). Accessed Jul 21, 2019: http://act.maydaygroup.org/volume-3-issue-3/.
- Johnson, David W., and Roger T. Johnson. "An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning." *Educational Researcher* 38, no. 5 (June 2009): 365–379.
- ——. "Cooperation and Competition." In *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)*, edited by James D. Wright, 856–861. Oxford: Elsevier, 2015.
- -----. "Making Cooperative Learning Work." *Theory Into Practice* 38, no. 2 (1999): 67–73.
- Johnson, David W., Roger T. Johnson, and Karl Smith. "The State of Cooperative Learning in Postsecondary and Professional Settings." *Educational Psychology Review* 19, no. 1 (2007): 15–29.
- Johnson, Erik. "Developing Listening Skills through Peer Interaction." *Music Educators Journal* 98, no. 2 (2011): 49–54.
- ——. "The Effect of Symmetrical and Asymmetrical Peer-Assisted Learning Structures on Music Achievement and Learner Engagement in Seventh-Grade Band." *Journal of Research in Music Education* 65, no. 2 (2017): 163–78.
- ——. "The Effect of Peer-Based Instruction on Rhythm Reading Achievement." *Contributions to Music Education; Columbus* 38, no. 2 (2011): 43–60.

- Jordan, James. *The Choral Rehearsal: Volume 1*. Vol. 1. 2 vols. Ann Arbor, MI: GIA Publications, 2007.
- ——. The Choral Rehearsal: Volume 2. Vol. 2. 2 vols. Michigan: GIA Publications, 2008.
- Jordan, James, and Matthew Mehaffey. *Choral Ensemble Intonation: Method, Procedures, & Exercises*. Ann Arbor, MI: GIA Publications, 2001.
- Kaschub, Michele E. "The Choral Rehearsal Reconstructed: Meeting Curricular Goals Through Collaborative Interactions." *The Quarterly* 7, no. 2–4 (1997/1996): 91–101.
- Keil, Charles. "Culture, Music, and Collaborative Learning." Echology 1 (1987): 7–12.
- King, Alison. "Enhancing Peer Interaction and Learning in the Classroom Through Reciprocal Questioning." *American Educational Research Journal* 27, no. 4 (1990): 664–87.
- Langston, Thomas W., and Margaret S. Barrett. "Capitalizing on Community Music: A Case Study of the Manifestation of Social Capital in a Community Choir." *Research Studies in Music Education* 30, no. 2 (December 2008): 118–138.
- "Letters from Shaw." RobertShaw.Website. Accessed July 21, 2019. http://robertshaw.website/new-page-70.
- Lim, Mei Chern. "In Pursuit of Harmony: The Social and Organisational Factors in a Professional Vocal Ensemble." *Psychology of Music* 42, no. 3 (May 2014): 307–324.
- Lisk, Edward S. *The Creative Director: Conductor, Teacher, Leader.* Galesville, MD: Meredith Music Publications, 2007.
- Luce, David W. "Collaborative Learning in Music Education: A Review of the Literature." *Update: Applications of Research in Music Education* 19, no. 2 (March 2001): 20–25.
- MENC. *Handbook of Research on Music Teaching and Learning*. Edited by Richard Colwell. New York: Schirmer Books, 1992.
- Peters, Valerie R. "Collaborative Knowledge Building of Ethnic Musical Communities in an Urban High School: An Ethnographic Case Study." Ph.D., Northwestern University, 2007.
- Reynolds, Jeff. "Focus on Rehearsal: The Collaborative Music Room." *Canadian Winds: The Journal of the Canadian Band Association; Toronto, Ont.* 4, no. 1 (Fall 2005): 11–13.
- Robinson, Mitchell. "From Competition to Collaboration: Lessons from the Second Chair." *Research Studies in Music Education* 30, no. 2 (December 2008): 202–208.

- Seighman, Gary B. "Exploring the Science of Ensemble." *Choral Journal* 55, no. 9 (April 2015): 8–16.
- Shively, Joseph. "In the Face of Tradition: Questioning the Roles of Conductors and Ensemble Members in School Bands, Choirs, and Orchestras." In *Questioning the Music Education Paradigm*, edited by Lee Bartel, 179–90. Waterloo, Ontario: Canadian Music Educators' Association, 2004.
- Slavin, Robert E. "Comprehensive Approaches to Cooperative Learning." *Theory Into Practice* 38, no. 2 (1999): 74–79.
- Whitener, John L. "Using the Elements of Cooperative Learning in School Band Classes in the United States." *International Journal of Music Education* 34, no. 2 (May 2016): 219–33.
- Wis, Ramona M. "The Conductor as Servant-Leader." *Music Educators Journal* 89, no. 2 (November 2002): 17–23.