COOPERATIVE LEARNING METHODS FOR GROUP PIANO:

THE DEVELOPMENT OF A TEACHING GUIDE

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Abstract

This inquiry explored cooperative learning theory and methodology in the context of teaching functional keyboard skills in undergraduate collegiate group piano classes. The purpose was to create a teaching guide to be used in the teaching and learning of harmonization, transposition, improvisation, sight-reading, accompanying, playing by ear, and technique. The guide was created using established cooperative learning methods and was intended to be used in conjunction with other resources common to collegiate group piano classes. The majority of cooperative learning material pertains to non-music subjects; of those resources that relate to music, there are almost no available published sources that incorporate cooperative learning into the group piano curriculum. Teachers of collegiate group piano classes may wish to use this guide to introduce cooperative learning methodology in their teaching situations.
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CHAPTER I
INTRODUCTION

Since group piano instruction was first introduced in private European piano studios in the early 1800s, the practice of teaching keyboard skills to more than one student at a time became a popular method of instruction for many piano teachers. Initially, teachers taught multiple students using one or more acoustic instruments. With the introduction of the first electronic keyboard lab at Ball State University in 1956, piano teachers were able to teach many students at one time and each student had an individual instrument on which to learn. Keyboard study soon became a popular endeavor for many students of all ages in schools throughout the United States and abroad (Richards, 1962).

Group piano instruction works well for students of every age and skill level. Young beginning students can learn with their peers the preliminary elements of keyboard technique and the foundational aspects of music performance as they demonstrate aural and rhythmic discrimination through audiation, singing in tune, and moving their bodies and playing rhythm instruments with a steady beat. Intermediate students may have periodic group lessons to work on theory, listening, analysis, and ensemble playing—activities that can often be more enjoyable and rewarding when experienced with peers. Group piano is also ideal for adult students as they enjoy camaraderie and encouragement from each other in their creative pursuits. Sylvia Coats, an experienced piano pedagogue, shared her thoughts on this subject in a recent interview (Fisher, 2010c):
When groups are well facilitated with a positive, accepting environment that encourages exploration, students are more likely to be intensely engaged, express opinions, and experience personal insights about themselves and music. Good playing evolves from students learning through interactive experiences with music and each other. (p. 1)

Whatever the age or skill level of the student, group work seems to be an effective way for piano students to learn a variety of music and keyboard skills.

At the collegiate level, a majority of undergraduate music majors are expected to enroll in group piano courses to learn keyboard skills and complete required piano competencies. These requirements are set forth by the National Association of Schools of Music (NASM)—an accrediting body designed to maintain standards in post-secondary music programs. The NASM guidelines suggest that students desiring a bachelor’s degree in music must demonstrate competency at the keyboard, stating that for music education students especially, “functional performance abilities in keyboard...are essential.” (NASM, 2010, p. 99). Those keyboard skills that have long been categorized as functional include harmonization, transposition, improvisation, sight-reading, accompanying, and playing by ear (Chin, 2002; Hunter, 1973; Johnson, 1987; March, 1988; McDonald, 1989; Skroch, 1991; Smith, 1978). Keyboard technique, such as playing scales and chords, is also a necessary skill for performance facility at the keyboard; without proper playing technique, students may struggle to perform the skills necessary for demonstrating keyboard competency.

Many of these skills are currently taught in collegiate group piano classes, where the students are expected to pass each functional skill at a competency level determined by the music faculty. A number of students enter college with some prior knowledge of the piano, but these students often do not possess adequate proficiency in all of the required skills. These students must study piano, therefore, until they can demonstrate competency in all of the functional keyboard skills. Often, these students are able to pass the competency requirements following one
to two semesters of piano instruction. Other students are beginners at the keyboard, having no prior experience with the instrument. These students must first learn basic technique to achieve facility at the piano before learning some of the more advanced functional skills. These beginners often require individual help and coaching, and may need a longer time to learn the necessary skills to pass the competency test. It might be ideal for students of similar skill level to be grouped together for maximum teaching efficiency. Depending on the size of the institution and the ability to offer a wide range of classes, students with vastly different keyboard skills may find themselves in the same piano class.

Many collegiate piano classes meet only once or twice per week for two to four semesters (March, 1988; Skroch, 1991). This may not be an adequate amount of time for thorough keyboard study, especially when some of the students have little or no prior piano experience. Group piano teachers may find it difficult to help all of the students to become competent in functional keyboard skills; this is especially true if the teachers work with students of varying skill levels. Most likely, the students in these situations will be required to learn and practice a large amount of the material by themselves.

Traditional methods of teaching where students learn primarily in an individual manner and where they are assessed individually have been shown to contribute to student attitudes of competitiveness or despair (Johnson & Johnson, 1975; Kagan, 1989; Sharan, 1990; Slavin, 1990). The outgoing, more academically adept students are often the ones who ask questions and who are able to answer the teacher’s questions successfully. Students who struggle to keep up with the group may become discouraged and less motivated, especially if they do not receive the help they need to understand the material. Teachers may find it difficult to give each student adequate attention without slowing down the rest of the class or without putting in extra time outside of the allotted teaching hours.
The typical group piano classroom includes electronic keyboards equipped with an audio system that connects the teacher’s keyboard to the students’ instruments through headphones (Chin, 2002, Skroch, 1991). The audio system can be configured so that students hear only their individual keyboards when they need to learn and practice without distraction from other students. The teacher can make his voice and instrument available to each student individually, to a group of students, or to the entire class. The teacher also has the ability to combine any number of students into groups in order to meet various objectives. With this setup, the teacher has access to each group through the headphones and is able to tailor instruction to meet the needs of the students in each group. Instead of practicing alone, students could be encouraged to learn from each other in groups. This arrangement might maximize the time spent in class and could allow the students needing more attention to receive that instruction from the more adept students. The educational theory known as cooperative learning may be ideally suited to the group piano setting because this method appears to work well with student groups of varying sizes, configurations, and abilities (Johnson, Johnson, & Stanne, 2000).

The goal of cooperative learning is for each student to contribute meaningfully toward a shared goal while maximizing the learning of the other members in the group (Johnson & Johnson, 1975). The students are not merely working side by side to complete individual tasks, but they are actively involved in helping each other master the material so that each one improves his understanding. Ideally, while being guided by the teacher, each student contributes equally to the learning process, discovers new ideas with classmates, and learns how to work with others in a positive manner. In contrast to the traditional format of teaching in which the teacher explains a new concept and the students practice the skills primarily by themselves, cooperative learning encourages positive student interaction in the learning process (Clarke, 1994; Johnson & Johnson, 1975; Slavin, Sharan, Kagan, Hertz-Larowitz, & Webb, 1985; Zbikowski & Long, 1994).
Cooperative learning has become widely accepted in education since the 1980s (Johnson, Johnson, & Stanne, 2000). Many books have been written on the subject and many applications of cooperative learning methods have been outlined for instructional use in all academic subjects and grade levels. Proponents of cooperative learning claim that the roots of learning together go back much farther than 1980, as evidenced in the social learning philosophies of Piaget, Vygotsky, Dewey, Deutsch, and others (Slavin, 1983).

Since the inception of cooperative learning as an alternative teaching method, extensive research has been conducted to discover the benefits of cooperative learning and to compare those results with traditional teaching and learning methods. Research by leading proponents of cooperative learning (Johnson & Johnson, 1975; Kagan, 1989; Sharan, 1990; Slavin, 1990) has resulted in a list of benefits that includes:

- increased academic achievement
- positive social skills development (language development, inter-group relations, and leadership skills)
- positive student feelings through participation (with relation to self-esteem, emotional well-being, altruistic tendencies, and creating an accepting environment)
- improved ethnic relations
- promotion of cultural democracy (promoting cultural diversity and encouraging active participation in decisions that affect the group)
- natural opportunities for mainstreaming
- increased observance of pro-academic peer norms (students encouraging each other to do their best)
- increased high internal locus of control
- improved time on-task and general classroom behavior
This list of benefits will most likely continue to grow and be refined as more educators experiment with cooperative learning in their individual situations. Some teachers will likely discover additional benefits for their students and themselves. The benefits mentioned above, however, are consistently cited in the research as resulting from the use of cooperative learning methods in the classroom.

Two of the most widely researched benefits of cooperative learning are increased academic achievement and positive development of social skills. Research within various academic subjects indicates that both academic achievement and positive social skills improve for most students where cooperative learning is involved (Johnson & Johnson, 1975; Johnson, Johnson, & Stanne, 2000; Kagan, 1989; Sharan, 1990; Slavin, 1990; Stevens & Slavin, 1995). Research also has been done in the area of cooperative learning and music (non-piano) at the elementary, secondary, and collegiate levels. Other researchers have studied cooperative learning as it relates specifically to group piano. Results from these studies support the findings from non-music research involving cooperative learning: improved academic achievement occurs and social skills development is positive when cooperative learning is applied to music education and specifically to group piano instruction (Baker, 2008; Book McGree, 2010; Emmeleus, 1993; Fisher, 2006; Goliger, 1995).

Significance and Purpose of the Study

Since many undergraduate music students participate in group piano classes, a large number of students may benefit if group piano teachers explore ways to maximize the learning experience. Using cooperative learning techniques may be one way to efficiently utilize classroom teaching time as teachers guide the students in working together and motivating one another to improve their functional keyboard skills. The students might also gain valuable social skills and teaching experience through learning together and tutoring each other.

If group piano teachers desire to use cooperative learning in their classes, they will need to plan activities that are specifically cooperative in nature, tailor cooperative methods to the
specific task of learning functional keyboard skills, and provide feedback for the students to help them assess and improve their social skill interactions with each other (Johnson & Johnson, 1975; Slavin, et al., 1985). Due to the lack of resources incorporating cooperative learning methods into group piano curriculum, a teaching guide for this purpose was developed. This guide was designed to be used in conjunction with any curriculum currently being utilized in collegiate group piano classes. The guide was not intended to replace current group piano texts, but was created to be used as a supplemental teaching tool. Lesson plans and techniques based on widely-used and extensively-researched cooperative learning methods were outlined for implementing cooperative learning strategies in teaching functional keyboard skills to undergraduate music majors. The aim of this teaching guide was to be a valuable tool not only for teaching functional keyboard skills but also for promoting positive social and teaching skills among developing undergraduate musicians, many of whom will become the future music educators of society.

Definition of Terms

1. **Group piano**: the course(s) required of most undergraduate music majors in which they learn and demonstrate competency in functional keyboard skills

2. **Audiation**: the ability to hear and comprehend music in one’s head without hearing the physical sound; this is similar to the thought process for language

3. **Keyboard**: any instrument resembling an acoustic piano and used in the instruction of piano skills and literature; usually refers to an electronic or digital version of an acoustic piano

4. **Keyboard lab**: a classroom comprised of a teacher’s keyboard and a number of student keyboards, with all of the instruments capable of being linked via a headphone controller system; the room might also have a digital music display that allows the students to see in both staff notation and keyboard placement each note being played on the teacher’s keyboard
5. **Controller**: A device in a keyboard lab that allows the teacher and students to aurally communicate with each other using various grouping configurations that provide for a variety of instructional settings (individuals, pairs, small groups, entire class, etc.)

6. **Functional skills**: keyboard skills considered important for teaching and performing as a musician, including harmonization, transposition, improvisation, sight reading, accompanying, playing by ear, and technique development.

7. **Competency**: mastery of an established criteria of functional keyboard skill as demonstrated through performance.

8. **Cooperative learning**: learning that occurs through student-led and teacher-guided interaction with fellow classmates, the goal of which is to maximize peer learning.

9. **Cooperative learning assessment**: evaluation that takes place at the conclusion of a cooperative learning activity and focuses on group effectiveness in working toward a goal.

**Delimitations and Explanations**

The lessons in this document were designed to be used in a keyboard lab consisting of electronic instruments equipped with metronomes and recording capabilities. The keyboards must be capable of being linked through a headphone controller system. Because all keyboard labs are not similar in size or method, this teaching guide might not apply to every group piano situation. Teachers may have to alter lesson plans to accommodate the students using the particular equipment in their classrooms.

The time requirements for each lesson plan are only suggestions. Times are provided so that teachers may have an idea of the general class length needed to complete each lesson. Teachers may need to lengthen certain steps of the plans to give their students more time to complete the activities, or they may be able to shorten the time if their students are able to quickly grasp the concepts of the plans.
Summary

Group piano instruction occurs in many colleges and universities as music majors learn functional keyboard skills to be used in future music endeavors. Cooperative learning teaching methods, explored within the group piano context, may prove to be valuable strategies for teaching functional piano skills at the collegiate level. Cooperative learning is a teaching philosophy designed to promote active participation and maximum learning of all students in the classroom. Cooperative learning proponents believe that teaching students to work purposefully together as they learn may be beneficial for all students. Students might gain confidence that their skills and knowledge are able to improve through positive interaction with peers. Students might learn to help each other in the educational process rather than working against each other or competing with each other. These skills can be necessary for success in the relational situations that students will encounter when they leave school.

Research data pertaining to music in general and group piano in particular support the use of cooperative learning methods in music, as results have indicated an increase in academic achievement and positive social skills development. These data, highlighted in chapter two, prompted exploration into those cooperative learning methods that seemed to be more suited to teaching and learning in collegiate group piano classes. These particular cooperative methods became the foundation for the lesson plans in the teaching guide.

Chapter three outlines how the teaching guide was developed and designed. Chapter four is the teaching guide. That chapter provides a brief introduction to cooperative learning theory, an outline of the various elements of each plan, a description of the required musical skills necessary for student success, and an explanation of lesson intent. The cooperative lesson plans make up the bulk of the chapter. Chapter five offers a summary of the project, discussion of the teaching guide construction and discovery process with implications for networking with other teachers who may be using cooperative learning methods, and suggestions for future research.
CHAPTER II
REVIEW OF LITERATURE

To review chapter one, the benefits of cooperative learning in the areas of academic achievement and improved social interaction might be extended to the group piano classroom at the collegiate level. Rather than having students work alone in their individual “practice rooms” made available through the use of headphones, teachers might encourage students to experience the joy and challenge of learning together with peers. Because a group piano teaching tool based primarily on cooperative learning methods was not available at the onset of this project, this guide was developed for teaching functional keyboard skills at the collegiate level.

This chapter begins with a review of the available research in the area of functional piano skills being taught in collegiate group piano classes as compared with the skills being reported as necessary by professional musicians. Following that information is an introduction to cooperative learning philosophy and methods. Finally, the chapter concludes with a brief overview of the ways in which cooperative learning is currently being used in group piano classrooms.

Functional Keyboard Skills

Functional keyboard skills have long been viewed as important and necessary for most music careers (Hunter, 1973; Johnson, 1987; March, 1988; McDonald, 1989). What has been discovered through research was that sometimes the skills being taught in group piano classes did not adequately prepare music students for the situations they would encounter in their music careers (Chin, 2002; Johnson, 1987; March, 1988; Young, 2010). A comparison of responses by collegiate group piano teachers and public school music educators revealed that the same
functional keyboard skills were listed by both groups as important (Johnson, 1987). These skills were harmonization, transposition, improvising, sight-reading, accompanying, and playing by ear. Since these skills were being used by music educators in the field, it would seem reasonable for these skills to be emphasized in group piano curriculum in order to prepare musicians for practical piano performance in the workplace.

Subsequent research in this area resulted in disturbing discoveries. A study by March (1988) found a discrepancy between the keyboard skills actually being taught in piano classes and the keyboard skills cited as necessary in the field of music. Collegiate instruction seemed to place an emphasis on skills that had been determined to have little value for school music teachers: namely playing and memorizing piano solos and playing scales and arpeggios. Results indicated that group piano curriculum might focus instead on practical keyboard skills such as sight reading, playing chord progressions, accompanying, transposing, harmonizing, and improvising since these were the skills that music teachers reported using in the profession (March, 1988).

Current research revealed a continued disconnect between the skills deemed necessary for music students and the skills taught in group piano classes. A survey was conducted of 197 collegiate group piano teachers regarding educational background to determine the effect that their training had on in-class instructional procedures. It was discovered that most teachers listed the top skills needed by music students to be sight reading, harmonization, accompanying, open score reading, and transposition. In practice, however, many group piano teachers emphasized solo repertoire study, technical exercises, chord progressions, and critical listening in the curriculum. The only functional skills that were consistently emphasized in group piano classes were sight reading and harmonization (Chin, 2002).

More recently, a similar survey was conducted involving 109 musicians from various teaching and performing situations that focused on the keyboard skills these musicians used in their professions. Apparently, not all of the survey participants had been required to enroll in
group piano class during college—some participants had been exempt from piano study, some participants had taken private lessons, and some participants had been enrolled in group piano. A number of these musicians claimed to have learned piano skills outside of private lessons or group piano, either on their own or in courses such as music theory and music education methods. Regardless of the training experience, many musicians felt that they did not learn in college the piano skills that they used day to day in their professions. Since group piano instruction was becoming the standard approach for teaching functional keyboard skills at the collegiate level, the conclusion was that the piano curriculum should focus on the skills of sight-reading, transposing melodies, playing scales, harmonizing melodies, and reading open scores, because these were the skills that professional musicians claimed to use most often. Group piano teachers also might emphasize the skills of accompanying, improvising, and playing chord progressions in their classes because participants in the study indicated a desire to be more proficient in these areas (Young, 2010).

While decades of the research documented keyboard skills used by professional musicians, a large percentage of piano instruction did not seem to adequately prepare music majors for practical keyboard performance. Possible reasons for this could be (a) collegiate piano curriculum did not emphasize the functional skills that students used as professional musicians (Chin, 2002; March, 1988; Young, 2010), (b) students completed proficiency requirements in the first or second year of college training and forgot those skills upon graduating (Young, 2010), (c) teachers did not receiving adequate group piano and/or functional skill training, and thus relied on technique development and solo repertoire study as the basis for group piano curriculum (Chin, 2002; Young, 2010), and (d) group piano instruction focused solely on individual practice rather than incorporating group work (Chin, 2002).

One conclusion from the research was that “…small group work that promotes peer interaction and discovery learning seemed to be lacking in piano classes from all types of
institutions (Chin, 2002, p. 90).‖ If this statement were accurate, it would seem practical to explore various educational methodologies in an effort to improve the acquisition of functional keyboard skills. One of these alternatives might be the inclusion of cooperative learning methods into collegiate group piano curriculum.

Introduction to Cooperative Learning

Between the mid 1970s and early 1990s, educators and learning theorists began searching for alternative teaching and learning methods that might de-emphasize some of the negative aspects of traditional educational models. Academic environments where students were learning primarily in an individual manner and where they were being assessed individually seemed to foster attitudes of competitiveness or hopelessness among some students (Johnson & Johnson, 1975; Kagan, 1989; Sharan, 1990; Slavin, 1990). At that time, an educational method known as cooperative learning was being introduced into classrooms as one such alternative to the traditional way of teaching.

The leading proponents of cooperative learning, Shlomo Sharan (1990), Robert Slavin (1990), Spencer Kagan (1989), David Johnson and Roger Johnson (1975), set out to research, define, and describe this method. This group of learning theorists devised a list of essential elements for cooperative learning. Shlomo Sharan compiled this list in his book Cooperative Learning: Theory and Research (1990), claiming that “it is only under certain conditions that group efforts may be expected to be more productive than individual efforts” (p. 27). These conditions are:

1. Clearly perceived positive interdependence
2. Considerable promotive (face-to-face) interaction
3. Personal responsibility (individual accountability) to achieve the group’s goals
4. Frequent use of relevant interpersonal and small-group skills
5. Periodic and regular group processing
The first condition outlined by Sharan and embraced by other cooperative learning theorists as necessary for effective cooperative learning was *Positive Interdependence*. This aspect of cooperative learning was defined as each student playing a vital role in the learning of the others in the group. Each person had something to bring to the learning experience that helped the others. The perception by each member of the group was that he or she could not succeed in the task unless all of the other members succeeded. Each member in the group had to coordinate his efforts with those of the other members in order to complete the task at hand (Kagan, 1989; Lew, Mesch, Johnson & Johnson, 1986; Sharan, 1990).

Another condition of cooperative learning was *Promotive (or Face-to-Face) Interaction*. This type of interaction assumed that group members would help each other understand the task, provide necessary resources for completion of the task, and promote each other’s learning and growing. Students were encouraged to challenge each other’s answers and reasoning processes in order to provide greater insight for the entire group. The idea was that students must interact personally and face-to-face in order to complete the task (Johnson, Johnson, & Smith 1991; Sharan, 1990).

*Personal Responsibility/Individual Accountability* was a third condition of effective cooperative learning environments. Within this condition, it was assumed that each member of the group would do his share of the workload and would contribute as much as he could to the final product without hindering the efforts of the other group members. If group members were assessed individually and the group was rewarded based on individual improvement, each member might be more likely to work for the good of the group; group members should not tolerate any “freeloaders” going along for the ride while the highAchievers did all of the work for everyone else (Kagan, 1989; Sharan, 1990; Slavin, 1983).

Another condition of cooperative learning was the development of positive *Social Skills*—these included leadership, conflict resolution, and effective communication. Students did not
typically develop positive social skills naturally through merely working in groups. Students often needed to be taught and encouraged to interact socially for the benefit of the group as a whole (Kagan, 1989; Lew, Mesch, Johnson & Johnson, 1986; Sharan, 1990).

The fifth condition found in cooperative learning activities was *Group Processing*. This aspect seemed to be the easiest one to overlook (especially on the part of the teacher), but it was possibly the most important element in the scheme of cooperative learning. At the conclusion of a cooperative learning activity, the group members assessed how well they worked together and they made a plan for improving their communication and teamwork for subsequent activities. If the group did not evaluate those areas that worked for them as a group and those areas that needed improvement, they most likely would not develop the necessary skills for working together (Johnson, Johnson, & Holubec, 1992; Sharan, 1990).

In addition to the five conditions described above, other cooperative elements were highlighted as being important to the cooperative learning environment (Kagan, 1989; Johnson, Johnson, & Smith, 1991). These additional elements were:

6. **Team Formation**—how groups were constructed and how long the same group of students worked together

7. **Structuring and Structure**—using the appropriate cooperative learning method to achieve the desired outcome

8. **Heterogeneous grouping**—purposeful diversification of groups with regard to intellectual ability, ethnicity, gender, and socio-economic status

9. **Shared Leadership**—having students take turns being “in charge”

10. **Shared Responsibility**—all students trying their hand at various jobs within a particular project

One could expect more ideas to be added to the above list as more research was conducted in this area and as educators continued to incorporate cooperative learning techniques into their
classrooms. The initial five components were so prevalent in the cooperative learning literature, that they were considered to be essential building blocks for promoting effective cooperative learning. Hence, these five components served purposefully and consciously as the backbone for this teaching guide.

Cooperative Learning Methods

As a result of the work of the leading cooperative learning proponents, various methods for implementing cooperative learning theory in the classroom were developed during the past several decades. Over time, these methods were refined and more methods were added to the existing body of material so that teachers had many tools available to them for guiding the cooperative learning process in their classrooms. The cooperative learning methods outlined in this document were those methods that had been the most extensively researched and were the most widely-used (Johnson, Johnson, & Stanne, 2000; Slavin, 1983).

One of the earliest cooperative learning methods devised by Robert Slavin, David DeVries, and Keith Edwards was called Student Teams-Achievement Divisions (the abbreviation STAD is widely accepted) (Sharan, 1994). In the STAD format, heterogeneous groups of 4-5 students worked on learning material together. The three main components of this method were team rewards, individually accountability and equal opportunities for success. The students were tested individually through use of quizzes, but group scores were given based on group improvement over previous scores. This method of scoring allowed for each member of the group to contribute to the group score as each person was able to improve his or her learning and understanding regardless of the beginning aptitude level. Because the group as a whole received a score based on each member’s improvement, the members helped each other to improve so that the entire group score increased. Ideally, members worked together instead of against each other (Sharan, 1994).
A second widely used cooperative learning method also developed by Slavin and DeVries was called Teams-Games-Tournament (TGT). TGT had a similar format to STAD; instead of taking tests, the students demonstrated mastery of the material through games. This method was thought to be a little less stressful since the students are playing “games” rather than taking quizzes. Again, group scores were awarded based on individual improvement (Slavin, 1983).

Another format for conducting cooperative learning in the classroom took place through the use of “jigsaw” methods, of which there were several types. The first jigsaw method, now referred to as Jigsaw I, was initiated by Elliott Aronson (1978). In this cooperative learning method, students were assigned to teams, the material was broken up into several topics, and each member of the group was given a topic to study. After reading individually about the topics, those members of each group who were learning about the same topic (one person from each group) met to discuss what they learned. In discussing and listening with fellow classmates, these students became “experts” in their pieces of the academic puzzle. Students then returned to their original groups and took turns teaching the other group members what they learned about their piece of the topic. After all group members shared their knowledge with the others, the students took individual tests covering all of the material. In Jigsaw I, each student was dependent upon fellow group members to teach the material so that every person understood and could demonstrate achievement on the test. Each student contributed vital information, or a piece of the puzzle, to the learning process (Aronson, Blaney, Stephan, Sikes, & Snapp, 1978).

Slavin modified the jigsaw method by adding cooperative incentives (group grades or recognition) to the cooperative task method. In Slavin’s variation, called Jigsaw II, the students read the same passage of literature, such as a short story or biography. The students were each assigned a different topic related to the passage and proceeded to become the expert on that topic. Students reported back to group members the information they learned, and all of the students
were tested individually. Individual grades were combined into group grades, and recognition was awarded for individual and group improvement (Slavin, 1983).

Several other jigsaw methods were developed in an attempt to alter or improve the previous jigsaw methods. **Jigsaw III** was developed by Alexander Gonzalez and M. Guerrero (1983) to improve interaction in biracial classrooms where language might be a barrier. **Jigsaw IV** was developed by Dwight Holliday in an attempt to improve **Jigsaw II** and **Jigsaw III**. This method incorporated assessment quizzes throughout the learning process in an effort to guide future learning (Hedeen, 2003). As more teachers apply cooperative learning techniques in their classrooms, they may continue to alter the various methods in an effort to help their students more effectively.

Another cooperative learning method developed by David Johnson and Roger Johnson was known as **Learning Together**. This method was also referred to as **Circles of Learning** or **Cooperative Base Groups**. In this style of learning, students worked in groups of 4-5 as they completed worksheets together. Each group handed in a single sheet at the completion of the assignments and was graded according to the work done by the group as a whole. It was assumed that the students helped each other learn the concepts as they worked through the assignment (Johnson & Johnson, 1975).

Shlomo Sharan and his colleagues developed a cooperative learning method called **Group-Investigation**. This method was a bit more loosely constructed than other methods in that students were allowed to choose their own groups based on topic interest. Group members divided the tasks and completed the activities necessary to produce a group presentation. The entire group received a grade for the final product. The premise behind this method was that students used the interpersonal skills they learned to collectively plan specific learning goals and then implemented the cooperative skills necessary to reach those goals (Sharan & Sharan, 1994).
Several cooperative methods were designed for use with specific subjects. Two such methods were: 1) Team Assisted Individualization (TAI) and 2) Cooperative Integrative Reading and Composition (CIRC). TAI was developed by Robert Slavin and his colleagues and was used primarily in the math setting. TAI combined individual instruction with group learning as students completed individually-paced worksheets and quizzes, but did so in the context of pair tutoring and student monitoring. According to Slavin (1983), “TAI is unique among all cooperative learning methods in its use of individualized instead of class-paced instruction. It was developed to be used when a class is too heterogeneous to be taught the same material at the same rate…” (p. 27). CIRC was developed as a comprehensive program for teaching writing and language arts in grades 3 and 4 (Stevens, Madden, Slavin, & Farnish, 1987). It was recently modified to include grades 2-6.

Among all of the cooperative learning theorists, Spencer Kagan (1989) has developed the greatest number of cooperative learning methods. Rather than calling his teaching plans “methods,” Kagan preferred to label his cooperative learning techniques “structures.” For Kagan, structures were broad conceptual objectives used in developing cooperative skills. Kagan claimed that teachers sometimes learned and implemented specific activities that were able to be utilized in only one prescribed way. He believed that teachers could learn how to use and incorporate cooperative learning structures that applied to many different situations, allowing for flexibility on the part of teachers who were not limited to one application of a concept (Kagan, 1989). Two of Kagan’s most well-known structures were Pairs Check and Think-Pair-Square (based on Frank Lyman’s (1981) original format Think-Pair-Share). These cooperative methods relied on the work of student pairs discovering together and tutoring each other. Pairs Check, Think-Pair-Square and Think-Pair-Share were applied to the instruction of many different academic subjects, including group piano as seen in the work of Fisher (2006) and Cremaschi (2000).
The various methods for employing cooperative learning strategies in the classroom were researched, tested, and used in practical applications for many years (Johnson, Johnson, & Smith, 1991). In 2000, a meta-analysis was conducted in an effort to validate the effectiveness of various widely-used methods of cooperative learning (Johnson, Johnson, & Stanne, 2000). The methods reviewed were:

- **Learning Together**
- **Academic Controversy**
- **Student-Team-Achievement-Divisions**
- **Teams-Games-Tournaments**
- **Group Investigation**
- **Jigsaw**
- **Teams-Assisted-Individualization**
- **Cooperative Integrated Reading and Composition**

All eight cooperative methods in the meta-analysis were reported to have a significant positive effect on academic achievement. When the cooperative methods were compared with competitive strategies or individualistic learning, the Learning Together model produced the highest results of all the cooperative methods. The authors of the meta-analysis concluded that the amount of research conducted in the area of cooperative learning methods was so extensive and could be generalized to such a variety of educational situations and outcomes, that the findings strongly validated the use of cooperative learning methods in teaching and learning (Johnson, Johnson, & Stanne, 2000).

Cooperative Learning in Use Today

Today, many method books explain how to use cooperative learning in elementary school, middle school, high school, and college. The bulk of cooperative learning literature pertains to the “academic” school subjects such as math, science, and language arts. Few resources incorporate
cooperative learning methods for use in the arts, although research studies have been conducted in recent years producing results that promote the application of cooperative learning methods to fine arts classes and specifically to music learning.

Research in the area of cooperative learning and group piano instruction appeared in the early 1990s. A study of New Zealand colleges conducted by John Emeleus (1993) compared achievement of two groups of piano students: one group was taught using traditional individualized instruction and the other group was taught using cooperative learning methods. Although Emeleus’ study was a Master’s thesis conducted over a short period of time (due to the set-up of the college program), his research and data results appeared to be reliable. He found that the cooperative learning group was more advanced in keyboard skills and general musicianship than the group that was taught in an individualized manner (Emeleus, 1993).

The first documented doctoral study incorporating cooperative learning methods into the group piano setting was conducted by Joseph Goliger (1995). As one who paved the way for further research in this area, Goliger admitted to several shortcomings with his study. He believed that the implementation of the cooperative method as a sole venue for teaching and learning in his situation was too abrupt for teachers and students who were used to a more traditional educational method. He felt that some of the students resisted this method because it was unfamiliar and experimental. Despite the downfalls of his particular study, Goliger believed that the benefits to the students outweighed the difficulties encountered due to the strength of the group learning model.

Several positive outcomes resulted from this research endeavor. One purpose of the study was to determine whether cooperative methods could be applied with success to group piano teaching and learning. It was concluded that through the use of cooperative methods (the study focused on the Learning Together and Teams-Games-Tournaments models) “…the retention of information as required for the Final Exam showed a marked and dramatic improvement in grade
results (Goliger, 1995, p. 371-372).” Another important aspect of the study was the documentation of the affective responses of students as they adjusted to the cooperative learning method. As students progressed through the study it was observed that they developed a sense of teamwork or “family”, an acceptance of the positive interdependence aspect of the cooperative model, growth in individual self-esteem and self-acceptance connected to group interpersonal social support, and an increased acceptance of various social differences (Goliger, 1995).

In more recent years, several studies and articles were written that promote the use of cooperative learning methods in collegiate group piano classes. Christopher Fisher (2006), a proponent of using cooperative methods in collegiate group piano, has applied cooperative learning methods to his classes at Ohio University. In his dissertation, Fisher explored five cooperative learning methods, tailoring those methods to the teaching of keyboard skills. He found the cooperative learning methods to be effective tools for improving achievement, social skills, and attitude toward piano study among his college students (Fisher, 2006). Fisher recently published a book titled Teaching Piano in Groups (2010a) that outlines many facets of group piano teaching, including a chapter about using cooperative learning techniques in group piano.

Alejandro Cremaschi was another college professor who has used cooperative learning methods in his group piano classes at the University of Colorado at Boulder. Dr. Cremaschi has published some of his cooperative learning strategies on the pedagogy website Piano Pedagogy Forum (2000). His knowledge of the subject and his practical application of cooperative learning methods have been passed onto some of his graduate students, who have explored cooperative learning techniques with their own group piano students. One of Cremaschi’s students, Emily Book McGree, recently completed her dissertation involving cooperative learning at the collegiate level. Book McGree’s study (2010) combined quantitative and qualitative data to determine the effects of cooperative learning methods on the achievement, self-efficacy, practice habits, and attitudes of group piano students. Results indicated that the use of cooperative
learning techniques seemed to contribute to increased keyboard skill achievement and a positive attitude towards piano study.

Nancy Baker (2008) investigated two fundamental aspects of student learning in the group piano setting: (a) improvement in student attitude toward sight-reading at the piano and (b) achievement in sight-reading at the piano. Baker’s research focused on attitudinal and achievement changes in the context of dyad peer tutoring (groups of two students). The tutors in the dyads experienced an increase in sight-reading achievement while the tutees felt more confident in their sight-reading skills, thereby projecting a positive attitudinal effect following peer tutoring (Baker, 2008).

Summary

Functional keyboard skills such as harmonization, transposition, improvising, sight-reading, accompanying, and playing by ear were viewed as important for musicians to develop, as these skills were used in a variety of music careers. While many collegiate music majors learned functional keyboard skills in group piano classes, research indicated that some music students did not learn all the keyboard skills necessary for their particular careers. Other students did not feel adequately prepared to use the keyboard skills that they learned. One remedy for this problem may be the exploration of using cooperative methods in the teaching and learning of functional keyboard skills so that students discovered and learned together rather than learning primarily in an individual manner.

The research pertaining to cooperative learning in the group piano setting was limited, with available studies focused on only one or two functional skills or having incorporated only a few of the available cooperative methods. A cooperative learning curriculum covering most of the common functional keyboard skills did not exist for group piano instruction. A comprehensive teaching guide containing cooperative learning activities and lesson plans for common functional
keyboard skills and using a variety of cooperative methods was devised in chapter four of this document. The development and design of this teaching guide is outlined in chapter three.
CHAPTER III

METHOD

The purpose of this study was to develop a teaching guide applying cooperative learning methods to the teaching and learning of functional keyboard skills in collegiate group piano classes. This teaching guide was designed to work in conjunction with any curriculum currently being used to teach functional keyboard skills. Teachers could use this guide to help their students work together in a positive manner as they learned functional keyboard skills. Since no comprehensive group piano resource existed that focused on cooperative learning methods, this teaching guide offered a unique approach to the teaching and learning of functional keyboard skills.

Origin of the Teaching Guide

The foundation for the teaching guide originated from a teaching situation in which class time was limited. It became apparent that the traditional method of group piano teaching presented a challenge in equipping the beginning students with the necessary keyboard skills to be successful musicians. Traditional teaching methods typically involved the teacher presenting a new concept or skill and the students working individually to learn the material, with the students being tested individually to determine the level of mastery (Chin, 2002; Emmeleus, 1993; Johnson & Johnson, 1975; Sharan, 1990; Skroch, 1991; Slavin, 1990).

Some of the students in this situation seemed to not receive enough in-class practice or individual help that was needed to master all of the functional keyboard skills. Generally, these students seemed frustrated during piano class and occasionally did not perform well enough to
pass the final skills test. The students were grouped to work on skills together in an effort to
utilize class time more efficiently, which allowed focused attention for those students who needed
individual help. This combination of pairs work and small group work mixed with large-class
instruction became the pattern of teaching and learning. After several months of learning in this
manner, the students seemed to enjoy piano class more than previous students had, and they were
performing the keyboard skills at a higher level than had students from prior semesters.

Out of this discovery came the impetus for research into a standardized approach of using
group learning in the piano class. Study of cooperative learning theory and methodology was
conducted in order to determine if this approach was compatible with group piano instruction. As
chapter two indicated, cooperative learning theory was widely accepted in all educational subjects
including music (Johnson, Johnson, & Stanne, 2000), although in the area of group piano
teaching the use of cooperative learning methods was limited. Research in the area of cooperative
learning and non-music classes became the foundation for further study outlining how
cooporative learning was used in general music classes and in group piano.

In the course of this research, it was discovered that only two teachers in the United States,
Alejandro Cremaschi (2000) and Christopher Fisher (2006), had published lesson ideas for
applying cooperative learning methods in collegiate group piano instruction. Cremaschi also
provided contact information of a graduate student, Emily Book McGree (2010), who was
finishing her dissertation on the topic of cooperative learning and its affects on student attitude
and achievement in collegiate group piano instruction. All three educators granted permission for
their lesson ideas to be incorporated into the teaching guide.

Because the published lesson plans were written from different approaches and because
they did not cover all of the functional keyboard skills, a need was identified for a unified,
comprehensive teaching guide. With an organized and accessible guide available, more group
piano teachers might incorporate cooperative learning into their curriculum if they desired.
Building on some of the ideas of Cremaschi, Fisher, and Book McGree, and adding ideas of her own, the author of the guide began creating the lesson plans.

Organization of the Teaching Guide and Lesson Plans

The guide was divided into various sections determined by functional keyboard skills—one skill was highlighted in each section. The skills chosen for inclusion in the guide were determined through research pertaining to keyboard instruction as valuable for pianists and music educators. These skills were harmonization, transposition, improvisation, sight-reading, accompanying, and playing by ear and were they being taught in many collegiate group piano classes (Chin, 2002; Fisher, 2006; Johnson, 1997; Skroch, 1991; Young, 2010).

Each lesson plan was designed around a specific cooperative learning method chosen to teach the musical objective. The cooperative learning method informed the cooperative objectives for the plan. Each cooperative method was designed with particular social skills that needed to be performed by the students. For example, the Jigsaw method required that students learned material with one group of students called the “jigsaw group.” The students then re-grouped with different students, and each person taught the learned material to the new group members (Aronson, Blaney, Stephan, Sikes, & Snapp, 1978). The cooperative skills (objectives) associated with the Jigsaw method were: 1) working in a positive manner while learning the information; 2) effectively communicating the information to fellow classmates; 3) listening to and assimilating the information for demonstration on a test or in a group project. Social skills such as these informed the cooperative skill objectives for the lesson plans.

Each functional skill had various musical objectives that the students must demonstrate through performance in order to be considered proficient at the keyboard. For example, the skill of sight reading required that students maintain steady tempo while playing as many correct notes and rhythms from the score as possible. Students must be able to perform a sight reading piece without looking at the hands too often. Students need to be able to study a score before playing,
determining those sections of the piece that might present a challenge in sight reading, and
devising a plan for overcoming those challenges. The musical skills needed for functional skill
improvement became the musical objectives for the lesson plans.

Not all cooperative learning methods worked with music learning. Some methods were
designed specifically for math (Team Assisted Individualization) and reading (Cooperative
Integrative Reading and Composition) and were difficult to apply to other subjects. Many of the
other cooperative methods worked well for music learning. Different methods were researched,
and those methods were used that had proven effective for non-music subjects (Johnson, Johnson,
& Stanne, 2000) as well as for group piano teaching and learning (Book McGree, 2010; Fisher,
2006; Golliger, 1995). The methodology from the various cooperative learning methods was
applied to the teaching and learning of functional keyboards skills, and lesson plans were
designed around those methods. Many of these plans included activities that had previously been
used in collegiate group piano teaching and were now formatted into the cooperative lesson plans.

In addition to the functional skill and cooperative skill objectives, the remainder of each
lesson included the pedagogical elements necessary for teaching: preparation needs, time
allotment, materials needed, assessment tools, and detailed steps of the plan. Care was given to
outline the steps of each plan so that the teachers using the plans and the students being instructed
would have an understanding of the lesson focus and purpose. Practice in teaching the lessons and
visualizing their use in the keyboard lab was helpful for outlining the various steps needed to
complete each lesson. Much time was spent with piano colleagues to re-work the plans so that
they were succinct, clear, and easy-to-use.

Because the lesson plans were written from a cooperative perspective, certain conditions
needed to be included in each lesson for it to be considered cooperative. These five conditions
were: 1) clearly perceived positive interdependence; 2) considerable promotive (face-to-face)
interaction; 3) personal responsibility (individual accountability) to achieve the group’s goals;
4) frequent use of relevant interpersonal and small-group skills; 5) periodic and regular group processing. Icons were chosen that represented the concepts of these five components; these icons were located in the lesson plans at the places where those cooperative ideals were present.

Finally, each plan included an explanation of the cooperative method used for that lesson as well as an application of the method outlined in the activities of the plan. Each plan also included group assessment for each cooperative objective. By defining the method applications, by requiring group assessment, and by including the five cooperative conditions, each lesson plan conformed to the descriptions and requirements necessary to be considered cooperative.

Summary

This chapter explained the premise for creating the teaching guide, the reasoning behind choosing the various elements of the guide, and the organization of the lessons in the guide. The teaching guide was written to be contained in chapter four. It was assumed that this chapter might best be presented as a stand-alone document intended to be used by group piano teachers. Therefore, the wording in chapter four was altered so that it was speaking directly to the practitioner. The goal of the guide was to be used as a supplementary teaching tool in the teaching and learning of functional keyboard skills.
CHAPTER IV

TEACHING GUIDE

This teaching guide is based on cooperative learning theory. Cooperative learning is built on the premise that students should discover concepts and material together, that students can learn to help each other acquire and improve knowledge and skills, and that students can benefit both academically and socially through these learning experiences. Cooperative learning methods are being used with success by teachers of all grades and subjects.

The teaching guide is organized into several sections. The first section explains each element of the lesson plans and defines the intent and purpose of the plans. The bulk of the guide contains cooperative learning lesson plans for teaching functional keyboard skills to collegiate group piano students.

Organization of the Lesson Plans

The cooperative learning lesson plans are organized into sections by functional keyboard skills typically learned in collegiate group piano classes: Section A: harmonization, Section B: transposition, Section C: improvisation, Section D: sight-reading, Section E: accompanying, Section F: playing by ear, and Section G: technique development. Each plan includes:

- functional skill objectives
- cooperative skill objectives
- the specific cooperative learning method(s) used for that plan and the author(s) who created the method
- suggested time frame to complete the lesson
• a definition of the cooperative method(s)
• an application of the method(s) to the specific plan activity
• grouping requirements
• necessary teacher preparation
• sequence of activities
• assessment procedures and tools

Some plans include variations for shortening the lesson plan, altering the lesson plan for different skill levels, or extending the lesson plan. An example of a lesson plan is provided for reference (Figure 1), followed by an explanation of each element of the plan.

<table>
<thead>
<tr>
<th>SKILL: HARMONIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lesson #1: Harmonizing a Familiar Melody</strong></td>
</tr>
<tr>
<td>Adapted from lesson plans by Alejandro Cremaschi (2000) and Christopher Fisher (2006)</td>
</tr>
<tr>
<td><strong>Functional keyboard skill objective</strong></td>
</tr>
<tr>
<td><strong>Cooperative skill objectives</strong></td>
</tr>
<tr>
<td><strong>Cooperative learning method</strong></td>
</tr>
<tr>
<td><strong>Cooperative method definition</strong></td>
</tr>
<tr>
<td><strong>Cooperative method</strong></td>
</tr>
</tbody>
</table>
Students may struggle with knowing how to choose chords when harmonizing a melody and in knowing whether their chord choices are accurate. When students share their answers with a partner, discrepancies can be clarified and discussed. Pairing students may create a non-threatening way to learn material, as peers may exhibit patience while helping their struggling classmates. If both partners are not adept at harmonization, the pair can work together to improve answers and a sense of teamwork might result. Pairs then check the work of other pairs and provide necessary feedback to correct answers and clarify understanding of the material.

**Time required**  
15-20 minutes

**Group size**  
Pairs

**Preparation**  
The teacher chooses melodies appropriate to the students’ skill levels and provides a list of possible chord choices for harmonizing each melody (see Appendix A for suggested melodies for harmonization). Each pair receives a different melody.

**Plan**  
Step One (3 minutes)  
- Students work individually to harmonize the assigned melody. The students may be instructed to write the chords without playing them on the keyboard (relying on audiation and knowledge of theory) or they may be permitted to play the chords on the keyboard.

Step Two (3-4 minutes)  
- The teacher sets the controller so that partners hear each other.
- Pairs compare answers and decide if changes need to be made.
- Pairs practice for the class performance (both students play melody and harmony).

Step Three (5-8 minutes)  
- The teacher sets the controller so that all of the students hear each other.
- The pairs take turns performing the melodies for the class (both students play melody and harmony).
- After each performance, the listening pair uses the performance rubric (Appendix B) to assess the performing pair’s chord choices, suggesting changes that may need to be made.
**Assessment**

4-5 minutes

**Functional skill:** Assessment happens in Step Three.

**Cooperative skills:** Each group of two student pairs discusses with the teacher how well they were able to share ideas, make changes to answers, and work in a positive manner.

**Figure 1.** Example of a group piano cooperative lesson plan.

*Lesson Objectives*

The functional keyboard objectives encompass specific skills within the parameters of harmonization, transposition, improvisation, sight-reading, accompanying, playing by ear, and technique. The cooperative learning objectives include those social skills that are necessary for positive group interaction while completing the functional objective. Specific cooperative objectives stem from the cooperative methods employed in the lessons.

*Cooperative Learning Methods*

Each cooperative method used in the lessons is designed to develop certain social skills in the students. Each method assumes a specific grouping of students—some methods allow for pair collaboration in creative learning, such as the design and presentation of new knowledge. Some methods require rote review such as checking the understanding of facts before a test. Some of the methods are designed for group work of three to five students who coach each other to learn and understand material for a group project or test. Other methods require the students to learn material with one group of students and then communicate that material to another group of students. These groupings are indicated in the plans.

Whatever the design, the students need to be encouraged to demonstrate positive social skills as they work with their classmates. Because positive social skills do not naturally occur with all students, the teacher will need to guide students in demonstrating those skills that
promote learning for every person in the class. Social skills that may need to be reinforced pertain
to time management (staying on task, talking for a short period of time, taking turns talking,
setting an agenda), equal participation of all group members (offering an idea, giving an
explanation, asking for clarification, asking for help when needed, checking for agreement,
checking for understanding), conflict resolution (respecting individual differences, affirming
ideas, building on other’s ideas, disagreeing politely, receiving critique with a good attitude), and
maintaining a positive working environment (talking quietly, not disturbing other groups)
(Kagan, 1994).

*Preparation and Plan Steps*

The teacher preparation sections and the specific plan steps are provided in anticipation of
the needs of teachers and students who might be unfamiliar with cooperative learning methods.
Careful thought and planning has gone into creating these steps to provide the teacher and
students with all the information they will need to make these lesson plans succeed in their
classrooms. The indicated times for each step of the plans are only suggestions for the teacher—
adjustments may need to be made for a particular group of students who might require more or
less time to complete various steps. As teachers become familiar with using cooperative methods,
they will understand the time that their students need for various activities and they can make
individual adjustments as necessary.

*Group Assessment*

Group assessment is an important part of the cooperative lesson. Through interactive
evaluation the students may learn to engage in positive communication and to work more
effectively in a group—this is one of the goals of cooperative learning. Group assessment does
not have to happen during every class period; if it does happen regularly, it does not have to be a
formal written evaluation. Assessment can often be a quick comment or two from a fellow
student or from the teacher as to the effectiveness of the group in working together. At other
times, the assessment is a formal evaluation that includes a grade. If assessment is a regular part of the class experience, students will most likely improve in their ability to evaluate their learning experience.

Some lessons call for a “winner” or highest scoring group. Sometimes this type of reward is an effective motivator for students. Prizes awarded to these groups do not need to be elaborate or expensive. If the awarding of prizes gets in the way of student learning, that part of the lesson could be eliminated. Students may be most motivated by receiving genuine praise from fellow students and the teacher and by experiencing an individual sense of accomplishment and improvement in skill acquisition.

Functional Assessment Tools

Each lesson includes assessment tools for functional skill evaluation. Some lessons are written so that the assessment comes from the teacher while other lessons require the students to evaluate their classmate’s skills. Some of the lessons have a specific assessment tool that fits the particular cooperative structure. Other lessons refer to a “performance rubric.” This rubric (found in Appendix B) outlines general performance criteria that group piano students will demonstrate as they master the various functional skills. Because the rubric includes a broad scope of performance elements, and because all of these elements are not assessed in each lesson, the teacher will need to determine those elements that will be assessed for a particular functional objective.

Icons

There are several conditions that are essential to include if an activity is to be defined as cooperative. These conditions are:

1) clearly perceived positive interdependence—all team members are integral to the group’s success
2) face-to-face interaction—students must actively work together to succeed
3) individual accountability—each person must demonstrate learning

4) frequent use of relevant interpersonal and small-group skills

5) periodic and regular group processing—evaluation of group communication is essential for improved relations.

Icons (Figure 2) have been used in the lesson plans to highlight those steps of the plan that fit each of these conditions.

<table>
<thead>
<tr>
<th>Positive interdependence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face interaction</td>
</tr>
<tr>
<td>Individual accountability</td>
</tr>
<tr>
<td>Interpersonal and small-group skills</td>
</tr>
<tr>
<td>Group processing</td>
</tr>
</tbody>
</table>

*Figure 2. Cooperative learning conditions and icons included in each lesson plan.*

**Lesson Plan Criteria**

A pre-requisite for these lesson plans is that students demonstrate a corresponding understanding of written and aural theory, fundamental keyboard performance skills, and basic improvisation ability. Written theory requirements include knowledge of all key signatures,
diatonic and secondary scales and chords for each key, appropriate chord progressions with smooth voice leading, and ability to choose correct chords to harmonize melodies. Aural skills involve audiating melodies used for harmonization and transposition, singing basic pitch and rhythm patterns, and detecting errors relative to the printed score. Keyboard performance skills include mastery of five-finger pentascales and full octave scales, ability to balance textures within piano parts and in collaboration with other performers, as well as experience with a variety of types of elementary-level repertoire in all keys. Improvisation skills include the ability to create basic rhythmic patterns in established meters with a steady tempo and the ability to perform chords in various accompaniment patterns.

The lesson plans in this teaching guide are based on a group size of 10-16 students. Suggested time allotments for the various steps may need to be adjusted to accommodate the abilities of different classes. If the number of students in a class is odd (either permanently or because someone in the class is missing on a particular day), the teacher might form a pair with one of the students. This is a good way to challenge the more advanced student who may possess skills beyond that of the rest of the class or who may need some extra motivation. The teacher/student pairing is also a good way to assist a student who is less advanced or who may be falling behind the other students; the teacher might use this time to give special attention to that student.

The lessons were designed to be used in a keyboard lab that is equipped with a controller system that allows the teacher to set the headphones in a variety of configurations for individual practice, pair work, group work involving any number of students, entire class participation, as well as other options. The keyboards may also be heard in the room without any headphones by changing the control switch on each instrument. If no keyboard setting is indicated at the outset of a particular lesson plan, it is assumed that the teacher sets the controller so that students are able
to work individually with the headphones. Other groupings with or without headphones are indicated as needed throughout the plans.

The lesson plans require a variety of student behaviors including moving, listening, singing, writing, talking, and performing at the keyboard. A variety of teaching techniques are incorporated to target different learning styles and preferences. Some activities are very short (only 5-10 minutes) while other plans are completed over the course of several weeks and require the students to work outside of class. Some of the plans are intended for use with long-term groupings of students (such as an entire semester) for the purpose of practice partnerships or team tournaments. These lesson plans are not designed for everyday use in the group piano class. Instead, the teacher may use the plans periodically to alter the usual teaching method and to provide variety in learning through individual exploration and discussion with classmates.

The teachers who provided lesson plans have used these plans with their group piano students (Book McGree, 2010; Cremaschi, 2000; Fisher, 2006). Several of the lesson plans include material from well-known group piano resources (Hilley & Olson, 2006; Hilley, & Olson, 2010; Lancaster & Renfrow, 1995). The author created the majority of the plans and has used many of the ideas with her own group piano classes.
Section A

HARMONIZATION LESSON PLANS
Lesson #1: Harmonizing a Familiar Melody
Adapted from lesson plans by Alejandro Cremaschi (2000) and Christopher Fisher (2006)

**Functional keyboard skill objective**
Student pairs will harmonize a familiar melody with appropriate chords selected from options provided by the teacher.

**Cooperative skill objectives**
The students will share ideas and reach a consensus of answers. Pairs of students will share answers with another pair, making changes to the answers as needed.

**Cooperative learning method**
*Think-Pair-Square (Kagan)*

**Cooperative method definition**
The teacher assigns a task and the students work individually to devise an answer. The students are then paired with partners who share their answers and discuss any discrepancies. The pairs work to reach a consensus of answers, seeking to disagree politely, affirming partners’ answers, and exhibiting patience as they work together. After a pre-determined period of time, each pair combines with another pair to share answers; more discussion occurs as the group compares answers. This grouping ensures that more students are actively participating in the sharing process, since groups of four are sharing simultaneously rather than the entire class evaluating one answer at a time.

**Cooperative method application**
*Think-Pair-Square* is an effective method for helping students learn and improve harmonization skills; student pairings create effective use of class time as students receive individual help from each other. Students may struggle with knowing how to choose chords when harmonizing a melody and in knowing whether their chord choices are accurate. When students share their answers with a partner, discrepancies can be clarified and discussed. Pairing students may create a non-threatening way to learn material, as peers may exhibit patience while helping their struggling classmates. If both partners are not adept at harmonization, the pair can work together to improve answers and a sense of teamwork might result. Pairs then check the work of other pairs and provide necessary feedback to correct answers and clarify understanding of the material.

**Time required**
15-20 minutes

**Group size**
Pairs

**Preparation**
The teacher chooses melodies appropriate to the students’ skill levels
and provides a list of possible chord choices for harmonizing each melody (see Appendix A for suggested melodies for harmonization). Each pair receives a different melody.

**Plan**

**Step One (3 minutes)**
- Students work individually to harmonize the assigned melody. The students may be instructed to write the chords without playing them on the keyboard (relying on audiation and knowledge of theory) or they may be permitted to play the chords on the keyboard.

**Step Two (3-4 minutes)**
- The teacher sets the controller so that partners hear each other.
- Pairs compare answers and decide if changes need to be made.
- Pairs practice for their performance (both students play melody and harmony).

**Step Three (5-8 minutes)**
- The teacher sets the controller so that two pairs of students hear each other.
- The pairs take turns performing the melodies for each other (both students play melody and harmony).
- After each performance, the listening pair uses the performance rubric (Appendix B) to assess the performing pair’s chord choices, suggesting changes that may need to be made.

**Assessment**

4-5 minutes

**Functional skill:** Assessment happens in Step Three.

**Cooperative skills:** Each group of two student pairs discusses with the teacher how well they were able to share ideas, make changes to answers, and work in a positive manner.
# Lesson #2: Harmonization Progression

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Student groups will create a logical chord progression for harmonizing an unfamiliar melody and will perform that harmonization as a group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Students will build upon each other’s ideas as they cooperate to create a logical sequence.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><strong>Sequencing (Kagan)</strong></td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>The teacher prepares cards with various steps of sequential material on each card. Each group receives one stack of cards in random order. Group members divide the cards evenly and take turns placing the cards in order until the entire sequence is correct. The students should be encouraged to work quietly and in a manner that is not distracting to classmates. Each student should be patient and encouraging with his team members as they seek to complete the activity. Students who do not understand the sequence need to ask for clarification. Fellow group members coach their classmates so that all students in the group understand the task.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>The students divide the cards with the various chord choices, and each student contributes ideas to the final sequence so that the entire group creates a harmonization progression. The students have the advantage of working in a group and being guided by fellow group members to choose appropriate chords for harmonizing the melody. A sense of camaraderie may result as students take pride in creating a team harmonization.</td>
</tr>
<tr>
<td>Time required</td>
<td>12-15 minutes</td>
</tr>
<tr>
<td>Group size</td>
<td>Groups of 3-4 students</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher provides one melody for all of the students to harmonize and creates cards with appropriate chord symbol choices (I, iv, V7, i 6/3, etc.). Each group receives the same set of cards.</td>
</tr>
<tr>
<td></td>
<td>The teacher assigns the students to groups of 3-4 and sets the controller so that the students hear only the members of their group.</td>
</tr>
</tbody>
</table>
Plan

Step One (2-3 minutes)
- The students in each group divide their stack of cards randomly so that each person in the group has several cards.
- The students sight-read the melody together.

Step Two (2-3 minutes)
- The students work as a group to arrange the cards to create an appropriate chord progression for harmonizing the melody.

Step Three (2 minutes)
- As a group, the students play the chord progression (using block chords) assisting each other as needed.

Step Four (3 minutes)
- The students play the melody with the chord progression and make any final changes as needed.

Step Five (1-2 minutes)
- As a group, the students perform the melody and harmonization for the teacher, who uses the performance rubric (Appendix B) to provide feedback on the chord choices.

Assessment

2 minutes

Functional skill: During Step Five, the teacher assesses the students’ ability to create an appropriate chord progression and to play that progression as a group.

Cooperative skills: The teacher guides the group discussion to determine how well the students cooperated to create the final sequence. Was each person able to correctly place his/her chords in a logical order?
Lesson #3: ABA Harmonization

**Functional keyboard skill objectives**

Students will compose a melody, harmonize that melody with appropriate chords, and combine melodies with a partner to create a short ABA composition.

**Cooperative skill objectives**

The students will share ideas in both oral and written formats and reach a consensus of answers. Students will combine written work into a cohesive final project.

**Cooperative learning method**

Think-Write-Pair-Compare (Kagan)

**Cooperative method definition**

This method is a variation based on the Think-Pair-Share method. The teacher assigns a task and the students work individually to devise an answer. The students are then paired with partners who share their answers and discuss any discrepancies. The pairs work to reach a consensus of answers, seeking to disagree politely, affirming partners’ answers, and exhibiting patience as they work together. After a predetermined period of time, the students share answers with the entire class; more discussion occurs with all of the students assessing the answers.

The Think-Write-Pair-Compare variation requires that the students write their answers before sharing with their partners. This requirement adds an element of individual accountability as students attempt to solve the problem without being influenced by their classmates’ input. As with the other Think-Pair methods, the students are encouraged to work in a positive manner with their partners and fellow group members.

**Cooperative method application**

In this lesson, the students compose a melody and ask their partners to choose chords to harmonize that melody. The students compare answers with their previously-determined harmonization, and collaboration occurs until students agree upon one version. The students combine their compositions into one larger work, which creates a sense of teamwork. The team performs the composition for the entire class.

**Time required**

22-25 minutes

**Group size**

Pairs
Preparation

The teacher defines parameters for the composition of the melodies (movement by seconds or thirds, quarter and half notes, eight measures long, selected keys, etc.). The teacher provides the assessment guidelines for the students so that they know what is expected of them (Figure 3).

The teacher assigns the students to pairs. Prior to the in-class activity, the students compose melodies with appropriate harmonizations, and they bring two copies of the melody to class—one copy includes the chord symbols (letter names or Roman numerals) and the other copy does not.

In class, the teacher sets the controller so that partners hear each other.

Plan

Step One (5 minutes)
- The students give the melodies without chord symbols to their partners.
- The partners work individually to harmonize each others’ melodies, without looking at the chords provided by their partners.

Step Two (7-8 minutes)
- The partners perform each others’ melodies with the new chords added.
- The partners discuss the differences and similarities in chord choices.
- Changes are made as needed so that partners agree on the chord choices.

Step Three (8-10 minutes)
- The students combine the melodies into an ABA composition and practice the piece together in preparation for the class performance.
- Using the assessment tool (Figure 3), the teacher evaluates each composition prior to the performance and helps the students make necessary changes.
- The teacher sets the controller so that all students hear all of the keyboards.
- Pairs perform the compositions for the class.
Assessment 2 minutes

Functional skill: The teacher uses the assessment tool to assess each student’s work in Step Three.

Cooperative skills: The students discuss with the teacher how well they were able to share ideas, make changes to answers, and produce a cohesive final composition.

<table>
<thead>
<tr>
<th>STUDENT NAMES:</th>
<th>SCORE: _____/100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>_____/ 10</td>
</tr>
<tr>
<td>ABA format</td>
<td>_____/ 10</td>
</tr>
<tr>
<td>Each section is composed so that each one can move from one to another with appropriate harmonic/melodic transition</td>
<td>_____/ 20</td>
</tr>
<tr>
<td>Piece uses appropriate harmonic progressions</td>
<td>_____/ 20</td>
</tr>
<tr>
<td>Melody conforms to the parameters established by the teacher</td>
<td>_____/ 20</td>
</tr>
<tr>
<td>Correct rhythmic notation</td>
<td>_____/ 10</td>
</tr>
<tr>
<td>Neatly handwritten or created with notation software</td>
<td>_____/ 10</td>
</tr>
<tr>
<td>Comments:</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Sample scoring sheet for ABA Compositions.
Lesson #4: Chord Progressions in Different Keys
Adapted from a lesson plan by Alejandro Cremaschi (2000)

**Functional keyboard skill objective**
Students will correctly perform chord progressions in different keys.

**Cooperative skill objectives**
Students will affirm their partners’ answers or will coach the partners to learn the correct answer.

**Cooperative learning method**
*Inside-Outside Circle (Kagan)*

**Cooperative method definition**
The students form two circles, with one circle inside the other so that the students are facing each other as partners. All students possess a card with a question on one side and the answer on the other side. One student in each pair shows the question side of his card to his partner and asks for the answer. The questioning students affirm the correct answers or encourage their partners to learn the correct answer. The students are taught to not make fun of their classmates for wrong answers. The teacher models positive coaching of the correct response from the students.

At the teacher’s direction, the students reverse roles using the second card; the coaching student now becomes the answering student. When the pairs have completed the question and answer process, the teacher directs the partners to exchange cards so that the students possess different cards than they did when the activity began. One circle of students rotates until the students are paired with new partners. The question and answer process is repeated with the students coaching their new partners on the material learned from the previous partners. While working in this manner, the students are instructed to work quietly so as not to disturb their fellow classmates.

**Cooperative method application**
The *Inside-Outside Circle* method is a good way for students to work with different classmates and quickly review chord choices as partners take turns coaching each other. In this lesson the students are not really working in a circle (as most keyboard labs are not configured in a circle), but the concept of systematically rotating through the group of students should be maintained. Also, the coaching partnerships only happen one time so that the activity only uses part of the class session. The variation at the conclusion of the lesson provides an alternative for creating many different partner pairings if the teacher would like to extend the activity for thorough review of chord progressions.
Time required 15-16 minutes

Group size Pairs

Preparation The teacher prepares cards with different chord progressions for each student in the group. The front of the card has the key name (e.g. d minor), meter, two or three measures of rhythm, and a chord progression identified by Roman numerals and inversions underneath the rhythmic notation (see example below):

\[ d: 2/2 \ i \ iv6/4 \| i \ V6/5 \| i \| \]

The back of the card has the same exercise in regular staff notation with chords identified by letter names and inversions (d: 2/2 \ d, g 6/4 | d, A6/5 | d ||).

The teacher divides the class into two groups. During Step Two one group sits at the keyboards and the other group stands in front of the students at the keyboards so that a standing student (A) and a sitting student (B) are paired and facing each other. Both students in each pair should have a headphone plugged into the same keyboard. Students will switch headphones as needed.

Plan

Step One (3-4 minutes)
- Each student receives one card and practices the chord progression using both sides of the card.
- When the teacher directs, the students are paired with their partners.

Step Two (4 minutes)
- Student B sits at the keyboard while student A stands opposite of student B.
- Student A shows the FRONT of his card to student B
- Student B performs the progression with student A coaching as necessary until student B is able to play the progression.

Step Three (4 minutes)
- The students switch places and roles, repeating Step Two with Student B’s card.
**Assessment**

4 minutes

**Functional skill:** Using the performance rubric (Appendix B), the students rate how well they were able to play the chord progressions at the conclusion of the activity.

**Cooperative skills:** The teacher guides class discussion regarding the coaching procedure and to discover ways to be more helpful in the coaching process.

**Variation**

This activity could be lengthened by adding two steps:

**Step Four (4-5 minutes)**
- Student pairs exchange cards; pairs re-form in the following way:
  - the original formation: A-B, C-D, E-F, G-H
  - the new formation: G-B, A-D, C-F, E-H
- The learning process is repeated: student B teaches student G the progression she just learned from student A and student G teaches B what he learned from student H.

**Step Five (5-15 minutes)**
- The rotating process is repeated until everyone has played several different progressions or until teacher decides that the activity is finished.
- Possible new formations are:
  - E-B, G-D, A-F, C-H
  - C-B, E-D, G-F, A-H
  - A-C, E-G, B-D, F-H
  - A-E, C-G, B-F, D-H
  - A-G, C-E, B-H, D-F
SKILL: HARMONIZATION

Lesson #5: Play What I Write

Functional keyboard skill objectives

Students will harmonize a melody and record the harmonized performance. Students will then practice and record a melody harmonized by the partner, producing a recording that matches the partner’s recorded harmonization for the same melody.

Cooperative skill objective

Students communicate through written and aural description a clear explanation of a building process so that partners are able to reproduce the model.

Cooperative learning method

*Play-What-I-Write* (based on *Kagan’s Build-What-I-Write*)

Cooperative method definition

The students build structures using materials provided by the teacher. Each student writes a narrative description of his model. The intent of the writing is to produce a clear explanation of the building process so that a second student is able to reproduce the model. The student covers the model with a paper bag or other covering so that it is hidden from the partner. The partner reads the description and attempts to build the same structure with a second set of materials. The students compare their models, discussing why they do or do not resemble each other and attempting to understand the cause of any discrepancies. The students are encouraged to determine ways to improve their written communication.

Cooperative method application

This lesson is based on the *Build-What-I-Write* method, but instead of building a physical object from written instructions the students perform and record an aural rendition of their partner’s written instruction (the harmonized melody). This activity requires the students to choose appropriate chords for harmonizing their melodies and to correctly notate those chords so that the partner is able to play the same accompaniment and create an accurate recording.

Time required

17-20 minutes

Group size

Pairs

Preparation

The teacher provides simple melodies (mostly stepwise, diatonic, limited to pentascales) without chordal accompaniment supplied. Each student receives a different melody.
Plan

Step One (5-6 minutes)
- The students practice their melodies individually, writing chord progressions to harmonize the melodies (the students use letter names or Roman numeral symbols to indicate the chords).
- The students record their harmonized melodies on their keyboards.

Step Two (5-6 minutes)
- The students exchange scores with their partners and perform each other’s harmonized melodies.
- When the students are comfortable performing their partner’s melody and harmonization, they record their performance.

Step Three (5-6 minutes)
- The teacher sets the controller so that student pairs hear each other’s recordings.
- The students listen to both recordings for Student A’s melody, using the performance rubric (Appendix B) to note any differences in chord pitches or chord inversions and discussing why those differences occur.
- The pair does the same for Student B’s melody.

Assessment

2 minutes

Functional skill: The students assess the chord choices during Step Three.

Cooperative skills: The teacher observes pair interaction and notes how well the students communicate verbally and in written form. The teacher helps the pair discuss ways to improve communication if needed.
## SKILL: HARMONIZATION

### Lesson #6: Numbered Chords Together

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will review chord choices for harmonizing melodies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objectives</td>
<td>Students will check for peer understanding of material. Students will work together to ensure understanding of every group member.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><em>Numbered Heads Together (Kagan)</em></td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>The students are divided into groups. Each student in the group is assigned a number, with the same numbers being used for each group. The teacher calls out a question, and the group members discuss possible answers. The students help their fellow group members to know and understand the answer. After a pre-determined period of time, the teacher calls one number—the student with that number in each group raises his hand. The teacher calls on one student with a raised hand to give an answer and determines if the answer is correct. If the answer is not correct, the teacher may opt to discuss with the class why the answer is not correct; or the teacher may call upon another student to give an answer. Points may be awarded for each correct answer. <em>Numbered Heads Together</em> is different from the traditional process of teacher asking the entire class a question and allowing everyone to answer. Typically, the more aggressive students provide most of the answers in that situation; the remaining students tune out or give up because they don’t have a chance to answer. Alternatively, the teacher might call on certain students to answer, but if the students don’t understand the material they will not know the correct answer and they might be frustrated. <em>Numbered Heads Together</em> requires all of the students to understand the answers (in case their numbers are called) in an effort to score points for their team. The students may be more apt to understand the material because their teammates will coach them to understand. Each person on the team is responsible for his partners’ learning. The students must be taught to not blame their team members if they give incorrect answers. If the team does not do well, the group must determine how they can work together in a more effective manner to improve learning and performance.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td><em>Numbered Heads Together</em> can be a fun way to learn chords for harmonization. Student teams work together to ensure that their</td>
</tr>
</tbody>
</table>


teammates understand chord choices for harmonization. The students are then allowed to demonstrate understanding of the harmonization process by offering answers and earning points for their team. The students are not just memorizing answers; they must know the reason that those answers were chosen.

**Time required** 15-20 minutes

**Group size** Groups of 3-4

**Preparation** The teacher chooses a short melody to be harmonized.

The teacher assigns the students to groups of 3-4 and sets the controller so that the students hear only the members of their group.

The teacher assigns a number to each student in each group (each group has the same numbers).

**Plan**

**Step One (4-5 minutes)**
- The teacher asks the students to supply chord choices for harmonizing the melody.

- The students in each group discuss and choose chords to harmonize for each measure. Each member of the group should understand the reason for choosing each chord.

**Step Two (1-2 minutes)**
- The teacher sets the controller so that all students hear each other.

- The teacher calls out a number; the students who were assigned that number are allowed to raise their hands.

- The teacher calls on the first student who raises a hand and asks that student to supply chords for harmonizing the first measure of the melody. The student names the chords that his group chose for that measure and explains why these chords were chosen.

**Step Three (2-3 minutes)**
- The students play the melody with the indicated chord harmonization supplied by the answering student.

- The teacher asks the class if the chord harmonization is appropriate for that measure.
• If the chord harmonization is appropriate, the team represented by that student earns a point; if not, the teacher calls on another student from a different team who has the same number. The teacher continues to ask for answers until appropriate chords are chosen, recording student responses (Figure 4).

• The class discusses why the chord(s) worked or didn’t work both for the melodic pitches of that individual measure and in the chord progression as a whole.

Step Four (6-7 minutes)
• The activity continues until all of the chords have been reviewed in this manner

• The class performs the harmonized melody.

Assessment

2-3 minutes

**Functional skill:** During Step Three, the class assesses appropriate chord choice by each group.

**Cooperative skills:** The students discuss with the teacher how well they worked together as a group to ensure understanding by all team members.
Directions: Call a number between 1 and 4. Choose one student with that number who raises a hand. If the student names a correct chord, mark a √. If the student does not name a correct chord, mark an X.

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Measure #1</th>
<th>Measure #2</th>
<th>Measure #3</th>
<th>Measure #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1 (name)</td>
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<tr>
<td>Student 2 (name)</td>
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<tr>
<td>Student 3 (name)</td>
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<tr>
<td>Student 4 (name)</td>
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<tr>
<td>Group 2</td>
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<tr>
<td>Student 1 (name)</td>
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<td>Student 2 (name)</td>
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<tr>
<td>Student 3 (name)</td>
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<tr>
<td>Student 4 (name)</td>
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<tr>
<td>Group 3</td>
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<tr>
<td>Student 1 (name)</td>
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<tr>
<td>Student 2 (name)</td>
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<tr>
<td>Student 3 (name)</td>
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<tr>
<td>Student 4 (name)</td>
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</tbody>
</table>

Figure 4. Sample assessment tool for Numbered Chords Together.
**SKILL: HARMONIZATION**

**Lesson #7: Let’s Make a Chord**

| **Functional keyboard skill objective** | Students will choose appropriate chords to harmonize a melody chosen by the teacher and will perform the harmonized melody on the keyboard. |
| **Cooperative skill objective** | Students will cooperate in an effort to group themselves so that they form the answer to the teacher’s question. |
| **Cooperative learning method** | Formation (Kagan) |
| **Cooperative method definition** | Students use their bodies to form answers to the teacher’s question (for example, students might hold hands to form the shape of a triangle or a letter of the alphabet). This method gets students out of their seats and actively moving about the room. It is a useful method for those students who prefer the kinesthetic style of learning. |
| **Cooperative method application** | This activity allows for students to “feel” with their bodies the placement of pitches on the staff while they are also singing those pitches. Movement is paired with sound, which can solidify understanding of pitch relationships and chord progressions. The students work as a team to form a chord, so they are made aware of the relationship of their individual pitch in relation to the chord and to the progression. Students then apply the learning to their individual harmonization attempt on their keyboards. |
| **Time required** | 12-15 minutes |
| **Group size** | Groups of 3 |
| **Preparation** | The teacher chooses a short melody that can be harmonized with one chord per measure and performs the melody for the students. The teacher makes a large staff on the floor using tape, paper, etc. The staff spaces should be wide enough that adults can comfortably stand on the lines and spaces. |
| **Plan** | Step One (3 minutes) |
|  | • Each group is assigned one measure of the melody and is instructed to determine a chord that harmonizes that measure. The students are not allowed to play the chords on the keyboard—they should rely on analysis and/or audiation |
• The students in each group discuss why particular chords are chosen and make sure each team member understands the choice of their particular chord.

• The students physically form the chords by placing themselves on the appropriate line or space of the floor staff.

Step Two (4-5 minutes)
• The teacher provides an aural framework for the piece by playing a brief primary chord progression in the key of the melody.

• While the teacher plays the melody for each measure, the students sing the chord harmonization with each student singing his pitch on a neutral syllable such as “la.” The teacher asks one member from each group why they chose the chord they did for their particular measure.

• The class discusses the appropriateness of the chord choices for each individual measure and in the context of the entire progression. Students should give suggestions for alternate chords or different chord inversions, especially if those chords or inversions contribute to smoother voice leading. The teacher records student responses on the assessment tool (Figure 5).

Step Three (1-2 minutes)
• The teacher continues to play the remainder of the melody while each group sings the harmonization of their assigned measure.

Step Four (2-3 minutes)
• The teacher writes the final progression on a classroom white board.

• The students individually play the melody and harmonization on their keyboards, reading the progression from the board.

Assessment

2 minutes

Functional skill: Class evaluation of appropriate chord choices takes place during Step Two.
Cooperative skills: Each group evaluates how well they worked together to form chords. Did each person in the group understand why a particular chord was chosen? Suggestions for improved future communication are offered by team members and the teacher.

Variation

If the student number is small, groups might represent more than one chord. Students in the groups will need to change position and sing different pitches as they move on the staff to represent a new chord. Students should move to the new chord in such a way as to demonstrate smooth voice leading between chords.

Mark a √ in the box for each measure completed correctly. Mark an X in the box if the students are unable to sing correct chord pitches.

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Measure #1</th>
<th>Measure #2</th>
<th>Measure #3</th>
<th>Measure #4</th>
<th>Measure #5</th>
<th>Measure #6</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Student name)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2</th>
<th>Measure #1</th>
<th>Measure #2</th>
<th>Measure #3</th>
<th>Measure #4</th>
<th>Measure #5</th>
<th>Measure #6</th>
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<tbody>
<tr>
<td>(Student name)</td>
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</table>

<table>
<thead>
<tr>
<th>Group 3</th>
<th>Measure #1</th>
<th>Measure #2</th>
<th>Measure #3</th>
<th>Measure #4</th>
<th>Measure #5</th>
<th>Measure #6</th>
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</thead>
<tbody>
<tr>
<td>(Student name)</td>
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</tbody>
</table>

*Figure 5. Sample assessment tool for* Let’s Make a Chord.
Lesson #8: Flash Chords

**Functional keyboard skill objective**
Students will practice naming chords in various keys and will play those chords on the keyboard.

**Cooperative skill objectives**
Students will affirm their partners’ answers or coach the partners to learn the correct answer.

**Cooperative learning method**
*Inside/Outside Circle (Kagan)*

**Cooperative method definition**
The students form two circles, with one circle inside the other so that the students are facing each other as partners. All students possess a card with a question on one side and the answer on the other side. One student in each pair shows the question side of his card to his partner and asks for the answer. The questioning students affirm the correct answers or encourage their partners to learn the correct answer if they answer incorrectly. The students are taught to not make fun of their classmates for wrong answers. The teacher models positive coaching of the correct response from the students.

At the teacher’s direction, the students reverse roles using the second card; the coaching student now becomes the answering student. When the pairs have completed the question and answer process, the teacher directs the partners to exchange cards so that the students possess different cards than they did when the activity began. One circle of students rotates until the students are paired with new partners. The question and answer process is repeated with the students coaching their new partners on the material learned from the previous partners. While working in this manner, the students are instructed to work quietly so as not to disturb their fellow classmates.

**Cooperative method application**
The *Inside-Outside Circle* method is a fast-paced way for students to review chord choices and work with a variety of classmates. In this lesson, keeping track of points adds an element of challenge that might motivate the students, especially since the competition focuses on the individuals—each student attempts to improve his score as he strives for high achievement.

**Time required**
12-15 minutes

**Group size**
Pairs
Preparation

The teacher creates cards with one Roman numeral chord symbol on one side (I, iv, V7, I 6/3, etc.) and the pitches that make up that chord on the other side (the notes should be listed in root position, even though some chord symbols indicate an inversion). The teacher provides examples for multiple keys. Each student receives one card.

Both students in each pair should have a headphone plugged into the same keyboard. Students will switch headphones as needed.

Plan

Step One (3 minutes)

- The teacher divides the class into two groups: one group sits at the keyboards and the other group stands in front of the students at the keyboards so that a standing student (A) and a sitting student (B) are paired.

- Student A shows his card to Student B. The cards should be turned so that the Roman numeral faces Student B and the chord pitches face Student A.

- Student A calls out the key of the example on his card. Student B names the pitches that make up the chord listed on the front of the card.

- Student A affirms the correct answers. If the answers are not correct, Student A coaches his partner to name the correct pitches.

- Student B then plays the chord in the correct inversion. Points are awarded for correctly naming the pitches and for correctly playing the chord inversion (students keep track of their own points—see sample assessment tool, Figure 6)

Step Two (2-3 minutes)

- Partners reverse roles and repeat Step One using Student B’s card.

Step Three (5-7 minutes)

- The students exchange cards. The students who are standing move one keyboard to the right, while the seated students stay where they are. The new partners repeat Steps One and Two, using the cards they have exchanged with their previous partners. Play continues until the original partners are back together or until the teacher decides that the activity is ended.
Assessment 2 minutes

Functional skill: Using the assessment tool (Figure 6), students keep track of how many points they receive for naming and playing correct chords and report that score to the teacher. The goal is to improve their individual scores the next time they play.

Cooperative skills: The class discusses how well they encouraged each other in discovering the correct answers.

Directions: Mark a √ if the chord is named or played correctly. Mark an X if the chord is not named or played correctly.

<table>
<thead>
<tr>
<th>(Student name)</th>
<th>Chord #1</th>
<th>Chord #2</th>
<th>Chord #3</th>
<th>Chord #4</th>
<th>Chord #5</th>
<th>Chord #6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Named the correct pitches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Played the correct inversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 6. Sample assessment tool for Flash Chords.
Section B

TRANSPOSITION LESSON PLANS
### SKILL: TRANSPOSITION

**Lesson #1: Transposition Teams**  
Adapted from a lesson plan by Alejandro Cremaschi (2000)

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will perform an excerpt with a transposing melody and a non-transposing accompaniment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objectives</td>
<td>Students coach each other to learn material and then compete to perform the material and earn points for the team.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td>Based on <em>Student Teams-Achievement Divisions</em> (<em>Slavin, DeVries, and Edwards</em>)</td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>Heterogeneous groups of 4-5 students work on the material with the goal that each student in the group improves his performance (based upon a previous score). The students are tested individually, but group scores are given based on group improvement over previous scores. Because the group as a whole receives a score based upon each member’s improvement, the students help each other to improve so that each person’s score can increase.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>This lesson is based on the <em>STAD</em> format in that students are grouped heterogeneously and they compete in a tournament. The students in this particular lesson, however, are not tested individually, but instead they compete as a group. The rationale for this change in format is that it allows for a greater number of students to be actively engaged in the performance rather than having only one student in the group compete against another student. Individual performances do affect group scores, so students will likely help each other improve so that the group score increases. Because students are helping each other succeed, the students will most likely feel a sense of camaraderie rather than competition.</td>
</tr>
<tr>
<td>Time required</td>
<td>13-17 minutes per tournament</td>
</tr>
<tr>
<td>Group size</td>
<td>Groups of 3</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher chooses a short piece or excerpt appropriate to the skill level of the students. The piece should consist of a drone or simple accompaniment in a non-transposing key and a melody that requires transposition (Figure 7). The teacher assigns the same piece to all of the students. The teacher assigns the students to groups of 3 and sets the controller</td>
</tr>
</tbody>
</table>
so that the students hear only the members of their group. The groups should consist of a heterogeneous mixing of students as much as possible with regard to skill level, ethnicity, gender, and age.

**Plan**

**Step One (5-8 minutes)**
- The teacher provides directions for students to follow during the individual and small group practice time:
  - determine the range of the melody
  - scan the piece for difficult intervals and be able to name them
  - name or sing (with solfège syllables) the intervals before playing the pitches
  - tap finger numbers while singing the pitches
  - perform the piece individually for members of the group and receive comments for improvement

- Each group practices the melody, assisting fellow group members as needed.

**Step Two (5-6 minutes)**
- The teacher changes the controller setting so that all students hear each other.

- Two groups compete by performing the piece for the rest of the class. All of the students in each group perform together; one student sets the tempo by counting one measure out loud.

- A third group judges the accuracy of each competing group using the performance rubric (Appendix B).

**Assessment** 3 minutes

**Functional skill:** Assessment happens in Step Two. The teacher uses the completed performance rubrics to assign a score to each team.

**Cooperative skills:** The teams discuss how well they helped each other to prepare for the competition, focusing on improving cooperative work as needed.

**Variation**

The competition might be repeated several more times so that each group competes with the other groups. Thus, a small “tournament” consisting of various rounds would take place. The winners of these rounds could compete in a
“play-off” to determine the overall winning team. As always, fun in learning should be the objective in these competitions!

Figure 7. Sample transposition example.

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SKILL: TRANSPOSITION

Lesson #2: Transposition Round and Round

**Functional keyboard skill objective**
Students will transpose melodies up or down a whole or half step.

**Cooperative skill objectives**
Students will affirm their partners’ answers or will coach the partners to learn the correct answer.

**Cooperative learning method**
*Inside-Out Circle (Kagan)*

**Cooperative method definition**
The students form two circles, with one circle inside the other so that the students are facing each other as partners. All students possess a card with a question on one side and the answer on the other side. One student in each pair shows the question side of his card to his partner and asks for the answer. The questioning students affirm the correct answers or encourage their partners to learn the correct answer if they answer incorrectly. The students are taught to not make fun of their classmates for wrong answers. The teacher models positive coaching of the correct response from the students.

At the teacher’s direction, the students reverse roles using the second card; the coaching student now becomes the answering student. When the pairs have completed the question and answer process, the teacher directs the partners to exchange cards so that the students possess different cards than they did when the activity began. One circle of students rotates until the students are paired with new partners. The question and answer process is repeated with the students coaching their new partners on the material learned from the previous partners. While working in this manner, the students are instructed to work quietly so as not to disturb their fellow classmates.

**Cooperative method application**
The *Inside-Out Circle* method is a good way for students to practice transposition a number of times as they work with a variety of classmates. In this lesson the students are not really working in a circle (as most keyboard labs are not configured in a circle), but the concept of systematically rotating through the group of students should be maintained.

**Time required**
18-20 minutes (more time needed if the activity revolves through all of the students)
Group size: Pairs

Preparation:
The teacher creates cards consisting of a melody on one side, and the same melody transposed up or down a whole or half step on the other side. The teacher gives each student a card with a different melody.

The teacher divides the class into two groups: one group sits at the keyboards and the other group stands in front of the students at the keyboards so that a standing student (A) and a sitting student (B) are paired and facing each other. Both students in each pair should have a headphone plugged into the same keyboard. Students will switch headphones as needed.

Plan:
Step One (4-5 minutes)
- Student B sits at the keyboard while student A stands opposite of student B.
- Student A shows the melody side of his card to student B.
- Student B names the key and plays the melody one time as written.
- Student A then names the new key (from the back of the card).
- Student B names the sharps or flats in the key signature and plays the melody in the new key with student A coaching as necessary.
- Using the performance rubric (Appendix B), the coaching student assesses his partner’s performance.

Step Two (4 minutes)
- The students reverse roles, with student A sitting at keyboard and playing the melody written on the card held by student B.
- Student B completes his transposition and is assessed by Student A.

Step Three (8-9 minutes)
- The students exchange cards. The students who are standing move one keyboard to the right, while the seated students stay where they are. The new partners repeat Steps One and Two, using the cards they have exchanged with their previous partners.
<table>
<thead>
<tr>
<th><strong>Assessment</strong></th>
<th>2 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Functional skill:</strong></td>
<td>In Steps One and Two, the students assess each other’s performances using the performance rubric.</td>
</tr>
<tr>
<td><strong>Cooperative skills:</strong></td>
<td>The teacher guides class discussion regarding how well the students gave and received help, focusing on improving those skills.</td>
</tr>
</tbody>
</table>

| **Variation** | This activity might be lengthened by allowing the rotations to continue until all of the students have partnered with each other. This would allow each student to experience working with a variety of coaches. |
SKILL: TRANSPOSITION

Lesson #3: Flash Me a Melody

**Functional keyboard skill objective**
Students will transpose a melody into the key chosen by their partners.

**Cooperative skill objective**
Students use flashcards to test other's knowledge of factual material, coaching for correct answers and affirming incorrect attempts.

**Cooperative learning method**
*Flashcards (Kagan)*

**Cooperative method definition**
Students test each other on material using cards with a question on one side and the answer on the other side. Students coach their partners as necessary until the partners can readily give the correct answers. This method is helpful for reviewing material that is learned by rote.

**Cooperative method application**
Using the *Flashcards* method for transposition practice provides opportunity for the students to perform a melody in many different keys. Because students are working in pairs, they can coach each other on pitch and rhythm accuracy as well as finger placement and tempo consistency. If students struggle with consistent performance in various keys, this approach might be a more encouraging method for those students.

**Time required**
13-20 minutes

**Group size**
Pairs

**Preparation**
The teacher makes sets of cards with different options for transposing up or down a whole or half step. Students are grouped in pairs and each pair receives a melody and a set of cards.

The teacher sets the controller so that partners hear each other.

**Plan**
Step One (2-3 minutes)
- The pairs sight-read the melody together.

- Student A chooses a card with an instruction for Student B to transpose the melody up or down a whole or half step from the original key.
- Student A coaches and encourages Student B to perform the correct pitches and correct rhythms.

Step Two (2-3 minutes)
- The students reverse roles and repeat Step One, with Student B choosing a different card for Student A.

Step Three (6-10 minutes)
- The students continue taking turns until all of the cards have been used. Using the performance rubric (Appendix B), students assess their partners’ performances.

**Assessment**

3-4 minutes

**Functional skill:** In Step Three, the students assess each other’s performances.

**Cooperative skills:** The teacher guides class discussion regarding how well the students gave and received help, focusing on improving those skills.
**SKILL: TRANSPOSITION**

### Lesson #4: Concert pitch, please!

**Functional keyboard skill objective**

Students will accurately transpose parts of an ensemble from the written transposing key to the concert key.

**Cooperative skill objective**

Students learn information within one group and then communicate that information to a second group so that each student is able to demonstrate understanding.

**Cooperative learning method**

Based on *Jigsaw I* (Aronson)

**Cooperative method definition**

Students in each group are assigned different readings pertaining to one topic. Students are then re-grouped to work with other students having the same topic (jigsaw groups); the goal is to read, discuss, and study together to become “experts” on that topic. After working for a pre-determined time, the students return to their original groups and teach their team members the information they have learned while in their jigsaw groups. The students take individual tests on the collective material. In this method, team members rely on each other to accurately learn and teach the information.

**Cooperative method application**

In this lesson, the *Jigsaw* format is modified. The students don’t learn and teach new material to their peers; instead they learn the new material and then perform that material as part of an ensemble with their original group members. Each student is not graded individually but as part of the ensemble. Each student is demonstrating mastery of an integral part of the music, without which the composition would not be complete.

**Time required**

10-12 minutes

**Group size**

Groups of 3

**Preparation**

The teacher chooses ensemble examples that include one or more transposing parts (Figure 8). The teacher places the students into groups of three and assigns a transposing part and one non-transposing part to each student in the group.

**Plan**

Step One (4-5 minutes)

- All students with the same transposing part join together to form a jigsaw group.
- The teacher sets the controller so that jigsaw members hear each other.

- The students practice their parts with their jigsaw group members, helping each other as needed.

**Step Two (3-4 minutes)**
- The students re-organize into their original groups.

- The teacher changes the controller setting so that the group members hear each other.

- The students perform as an ensemble. One student sets the tempo and keeps the group together, counting out loud as necessary. Using the performance rubric (Appendix B), the teacher assesses the group performance.

**Assessment**

3 minutes

*Functional skill:* In Step Two, the teacher assesses the group performance.

*Cooperative skills:* Students discuss with the jigsaw groups how well they learned and were able to perform their individual part with the original group.
Figure 8. Sample ensemble transposition excerpt.

**SKILL: TRANSPOSITION**

### Lesson #5: Partner Transposition

| **Functional keyboard skill objective** | Students will transpose a familiar melody with harmonization into a key chosen by the teacher. |
| **Cooperative skill objective** | The students will share ideas and reach a consensus of answers. Pairs of students will share answers with another pair and will make changes to the answers as needed. |
| **Cooperative learning method** | Think-Pair-Square (Kagan) |
| **Cooperative method definition** | The teacher assigns a task and the students work individually to devise an answer. The students are then paired with partners who share their answers and discuss any discrepancies. The pairs work to reach a consensus of answers, seeking to disagree politely, affirming partners’ answers, and exhibiting patience as they work together. After a pre-determined period of time, each pair combines with another pair to share answers; more discussion occurs as the group compares answers. This grouping ensures that more students are actively participating in the sharing process, since groups of four are sharing simultaneously rather than the entire class evaluating one answer at a time. |
| **Cooperative method application** | Think-Pair-Square is an effective method to use when putting two musical elements together such as melody and harmonization. Partners will encourage each other to perform accurately as they play together—students will be forced to maintain tempo and they will attempt to match the parts played by the other partner. Because the students are performing with only one other class mate, the pressure is not as great as if they were performing with a group. It is also easier for the partner to detect performance issues since there are only two students playing at a time. |
| **Time required** | 15-17 minutes |
| **Group size** | Pairs, groups of four |
| **Preparation** | The students should be familiar with a repertoire of short melodies with primary triad harmonization (see Appendix A). The teacher groups the students in pairs. Student pairs choose a melody to practice. |
Plan

Step One (3-4 minutes)
- The students work individually to practice the chosen melody and harmonization.

Step Two (5-6 minutes)
- The teacher sets the controller so that partners hear each other.
- Each student pair plays both the melody and harmonization one time.
- Using the same harmonization, the pairs transpose the melody into a key chosen by the teacher.
- Partners coach each other to perform accurate melodic pitches, chords, and rhythm while maintaining a constant tempo.

Step Three (5 minutes)
- Each pair joins another pair.
- The teacher changes the controller settings so that two pairs hear each other.
- The pairs take turns performing the harmonized melodies.
- Using the performance rubric (Appendix B), the pairs assess each other’s performances.

Assessment

2 minutes

Functional skill: In Step Three, the pairs assess each other’s performances.

Cooperative skills: The students discuss with the teacher how well they were able to share ideas, make changes to answers, and work in a positive manner.
Section C

IMPROVISATION LESSON PLANS
### Lesson #1: Guided Group Improvisation
Adapted from a lesson plan by Alejandro Cremaschi (2000)

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Student groups will create, practice and perform an ensemble improvisation in which each group member performs a different part of the ensemble.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Students will create a learning experience within parameters designed by the teacher. The experience culminates in a final presentation in which each student contributes equally.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td>Learning Together (Johnson &amp; Johnson)</td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>In the Learning Together format, group members work together to produce one worksheet or project and are graded as a group based on that final product. Each person in the group must contribute equally to the final presentation. The students are encouraged to create their learning experience within parameters set by the teacher. These guidelines set by the teacher help to keep the students unified within a framework in which all group members are able to succeed. Without parameters, the students might struggle to keep the project simple enough for each person in the group to succeed, while at the same time creating enough challenge for the more advanced students.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>Using the Learning Together model, the students create a large aspect of their learning experience through the improvisation they design as a group. The students are guided by the parameters on the cards set by the teacher. Working as a group on an improvisation is often helpful for those students who may struggle with this skill, especially if the group members work together in a positive manner. The students who aren’t as skilled in improvisation will most likely learn techniques from fellow group members as they work through the various parts of the improvisation together. The collection of improvisation ideas for each student should grow through interaction with classmates. Also, when all group members are performing their individual parts together, the ensemble may produce a more pleasing performance experience than if one individual is struggling to improvise in a solo performance.</td>
</tr>
<tr>
<td>Time required</td>
<td>21-22 minutes</td>
</tr>
<tr>
<td>Group size</td>
<td>Groups of 3 or 4</td>
</tr>
</tbody>
</table>
Preparation

The teacher creates sets of cards with various choices for a specific musical element such as key, meter, harmonic progression, length of piece, rhythmic or melodic motives, and characteristic descriptors such as “blissful,” “pensive,” “serene,” “adventurous.” (One set of cards contains only key choices; another set contains meter choices, another set contains the descriptor cards, etc.).

The teacher creates an assessment tool for the listening students to use (Figure 9).

The teacher assigns the students to groups of 3 or 4 and sets the controller so that the students hear only the members of their group.

Plan

Step One (2 minutes)
- One student in the group is the moderator, guiding group discussion and keeping the group on task.
- Each group randomly selects one card from each category so that each group has one key card, one meter card, one harmonic progression card, etc.
- The students designate the part that each group member will perform: the bass line, harmony, melody, and countermelody (if the group consists of four members).

Step Two (10 minutes)
- The group members discuss how to make the improvisation fit within the parameters on their cards.
- Students choose appropriate instrumental sounds from the various options on the keyboard.
- The moderator guides the group in putting together the various layers of the improvisation beginning with the harmony, then adding the bass line, melody, and countermelody.
- The group plays the improvisation, repeating or revising it as needed, until members of the group are comfortable with it.

Step Three (7-8 minutes)
- Using the controller, the teacher groups the students so that two groups hear each other.
- The performing group shows their cards to the
listening group before performing for that group.

- Using the assessment tool (Figure 9), the listening group evaluates how well the performing group improvised within the parameters on their cards, discussing with them aspects of the performance that were positive and suggesting ways to improve the performance.

- The groups reverse roles and repeat Step Three.

**Assessment**

2 minutes

**Functional skill:** During Step three, the students evaluate their classmates’ improvisation skills.

**Cooperative skills:** Each group discusses how well they worked together to create an improvisation within the parameters designated by the teacher and how well each group member contributed to the final performance.

<table>
<thead>
<tr>
<th>Your group name/number</th>
<th>Performing group name/number</th>
</tr>
</thead>
</table>

**Directions:** Read the parameter cards for the performing team. As a group, rate the performance based on adherence to those parameters. A score of 3 means that the group fully adhered to the guidelines for that element, a score of 2 means that the group somewhat adhered to the guidelines, and a score of 1 means that the group did not adhere to the guidelines.

- key | 3 2 1
- meter | 3 2 1
- harmonic progression | 3 2 1
- rhythmic or melodic motives | 3 2 1
- length of piece | 3 2 1
- characteristic descriptors | 3 2 1

*Figure 9. Sample rating scale for Guided Group Improvisation.*
SKILL: IMPROVISATION

Lesson #2: Improvising and Polishing Variations as a Group
Adapted from a lesson plan by Alejandro Cremaschi (2000)

**Functional keyboard skill objective**
Student groups will create and perform improvised variations of a theme by altering melodic, rhythmic, or harmonic elements of the theme.

**Cooperative skill objective**
Student groups construct and relay knowledge that leads to whole-class cooperation in attaining a goal.

**Cooperative learning method**
*Co-op, Co-op (Kagan)*

**Cooperative method definition**
The *Co-op, Co-op* method incorporates aspects from other cooperative learning methods. Similar to *Group-Investigation*, the students work together to produce information or new learning that benefits the class as a whole, and each group member is responsible for a different part of the project. The students work in a manner similar to the *Jigsaw* method in that each group focuses on a different element of the topic and then presents that information to the entire class so that all students receive all of the information. Like the *STAD* method, groups should be heterogeneous in nature in order to be a smaller representation of the classroom environment. The assumption in using groups of this nature is that it provides a broader perspective of ideas, and it is a situation in which students might have to put forth more effort to cooperate, since they are not necessarily in a group with like-minded friends. Unlike some methods that emphasize individual testing, individual grades, and group competition, *Co-op, Co-op* focuses on inter-group cooperation that leads to whole class understanding and attainment of a learning goal.

**Cooperative method application**
The *Co-op, Co-op* method is an effective method to use for practicing improvisation and variation techniques because the students learn from each other and are coached by fellow group members who might be more adept at these skills. *Co-op, Co-op* assumes that the entire class will benefit from the information learned in the groups when these groups share with the larger body of students the aspects they discovered about improvising and creating variations. Each student benefits from the broader input and ideas of classmates instead of relying on his/her own limited knowledge or skill.

**Time required**
30-35 minutes

**Group size**
Groups of 3 to 5
**Preparation**

Students should be familiar with variation techniques pertaining to melodic, harmonic, and rhythmic variation. The teacher supplies a list of variation techniques and demonstrates these on her keyboard.

The teacher designs a rating scale for the students to use in evaluating each group’s performance (Figure 10).

The teacher assigns the students to groups of 3 to 5 and sets the controller so that the students hear only the members of their group.

**Plan**

**Step One (4-5 minutes)**
- The teacher assigns a different harmonized theme to each group (the themes must be simple enough to allow for many types of variations).
- Each group learns and practices together their assigned theme.
- The group members discuss and choose variation techniques for that theme, with one variation technique assigned to each group member.

**Step Two (5 minutes)**
- The teacher sets the controller so that individual students may work alone.
- The group members individually practice their own variations.
- Each student improvises and records a variation on his keyboard.

**Step Three (4-5 minutes)**
- Using the controller, the teacher splits each group into smaller groups of 2-3 students.
- The group members play their recordings for each other, suggesting changes as needed.

**Step Four (5 minutes)**
- The teacher changes the controller setting so that individual students may work alone again.
- Group members work individually to incorporate suggestions from fellow group members, and they record their revised parts.
Step Five (2-3 minutes)
- The teacher changes the controller setting so that students are linked with their original groups of 3-5.
- The group listens to all of the variation recordings and chooses the order in which to play them.

Step Six (8-10 minutes)
- Using the controller, the teacher combines all of the students in the class.
- Each group plays their entire set of recorded variations for the rest of the class.
- The listening students evaluate the performances using the assessment tool (Figure 10).

Assessment 2 minutes

Functional skill: In Step Six, the listening students use the assessment tool to rate the performance.

Cooperative skills: The class discusses how each group’s contribution led to all students’ understanding of variations and improvisation.

Variation  To shorten time in class, this activity could be divided into two sections between steps 3 and 4 and completed during two class periods.
Directions: Rate each variation.

<table>
<thead>
<tr>
<th>Your group name/number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing group name/number</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variation #1</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retains enough of the original melody to be recognizable but varied enough to be considered a variation</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Is played with consistent tempo</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Contains the correct number of beats in each measure</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Has a harmonic framework that supports the melody.</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variation #2</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retains enough of the original melody to be recognizable but varied enough to be considered a variation</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Is played with consistent tempo</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Contains the correct number of beats in each measure</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Has a harmonic framework that supports the melody.</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

(Add more boxes as needed for subsequent group members)

*Figure 10. Sample rating scale for Improvising and Polishing Variations as a Group.*
### SKILL: IMPROVISATION

**Lesson #3: Improvisation Investigation**  
Adapted from a lesson plan by Christopher Fisher (2006)

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will research and present a particular style of piano performance, which includes an improvisation based on that style.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Student groups construct and relay knowledge that leads to whole-class cooperation in attaining a goal.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><strong>Co-op, Co-op</strong> (<em>Kagan</em>)</td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>The <strong>Co-op, Co-op</strong> method incorporates aspects from other cooperative learning methods. Similar to <strong>Group-Investigation</strong>, the students work together to produce information or new learning that benefits the class as a whole, and each group member is responsible for a different part of the project. The students work in a manner similar to the <strong>Jigsaw</strong> method in that each group focuses on a different element of the topic and then presents that information to the entire class so that all students receive all of the information. Like the <strong>STAD</strong> method, groups should be heterogeneous in nature in order to be a smaller representation of the classroom environment. The assumption in using groups of this nature is that it provides a broader perspective of ideas, and it is a situation in which students might have to put forth more effort to cooperate as they are not necessarily in a group with like-minded friends. Unlike some methods that emphasize individual testing, individual grades, and group competition, <strong>Co-op, Co-op</strong> focuses on inter-group cooperation that leads to whole class understanding and attainment of a learning goal.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>Using the <strong>Co-op, Co-op</strong> format to research a topic is an effective method for generating student excitement and cooperation, especially in this lesson where the students choose their topics for study. Students will most likely put more effort into the project if they have chosen the topic out of personal interest, and a sense of mutual excitement might be experienced by the group. Cooperation happens as each student completes his part of the assignment and brings his perspective to the group project. Because each student is responsible for a specific piece of the final presentation, he is held accountable by his fellow group members and is encouraged to do the best job he can. This method of group investigation seems to create more camaraderie and a sense of purpose than the traditional method of individual presentations (Fisher, 2006). <strong>Co-op, Co-op</strong> assumes that the entire class will benefit from the</td>
</tr>
</tbody>
</table>
information learned in the groups when these groups share with the larger body of students.

**Time required**
Various steps over the course of several weeks

**Group size**
Groups of 3 or 4, depending upon topic choice

**Preparation**
The teacher presents a brief overview of one popular piano style (for example jazz, blues, rock, folk, pop, and country). The students are instructed to prepare a 15-minute group presentation of one style of piano performance that falls within the broader stylistic category (for instance, within the broad category of jazz are sub-categories such as rag, boogie, swing, bebop, fusion, etc.). The presentation must include historical information about the style, performance characteristics of that style, and an improvisation from each student demonstrating that particular style.

The students form groups of 3 to 4 based upon their choice of style to explore.

The teacher creates an assessment tool for evaluating the presentations (Figure 11) and distributes this to the students.

**Plan**

**Step One**
- The students prepare their projects outside of class.
- As part of that preparation, the groups choose a rhythmic or melodic motive that represents their style and they discuss ways to use that motive while improvising.
- The groups divide the tasks of the project between members (one person is responsible for handout preparation, one person finds audio/visual resources, etc.).

**Step Two (15 minutes)**
- During the class period, the groups present their projects.

**Assessment**
3-5 minutes

*Functional skill:* Using the assessment tool (Figure 11), the teacher evaluates the presentations and assigns a grade to
Cooperative skills: At the conclusion of each presentation the entire class discusses how beneficial the information was to the class understanding of that particular performance style. The students evaluate the strengths of each group and offer suggestions for improving cooperative work for future presentations.

Student Names:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Rate each category. A score of 3 means that the group fully adhered to the guidelines for that element, a score of 2 means that the group somewhat adhered to the guidelines, and a score of 1 means that the group did not adhere to the guidelines.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students list and explain at least 3 salient features of the style</td>
<td>3 2 1</td>
</tr>
<tr>
<td>Presentation of the information is clear and organized</td>
<td>3 2 1</td>
</tr>
<tr>
<td>Handouts and audio/visual resources are relevant to the presentation</td>
<td>3 2 1</td>
</tr>
<tr>
<td>Each student demonstrates the ability to improvise on a melodic or rhythmic motive within a particular performance style</td>
<td>3 2 1</td>
</tr>
<tr>
<td>All students participate equally in the final presentation</td>
<td>3 2 1</td>
</tr>
<tr>
<td>The presentation stays within the allotted time frame</td>
<td>3 2 1</td>
</tr>
</tbody>
</table>

Comments:  

*Figure 11. Sample assessment tool for Improvisation Investigation.*
**SKILL: IMPROVISATION**

**Lesson #4: Round Robin Improv**
Based on examples from *Piano for the Developing Musician, 6th Ed.* by Hilley and Olsen (2006)

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will improvise a two-measure melodic “answer” in response to a two-measure melodic “question” using the same pitch set and rhythmic motive.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Students will take turns offering ideas for group evaluation.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><em>Round Robin (Kagan)</em></td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>All of the students in a group take turns giving an answer to the question. Each person is required to contribute something to the discussion; this prevents students from being non-participants or allowing one student to dominate the discussion.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>In this lesson, the students take turns contributing musical answers in <em>Round Robin</em> fashion alternating with the leader. Being part of a group where each student is required to perform an “answer” adds a degree of challenge that might not otherwise occur if only one other person (the teacher or a fellow student) were doing this activity as a partner with the student. Because the pulse continues before, during, and after each student response, subsequent students must keep track of the meter and the beats, and must anticipate their entrances in the performance so as not to interrupt the flow of the exercise.</td>
</tr>
<tr>
<td>Time required</td>
<td>7-9 minutes</td>
</tr>
<tr>
<td>Group size</td>
<td>Groups of 3 to 4</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher chooses an improvisation activity that includes two-measure melodic questions intended to be followed by two-measure melodic answers (Figure 12). The teacher assigns the students to groups of 3 or 4 and sets the controller so that the students hear only the members of their group. If possible, students are grouped so that one student in each group has more advanced keyboard skills and serves in a leadership role.</td>
</tr>
<tr>
<td>Plan</td>
<td>Step One (2 minutes)</td>
</tr>
<tr>
<td></td>
<td>• The group members discuss the key signature and the pitch set for the exercise.</td>
</tr>
</tbody>
</table>
The leader sets the tempo by counting out loud one measure of quarter notes before playing two measures of the accompaniment pattern.

Step Two (2-3 minutes)
- The leader plays the first question phrase; Student A answers the leader by improvising two measures of melody while the leader continues the accompaniment pattern.
- The example continues until all students have had at least one turn

Assessment 3-4 minutes

Functional skill: The teacher listens to one round of improvisation and uses the assessment tool (Figure 13) to evaluate each student’s skill.

Cooperative skills: The teacher monitors group discussion concerning how well each student in the group performed.
Figure 12. Sample improvisation activity.


Directions: Mark a √ for each element completed correctly. Mark an X if the student is unable to complete the element.

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Enters on beat 1</th>
<th>Maintains steady tempo</th>
<th>Stays within the pitch set</th>
<th>Uses similar rhythmic patterns</th>
<th>Improvises for the entire 2 measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Add more boxes as needed for subsequent groups)

*Figure 13. Sample assessment tool for Round Robin Improv.*
SKILL: IMPROVISATION

Lesson #5: Question-Answer
Adapted from a lesson plan by Alejandro Cremaschi (2000)

Functional keyboard skill objective
Students will improvise, practice, and perform musical questions and answers.

Cooperative skill objective
Students will create a learning experience within parameters designed by the teacher. The experience culminates in a final presentation in which each student contributes equally.

Cooperative learning method
Based on Learning Together (Johnson & Johnson)

Cooperative method definition
In the Learning Together format, group members work together to produce one worksheet or project and are graded as a group based on that final product. Each person in the group must contribute equally to the final presentation. The students are encouraged to create their learning experience within parameters set by the teacher. These guidelines set by the teacher help to keep the students unified within a framework in which all group members are able to succeed. Without parameters, the students might struggle to keep the project simple enough for each person in the group to succeed while at the same time creating enough challenge for the more advanced students.

Cooperative method application
The Learning Together approach for improvising musical “questions” and “answers” could be a good method to use for students who might be intimidated by doing this activity in a group (as in lesson 4). In this lesson students are working only with one partner, so there should be a lesser degree of stress for the shy students. The students are encouraged to be creative as they improvise, but they are required to remain within the guidelines set up by the teacher. Each student contributes equally to the final performance, and in doing so, demonstrates understanding of the material.

Time required
8-10 minutes (+ 4-6 minutes per pair for performing and assessment)

Group size
Pairs

Preparation
The teacher provides parameters for the improvisations such as key choice, harmonic progressions, meter, tempo, length of questions and answers, etc.

The teacher creates an assessment tool (Figure 14).
The teacher sets the controller so that students are paired in group mode and are able to record together.

**Plan**

**Step One (3 minutes)**
- Student A improvises a question phrase using the teacher’s parameters. Student A records his question on his keyboard.
- Student B improvises and records an answer immediately after Student A is finished.

**Step Two (2-3 minutes)**
- The pair replays the improvisation and decides to keep it or to record another improvisation. The students discuss ways to improve the performance if necessary.

**Step Three (3-4 minutes)**
- The students reverse roles: Student B improvises and records a question while Student A improvises and records an answer.
- After the pair has recorded two examples, they choose one of the recorded questions and answers to play for the class.

**Step Four (2-3 minutes per pair)**
- Using the controller, the teacher groups all of the students in the class so that they hear each other’s keyboards.
- Each pair plays the recorded question-answer for the class.
- The listening students work in pairs to evaluate the performance using the assessment tool (Figure 14).

**Assessment**

2-3 minutes per pair

**Functional skill:** During Step Four, the listening students assess the performance of each pair.

**Cooperative skills:** During Step Four, the class assesses the ability of the pair to follow instructions and to produce a performance of equal contribution.
Directions: The performing pair states the parameters for their improvisation. Rate the performance based on adherence to those parameters. A score of 3 means that the performing pair fully adhered to the guidelines for that element, a score of 2 means that the pair somewhat adhered to the guidelines, and a score of 1 means that the pair did not adhere to the guidelines.

<table>
<thead>
<tr>
<th>Performing pair names</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key choice</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Meter</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Tempo</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Harmonic progression</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Length of question</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Length of answer</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Figure 14. Sample rating scale for Question-Answer.*
Section D

SIGHT-READING LESSON PLANS
**SKILL: SIGHT-READING**

### Lesson #1: New Piece Prep

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Student groups will create a plan for overcoming sight-reading challenges as they sight-read a piece of music.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objectives</td>
<td>Students will take turns offering ideas for group evaluation. Students will create a learning experience within parameters designed by the teacher. The experience culminates in a final presentation in which each student contributes equally.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><em>Round Robin (Kagan)</em> and <em>Learning Together (Johnson &amp; Johnson)</em></td>
</tr>
</tbody>
</table>
| Cooperative method definition      | *Round Robin:*  
Each of the students in a group take turns giving an answer to the question. Each person is required to contribute something to the discussion; this prevents students from being non-participants or allowing one student to dominate the discussion.  

*Learning Together:*  
In the *Learning Together* format, group members work together to produce one worksheet or project and are graded as a group based on that final product. Each person in the group must contribute equally to the final presentation. The students are encouraged to create their learning experience within parameters set by the teacher. These guidelines set by the teacher help to keep the students unified within a framework in which all group members are able to succeed. Without parameters, the students might struggle to keep the project simple enough for each person in the group to succeed while at the same time creating enough challenge for the more advanced students. |
| Cooperative method application     | Combining the two cooperative methods of *Round Robin* and *Learning Together* is done deliberately in this lesson. The *Learning Together* method assumes that the students will contribute equally to the final project, in this case a group sight-reading attempt. Obviously, each student will need to demonstrate sight-reading understanding and skill that will be evident during the performance. During the initial compilation of ideas for the pre-reading part of the activity, some students might refrain from participation either because of shyness, laziness, or dominance by out-spoken members of the group. Using the *Round Robin* method requires that each student contribute at least one idea to the sight-reading plan, thereby ensuring that each student is participating in each step of the activity. |
**Time required** 15-17 minutes

**Group size** Groups of 3 to 4

**Preparation** The teacher chooses sight-reading material suitable for the skill level of the students. The teacher gives each group a chart to use for writing ideas prior to sight-reading (Figure 15).

The teacher creates an assessment tool to evaluate each group (Figure 16).

The teacher assigns the students to groups of 3 or 4.

**Plan**

**Step One (5-7 minutes)**
- The students work in their groups without headphones and without using the keyboards as they examine the score and identify items in the music that might present challenges when sight-reading (unusual fingerings, accompaniment patterns, rhythmic difficulties, changes in hand position, accidentals, key changes, meter changes, dynamic markings, etc.).

- Each student suggests at least one item for consideration.

- One student writes down each person’s contribution. The group devises a plan for overcoming these challenges. Each student marks in his music what he will do or think about to overcome each challenge.

**Step Two (5 minutes)**
- The teacher sets the controller so that the students hear only the members of their group.

- The teacher reads the sight-reading chart before listening to each group’s performance.

- One person in the group chooses a tempo that works for all of the group members. The metronome may be set on one of the keyboards.

- The tempo setter counts one measure before the group sight-reads the piece.

- The teacher listens to the performance and uses the assessment tool (Figure 16) to evaluate group sight-reading ability.
Assessment 5 minutes

Functional skill: The teacher looks at the sight-reading chart to note that each student contributed at least one idea. In Step Two, the teacher assesses group performance.

Cooperative skills: The groups evaluate their plans for sight-reading asking the following questions:
1. Did their plan help them to sight-read effectively?
2. Did they overlook important areas of the piece that might have helped them to sight-read more accurately?
3. How well did they work as a group in devising their plan?

Directions: Identify items that may present a challenge in sight-reading this piece of music—use specific measure numbers where appropriate. Mark each student’s name next to the idea that he/she supplied.

<p>| Key signature |  |
| Tempo markings |  |
| Meter changes |  |
| Dynamic markings |  |
| Accidentals |  |
| Fingering issues |  |
| Rhythmic difficulties |  |
| Melodic leaps |  |</p>
<table>
<thead>
<tr>
<th>Changes in hand position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accompaniment patterns</td>
</tr>
<tr>
<td>Articulation</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

*Figure 15. Sample pre-reading chart for New Piece Prep.*

<table>
<thead>
<tr>
<th>Student Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students watched the music most of the time (instead of looking at their hands)</td>
</tr>
<tr>
<td>All students used both hands most of the time</td>
</tr>
<tr>
<td>All students maintained tempo</td>
</tr>
<tr>
<td>All students played most pitches correctly</td>
</tr>
<tr>
<td>All students played most rhythms correctly</td>
</tr>
<tr>
<td>Each student supplied at least one idea for the sight-reading plan</td>
</tr>
</tbody>
</table>

*Figure 16. Sample teacher assessment tool for New Piece Prep.*
Lesson #2: Sight-reading Drills Pairs with Eye Check  
Adapted from a lesson plan by Christopher Fisher (2006)

**Functional keyboard skill objective**  
Students will keep their eyes on the score while sight-reading.

**Cooperative skill objective**  
After working individually for an allotted time, partners check each other’s work and coach each other as needed to learn the correct answers.

**Cooperative learning method**  
*Pairs Check (Kagan)*

**Cooperative method definition**  
Students work individually for an allotted period of time. Partners then check each others’ work and coach as needed. *Pairs Check* can be a non-threatening way to incorporate cooperative learning because the students work individually which encourages accountability but they check their answers with a partner, which promotes communication, checking for correct answers, and understanding of the material. Because the interaction is with one partner only, the level of stress may be lower than if the students were required to share answers with a larger group of students. Partners often demonstrate patience with each other, and if the partnership is not working properly, the teacher is able to step in and assist the students with their communication.

**Cooperative method application**  
Using the *Pairs Check* format for sight-reading can be an effective way to promote depth of understanding for the students’ sight-reading skills. Some students may not be as skilled in sight-reading as their peers and they may not identify as many potential challenge areas in a piece of music as do the more advanced students. When the students work together and check each other’s answers, they are able to offer additional sight-reading considerations, thereby providing their partner with more tools to use during the pre-reading and sight-reading portions of the activity. The students also are able to watch their partner’s eyes and monitor how often they look at their hands while sight-reading.

**Time required**  
20 minutes

**Group size**  
Pairs

**Preparation**  
The teacher assigns students to pairs.
The teacher chooses sight-reading examples and divides each example in half. Student pairs share an example: one partner is assigned the first half of the example and the other partner is assigned the second half of the example.

The teacher provides a pre-reading chart for the students (Figure 17).

**Plan**

**Step One (3 minutes)**
- The students individually examine their parts of the score and mark potential challenges for sight-reading (unusual fingerings, accompaniment patterns, rhythmic difficulties, changes in hand position, accidentals, key changes, meter changes, dynamic markings, etc.).
- The students devise solutions for overcoming those challenges and write those ideas on the pre-reading chart (Figure 17).

**Step Two (4 minutes)**
- The teacher changes the controller setting so that pairs hear each other.
- Student A explains to Student B the potential sight-reading challenges in his portion of the score and shares his plan to negotiate those areas.
- Student B adds any helpful comments or suggestions that Student A may have overlooked.
- The pair chooses a comfortable sight-reading tempo and counts several measures out loud in that tempo.
- Student A plays the exercise while Student B notes on the assessment tool (Figure 18) how many times Student A looks down at his hands; Student B also notes any specific issues with the performance and states reasons why those problems may have happened.

**Step Three (2 minutes)**
- Following the performance, Student A verbally assesses how well he followed his sight-reading plan.
- Using his written notes, Student B provides additional evaluation, and he also states the number of times Student A looked at his hands. The students discuss how to improve sight-reading attempts.
Step Four (6 minutes)
- The students reverse roles and repeat Steps Two and Three, with Student B playing his portion of the example.

Step Five (2 minutes)
- The pair plays the entire piece together.

Assessment 3 minutes

Functional skill: During Steps Two and Three, the students assess the sight-reading attempts. After performing the exercise, the pair shares with another pair some of the strategies they learned for improving sight-reading.

Cooperative skills: Student pairs discuss how well they coached each other and how well they received help with a good attitude.

Directions: Identify items that may present a challenge in sight-reading this piece of music—use specific measure numbers where appropriate. You may choose to indicate some of these items in the music as an aid in sight-reading.

<table>
<thead>
<tr>
<th>Key signature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tempo markings</td>
<td></td>
</tr>
<tr>
<td>Meter changes</td>
<td></td>
</tr>
<tr>
<td>Dynamic markings</td>
<td></td>
</tr>
<tr>
<td>Accidentals</td>
<td></td>
</tr>
<tr>
<td>Fingering issues</td>
<td></td>
</tr>
<tr>
<td>Rhythmic difficulties</td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---</td>
</tr>
<tr>
<td>Melodic leaps</td>
<td></td>
</tr>
<tr>
<td>Changes in hand position</td>
<td></td>
</tr>
<tr>
<td>Accompaniment patterns</td>
<td></td>
</tr>
<tr>
<td>Articulation</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 17. Sample pre-reading chart for Sight-reading Drills Pairs with Eye Check.*

Directions: Tally how many times your partner looks at his/her hands while sight-reading. Also note any issues with sight-reading and discuss suggestions for improving sight-reading skill.

<table>
<thead>
<tr>
<th>Student A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Looked at hands</td>
<td></td>
</tr>
<tr>
<td>Problem areas with sight-reading</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student B</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Looked at hands</td>
<td></td>
</tr>
<tr>
<td>Problem areas with sight-reading</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 18. Sample assessment tool for Sight-reading Drills Pairs with Eye Check.*
Lesson #3: Let’s Share a Piece

**Functional keyboard skill objective**
Students will maintain tempo and listen to balance while sight-reading one hand of a piece with a partner.

**Cooperative skill objectives**
Students will create a learning experience within parameters designed by the teacher. The experience culminates in a final presentation in which each student contributes equally.

**Cooperative learning method**
*Learning Together (Johnson & Johnson)*

**Cooperative method definition**
In the *Learning Together* format, group members work together to produce one worksheet or project and are graded as a group based on that final product. Each person in the group must contribute equally to the final presentation. The students are encouraged to create their learning experience within parameters set by the teacher. These guidelines set by the teacher help to keep the students unified within a framework in which all group members are able to succeed. Without parameters, the students might struggle to keep the project simple enough for each person in the group to succeed while at the same time creating enough challenge for the more advanced students.

**Cooperative method application**
In this lesson, the *Learning Together* method is demonstrated in the final performance where each student must participate equally as one student performs the left hand portion of the piece and the other student performs the right hand portion. The students work together to devise a sight-reading plan, perform the piece, and assess their performance. Sight-reading one hand of a piece with a partner could be more challenging than sight-reading both hands alone, as students must maintain tempo with another person and listen for balance of melody and harmony. A benefit of *Learning Together* is that two students may think of more ideas for the pre-reading plan than will one student working alone.

**Time required**
12-15 minutes

**Group size**
Pairs

**Preparation**
The teacher chooses sight-reading material suitable for the skill level of the students and assigns one hand of the piece to each student in a pair. One partner will play the left hand part and the other partner will play the right hand part. The students work at one keyboard.
**Plan**

Step One (5 minutes)
- The student pairs work without headphones as they examine the score together and mark potential challenges for sight-reading (unusual fingerings, accompaniment patterns, rhythmic difficulties, changes in hand position, accidentals, key changes, meter changes, dynamic markings, etc.).

- The pair devises a plan for overcoming the sight-reading challenges, and they mark in the music what they will do or think about as they sight-read.

Step Two (3-4 minutes)
- The students plug their headphones into the same keyboard.

- The pair chooses a tempo and counts two measures out loud before playing.

- The pair sight-reads the piece together, recording the performance on the keyboard.

Step Three (2-3 minutes)
- While listening to the recording, the students assess the performance using the performance rubric (Appendix B).

**Assessment**

2-3 minutes

*Functional skill:* During Step Three, the students assess their performance.

*Cooperative skills:* The pair comments on the sight-reading attempt, discussing ways to improve the collaboration. The teacher guides discussion as needed.

**Variation**

To extend the length of the activity or to add a level of difficulty, the students might tap the non-playing hand while performing the other part. Each student is then tapping the rhythm of the part played by the partner while performing the notes and rhythms of his own part.
**SKILL: SIGHT-READING**

**Lesson #4: Pre-Reading Chart**

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will create a plan for overcoming potential challenge areas as they sight-read a piece of music.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objectives</td>
<td>Students complete worksheets as a group. The students will share ideas and reach a consensus of answers. Pairs of students will share answers with the entire class, making changes to the answers as needed.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td>Blooming Worksheets (Kagan) and Think-Pair-Share (Frank Lyman)</td>
</tr>
</tbody>
</table>
| Cooperative method definition      | *Blooming Worksheets:*  
The teacher creates worksheets that are structured specifically for group work: 1) by formatting the questions so that specific elements are highlighted (for example, rather than asking “How is this different from that?” ask “How is this different from that with regard to size, color, and material used?”); 2) by using group language that doesn’t require one right answer (for example “Name three important…” rather than “What is the most important…?”); 3) by ordering questions from the easiest to the more difficult so that slower working groups are able to finish at least some of the worksheet; 4) by including thought provoking open-ended questions at the end of the worksheet so that the quicker groups can stay busy while the rest of the groups finish.  

*Think-Pair-Share:*  
The teacher assigns a task and the students work individually to devise an answer. The students are then paired with partners who share their answers and discuss any discrepancies. The pairs work to reach a consensus of answers, seeking to disagree politely, affirming partners’ answers, and exhibiting patience as they work together. After a pre-determined period of time, the students share answers with the entire class; more discussion occurs with all of the students assessing the answers.  

| Cooperative method application     | The pre-reading chart in this lesson is based on the design of the Blooming Worksheets method. The students are instructed to supply as many answers as they can for the various categories—there is not a pre-determined set of answers to be guessed correctly. The format is more open-ended, allowing for discussion of answers. The categories are listed in order from the more easily identifiable musical elements (key, meter, and dynamics) to the more challenging items (fingering issues and hand position). The less advanced students should be able to |
supply at least some answers in the earlier categories and thus experience a degree of success. The more advanced students may be able to supply answers for each category and have time to move on to the challenge question. The chart is designed so that all students are able to be challenged.

Rather than having all of the students work on the chart as a group, the method of Think-Pair-Share was utilized so that individual students would be required to think of potential sight-reading issues before sharing those ideas with partners. The class sharing at the conclusion of the activity allows for more ideas to be discussed, generating an additional pool of strategies for the students to use in their individual sight-reading attempts.

<table>
<thead>
<tr>
<th>Time required</th>
<th>20 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group size</td>
<td>Individuals, pairs, entire class</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher chooses sight-reading material suitable for the skill level of the students and assigns the same material to each student. The teacher creates a chart for students to notate potential challenge areas in sight-reading (Figure 19).</td>
</tr>
</tbody>
</table>
| Plan          | Step One (5 minutes)  
|               | • Individual students study the score and complete the pre-reading chart (Figure 19).  
|               | Step Two (5 minutes)  
|               | • Using the controller, the teacher groups students so that pairs hear each other.  
|               | • Student pairs compare answers, supporting their answers and asking for clarification of the partner’s answers.  
|               | • The students write on their own worksheets additional answers from their partners.  
|               | • The students devise plans for overcoming the potential challenge areas.  
|               | Step Three (4 minutes)  
|               | • The teacher instructs the students to remove their headphones so that the entire class is able to discuss.  
|               | • The teacher guides the class discussion of answers, |
encouraging those groups with any additional suggestions to share those with the rest of the class. At this point, the students should have a complete chart of items to attend to when sight-reading.

Step Five (4 minutes)
- The students use the checklist to individually sight-read the piece.

Assessment 2 minutes

Functional skill: The teacher checks the sight-reading charts to assess each student’s ability to prepare for sight-reading.

Cooperative skills: As a class, the students discuss how well they shared ideas and reached a consensus of answers in the small group settings as well as with the entire class.

Directions: Write as many answers as you can for the following categories, focusing on those items that will aid your sight-reading—use specific measure numbers where appropriate

<table>
<thead>
<tr>
<th></th>
<th>My answers</th>
<th>Additional answers from my partner</th>
<th>Additional answers from the class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key signature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tempo markings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic markings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidentals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhythmic difficulties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Melodic leaps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fingering issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand crossing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Articulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Challenge question: If you were to teach this piece to someone else, what element would you teach first and why? How would you teach the item?

*Figure 19. Sample chart for Pre-Reading Chart.*
### Lesson #5: Sight-reading Jigsaw

**Functional keyboard skill objective**  
Students will teach sight-reading techniques to their group members. The group will demonstrate understanding of the techniques though a group sight-reading performance.

**Cooperative skill objective**  
Students learn information within one group and then communicate that information to a second group so that each student is able to demonstrate understanding. Emphasis is on individual improvement.

**Cooperative learning method**  
*Jigsaw II (Slavin)*

**Cooperative method definition**  
*Jigsaw II:* This method is similar to *Jigsaw I* (below) except that individual test grades are combined into group scores with an emphasis on individual and group improvement.

*Jigsaw I:*  
Students in each group are assigned different readings pertaining to one topic. Students are then re-grouped to work with other students having the same topic (jigsaw groups); the goal is to read, discuss, and study together to become “experts” on that topic. After working for a pre-determined period of time, the students return to their original groups and teach their team members the information they have learned while in their jigsaw groups. The students take individual tests on the collective material. In this method, team members rely on each other to accurately learn and teach the information.

**Cooperative method application**  
The *Jigsaw* method works well for learning a new piece of music. Because each jigsaw group is working simultaneously on a different part of the overall composition, the class time is utilized more effectively than if each student were to work individually on the entire piece. Through group study of one section of music, each student in that group becomes an “expert” on that section. The students re-group into work groups and teach each other their respective sections of the piece to the other students. It is well known that through the teaching process, material is often learned more thoroughly for the teacher. Thus, each student in the class should have a thorough understanding of the sight-reading challenges and plans to overcome those challenges for at least one part of the piece and can be successful in reading that part. The students rely on their group members to communicate the new material well and to assimilate the information so that the group can have a successful sight-reading performance.
**Time required** 17-23 minutes

**Group size** Groups of 4

**Preparation** The teacher chooses sight-reading material suitable for the skill level of the students and cuts the music into small sections (a 16-measure piece would divide nicely into four groups of 4 measures each). Each section should include a number indicating the order it fits into the whole.

The teacher assigns students to groups of four; each group member receives a different section of the piece.

**Plan**

**Step One (3-5 minutes)**
- All of the students with the same section of music form a jigsaw group.
- The jigsaw group works together without headphones and without playing the keyboards. The students examine the score, suggesting potential challenges for sight-reading, and devising a plan for overcoming those challenges.
- All of the students mark in their music what they will do or what they will think about to overcome those challenges.

**Step Two (3-4 minutes)**
- The students re-group into their original groups.
- The teacher sets the controller so that group members hear each other.
- The students look at the copy of the entire score.
- All number 1 students relay to their fellow group members those areas in section 1 that could be potential challenges for sight-reading, explaining the strategies that the jigsaw team devised for overcoming those challenges.
- The group members mark in their scores directions for overcoming the challenge areas.

**Step Three (4-6 minutes)**
- Students 2, 3, and 4 take turns explaining potential challenge areas in their respective sections of music. The students make markings in their music as needed.
Step Four (4-5 minutes)

- The teacher changes the controller setting so that groups are able to record together.
- One student sets the tempo by counting one measure out loud, and the group sight-reads the piece.
- The students listen to the recording and assess their performance using the performance rubric (Appendix B).

Assessment

3 minutes

**Functional skill:** During Step Four, the students assess their performance.

**Cooperative skills:** The students re-group with their jigsaw groups and relay how well they were able to convey sight-reading ideas to their original group, asking the questions:

1) Did their team members accept their ideas and implement those ideas in the sight-reading attempt?
2) Did each student improve in his ability to sight-read?
Section E

ACCOMPANYING LESSON PLANS
SKILL: ACCOMPANYING

Lesson #1: Hymn Sing

Functional keyboard skill objective

Students will maintain a steady tempo while playing some or all voices of a hymn as fellow students sing.

Cooperative skill objectives

Students will take turns offering ideas for group evaluation. Students will create a learning experience within parameters designed by the teacher. The experience culminates in a final presentation in which each student contributes equally.

Cooperative learning method

Round Robin (Kagan) & Learning Together (Johnson & Johnson)

Cooperative method definition

Round Robin:
All of the students in a group take turns giving an answer to the question. Each person is required to contribute something to the discussion; this prevents students from being non-participants or allowing one student to dominate the discussion.

Learning Together:
In the Learning Together format, group members work together to produce one worksheet or project and are graded as a group based on that final product. Each person in the group must contribute equally to the final presentation. The students are encouraged to create their learning experience within parameters set by the teacher. These guidelines set by the teacher help to keep the students unified within a framework in which all group members are able to succeed. Without parameters, the students might struggle to keep the project simple enough for each person in the group to succeed while at the same time creating enough challenge for the more advanced students.

Cooperative method application

The Round Robin method is applied in this lesson as each student takes a turn filling the accompanist role during the hymn singing. This method of learning hymn playing is very effective because it forces the students to maintain the tempo, leaving out pitches where necessary. When students play hymns individually, they may interrupt, rush, or slow the tempo during the challenging places. By accompanying live singing, the students are forced to continue the beat and progress to each subsequent measure. This is an important skill for accompanying.

The Learning Together aspect of the plan is seen as the students create the learning experience when each group decides what students will sing a particular voice part and as they discuss the pre-reading plan and
the assessment of the individual performances. A key element of *Learning Together* is that all students play an equal role in the final project—this aspect is seen as each student sings a voice part or plays the accompaniment during each performance of the hymn.

**Time required**

22-25 minutes

**Group size**

Groups of 4 to 5

**Preparation**

The teacher chooses hymns that are suitable for the students’ skill levels. The teacher creates an assessment tool for the record keeper to evaluate individual accompanying skills (Figure 20).

The teacher assigns the students to groups of 4 or 5 and sets the controller so that the students hear only the members of their group.

**Plan**

**Step One (3 minutes)**
- Group members choose the voices of the hymn they will sing or play so that all parts are covered (singing is preferable; but if all of the students in a group are women, for example, then one person will need to play the bass line rather than sing it); one student is the record keeper.

- The group reviews items that might present a challenge during hymn reading such as key signature, accidentals, unusual rhythms, a bass line with many leaps, and large intervals between voice parts.

**Step Two (2 minutes)**
- The record keeper sets a slow tempo by counting one measure out loud, and the students sight-sing the hymn (or part of the hymn).

- The students sing the hymn a second time while also playing their voice parts on the keyboards.

**Step Three (3 minutes)**
- One student is assigned to be the accompanist. The accompanist sets the tempo by counting one measure out loud, and he plays the hymn while the other students sing.

- The group attempts to maintain the tempo (the singers should not slow down if the accompanist stumbles—they should keep singing).
During the performance the record keeper uses the assessment tool to evaluate how well the student accompanied (Figure 20).

The record keeper relays the information gathered during the performance. The group provides feedback as to how the accompanying student can improve this skill. The students should try to be as encouraging as possible. The goal is for each student to attempt to improve his performance each time he accompanies four-part singing.

Step Four (12-15 minutes)
- The students repeat Step Three until all group members have filled the role of accompanist and record keeper.

**Assessment**

2 minutes

**Functional skill:** During Step Three, the record keeper assesses accompanying ability. The group provides feedback for the accompanist.

**Cooperative skills:** The students discuss how well they each performed their role in the hymn reading and how encouraging they were to their group members.

<table>
<thead>
<tr>
<th>Student name</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>What kind of tempo did the accompanist set for his/her ability?</th>
<th>Just right</th>
<th>Too slow</th>
<th>Too fast</th>
</tr>
</thead>
<tbody>
<tr>
<td>What parts were played?</td>
<td>Soprano</td>
<td>Alto</td>
<td>Tenor</td>
</tr>
<tr>
<td>How many times did the student stop playing or hesitate?</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

*Figure 20. Sample assessment tool for *Hymn Sing*.  

...
## SKILL: ACCOMPANYING

### Lesson #2: Teach Me How to Accompany

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will give a collaborative performance with a partner, filling either the role of accompanist or soloist.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Student groups construct and relay knowledge that leads to whole-class cooperation in attaining a goal.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td>Co-op, Co-op (Kagan)</td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>The Co-op, Co-op method incorporates aspects from other cooperative learning methods. Similar to Group-Investigation, the students work together to produce information or new learning that benefits the class as a whole, and each group member is responsible for a different part of the project. The students work in a manner similar to the Jigsaw method in that each group focuses on a different element of the topic and then presents that information to the entire class so that all students receive all of the information. Like the STAD method, groups should be heterogeneous in nature in order to be a smaller representation of the classroom environment. The assumption in using groups of this nature is that it provides a broader perspective of ideas, and it is a situation in which students might have to put forth more effort to cooperate since they are not necessarily in a group with like-minded friends. Unlike some methods that emphasize individual testing, individual grades, and group competition, Co-op, Co-op focuses on inter-group cooperation that leads to whole class understanding and attainment of a learning goal.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>The students in this lesson use a modified version of Co-op, Co-op as they work in pairs and not in small groups. Because one person is filling the role of soloist and one is filling the role of accompanist, each partner is responsible for an equal part of the final presentation. The information presented by each pair to the rest of the class helps all students better understand the collaborative process.</td>
</tr>
<tr>
<td>Time required</td>
<td>Various steps over the course of several weeks</td>
</tr>
<tr>
<td>Group size</td>
<td>Pairs</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher assigns the students to pairs, attempting to place students with different instrument skills together (e.g. a vocal student with an instrumental student).</td>
</tr>
</tbody>
</table>
The teacher chooses simple pieces or excerpts for the students to use to accompany their partners performing the solo parts on their major instruments.

**Plan**

**Step One (3-4 minutes)**
- Each pair studies the score together; discussing and making written notes about potential challenge areas in the collaboration involving balance, tempo, stylistic considerations, and communication during performance.

**Step Two**
- The students work on their parts outside of class (individually and collaboratively).
- The students prepare a presentation outlining the specific musical and collaborative aspects that they worked on, the challenges they encountered, and the ways in which they worked through those issues.

**Step Three (10 minutes per pair)**
- The students perform their pieces for the class and give a brief presentation of their collaborative experience.

**Assessment**

2-3 minutes (per pair)

**Functional skill:** During the performance and presentation the teacher notes on the assessment tool (Figure 21) how well each pair collaborates and how well the accompanying student is able to accompany. The entire class offers suggestions for improving the collaboration.

**Cooperative skills:** As part of the presentation, the student pairs share how well they worked together in sharing and affirming each other’s ideas and in handling conflicts.

**Variation**

The activity should be completed a second time with the soloist taking the role of accompanist and the accompanist taking the role of soloist. The teacher may opt to keep the pairs the same or re-group the students into new partnerships.
Directions: Evaluate student pair’s ability to collaborate by circling Yes or No. Make additional notes in the space provided.

<table>
<thead>
<tr>
<th>The students present their collaborative challenges to the class in a clear, concise manner.</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>The solo student is able to perform his/her part with minimal mistakes.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>The accompanying student is able to perform his/her part with minimal mistakes.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>The pair collaborated well together.</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

*Figure 21. Sample assessment tool for *Teach Me How to Accompany.*
SKILL: ACCOMPANYING

Lesson #3: Two-Handed Accompaniment

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will perform a two-handed accompaniment while a partner performs the melody.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objectives</td>
<td>Students will create a learning experience within parameters designed by the teacher. The experience culminates in a final presentation in which each student contributes equally.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td>Learning Together (Johnson &amp; Johnson)</td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>In the Learning Together format, group members work together to produce one worksheet or project and are graded as a group based on that final product. Each person in the group must contribute equally to the final presentation. The students are encouraged to create their learning experience within parameters set by the teacher. These guidelines set by the teacher help to keep the students unified within a framework in which all group members are able to succeed. Without parameters, the students might struggle to keep the project simple enough for each person in the group to succeed while at the same time creating enough challenge for the more advanced students.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>The students create their learning experiences by choosing an accompaniment style that fits their melody. They practice the melody and accompaniment, learning both parts. Each student takes a turn performing the accompaniment while the partner sings or plays the melody. Thus, each student is participating equally in the final performance.</td>
</tr>
<tr>
<td>Time required</td>
<td>12-18 minutes</td>
</tr>
<tr>
<td>Group size</td>
<td>Pairs</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher chooses melodies with harmonic accompaniment indicated and provides various patterns of accompaniment such as block chord, boom-chick, and broken chord (Figures 22, 23, and 24). The teacher groups students into pairs, assigns a melody to each pair, and sets the controller so that partners hear each other.</td>
</tr>
</tbody>
</table>
Plan

Step One (2 minutes)
- The students sight-read the melody together, accompanying with blocked chords.

Step Two (3-4 minutes)
- The students choose an accompaniment style that fits the melody.
- The students practice a two-handed accompaniment within that style.

Step Three (2 minutes)
- The students take turns accompanying each other. The accompanying student sets the tempo by counting one measure out loud; he then plays the accompaniment while the partner sings or plays the melody.

Assessment

5-10 minutes

**Functional skill:** Using the performance rubric (Appendix B), the teacher assesses the performance. The teacher also determines whether the chosen accompaniment style fits the melodic style and gives direction to the students as needed.

**Cooperative skills:** The students discuss with the teacher how well they worked together to create an accompaniment that fits the melody.

*Figure 22.* Block chord accompaniment pattern.

Figure 23. Boom-chick accompaniment pattern.


Figure 24. Broken chord accompaniment pattern.

### Lesson #4: Jigsaw Accompanying

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will learn various styles of accompanying and will demonstrate those styles in a group performance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Students learn information within one group and then communicate that information to a second group so that each student is able to demonstrate understanding.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td>based on <em>Jigsaw I</em> (<em>Aronson</em>)</td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>Students in each group are assigned different readings pertaining to one topic. Students are then re-grouped to work with other students having the same topic (jigsaw groups); the goal is to read, discuss, and study together to become “experts” on that topic. After working for a pre-determined time, the students return to their original groups and teach their team members the information they have learned while in their jigsaw groups. The students take individual tests on the collective material. In this method, team members rely on each other to accurately learn and teach the information.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>This lesson uses a modification of the <em>Jigsaw I</em> method in that the students do not teach new information to the group, but instead they demonstrate individual understanding of a new concept through performance. This method of learning accompaniment styles allows the students to experience various styles in one class period without having to learn and practice each style individually.</td>
</tr>
<tr>
<td>Time required</td>
<td>16-17 minutes</td>
</tr>
<tr>
<td>Group size</td>
<td>Groups of 3</td>
</tr>
<tr>
<td>Preparation</td>
<td>Students should have previously learned various accompaniment styles such as blocked chord accompaniment, two-handed accompaniment, or keyboard style accompaniment. The teacher chooses a melody that can be harmonized in all three styles. The teacher assigns a number to each student in each group (each group has the same numbers). The teacher assigns an accompaniment style to each number (for example, number one students learn the blocked chord)</td>
</tr>
</tbody>
</table>
accompaniment; number two students learn the two-handed 
accompaniment, and number three students learn the keyboard style 
accompaniment).

**Plan**

Step One (4-5 minutes)
- All of the students with the same number form a jigsaw 
group.
- The teacher sets the controller so that jigsaw members 
hear each other.
- The jigsaw group members learn the melody, 
accompanying it with the style assigned to them.
- The students coach one another as needed so that all 
group members are able to perform the 
accompaniment.

Step Two (7 minutes)
- The students re-group into their original groups.
- The teacher changes the controller setting so that the 
students hear their fellow group members.
- The students take turns performing the melody using 
the accompaniment styles learned with the jigsaw team 
while their group members play the melody.
- After each performance, the students use the 
performance rubric (Appendix B) to evaluate each 
other’s performance.

**Assessment**

5 minutes

**Functional skill:** During Step Two, the students assess each 
other’s accompanying performance. They suggest ways to 
improve this skill.

**Cooperative skills:** The jigsaw team members re-group and 
relay how well they were able to perform their 
accompaniment style in the original groups.
Section F

PLAYING BY EAR LESSON PLANS
**SKILL: PLAYING BY EAR**

### Lesson #1: Play Me a Tune

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will choose a melody with which they are familiar and will perform that melody in a key chosen by the teacher.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>The students will share ideas and reach a consensus of answers. Pairs of students will share answers with another pair and will make changes to the answers as needed.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td>Think-Pair-Square (Kagan)</td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>The teacher assigns a task and the students work individually to devise an answer. The students are then paired with partners who share their answers and discuss any discrepancies. The pairs work to reach a consensus of answers, seeking to disagree politely, affirming partners’ answers, and exhibiting patience as they work together. After a predetermined period of time, each pair combines with another pair to share answers; more discussion occurs as the group compares answers. This grouping ensures that more students are actively participating in the sharing process, since groups of four are sharing simultaneously rather than the entire class evaluating one answer at a time.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>Think-Pair-Square is an effective method for helping students play by ear. Playing by ear for partners enhances the learning of the skill because the students may experience a heightened level of expectation than if they were practicing individually. The partners evaluate the performance and provide practical ideas for improvement of the skill. Student coaching might be less intimidating than teacher coaching since the students are working with a peer. Also, the students are working together to choose tempo, fingerings, and correct pitches and rhythms, so that they feel a sense of teamwork with the final product.</td>
</tr>
<tr>
<td>Time required</td>
<td>18 minutes</td>
</tr>
<tr>
<td>Group size</td>
<td>Pairs</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher provides a list of diatonic melodies that are suited to the skill level of the students (see Appendix A, Primary Chords (I-V) and Primary Chords (I-IV-V)). The teacher groups the students into pairs.</td>
</tr>
</tbody>
</table>
Plan

Step One (5 minutes)
- Pairs choose from the list one melody with which both students are familiar, and they sing the melody using solfège syllables.
- The teacher chooses a key for each melody, and student pairs determine the starting pitch.
- Students individually practice the melody by ear.

Step Two (5 minutes)
- The teacher changes the controller setting so that partners hear each other.
- The students take turns playing the melody for their partners.
- The partners evaluate pitches, rhythm, and tempo, suggesting changes as needed until both students agree upon each item.
- The pair performs the melody together.

Step Three (3 minutes)
- The teacher changes the controller setting so that two pairs hear each other.
- One pair plays their melody for the other pair.
- Using the performance rubric (Appendix B), the listening pair assesses the performance.

Step Four (3 minutes)
- The pairs reverse roles and repeat Step Three.

Assessment
2 minutes (per group of four)

Functional skill: During Step Three, pairs assess the performance.

Cooperative skills: Groups discuss with the teacher how well they were able to share ideas, make changes to answers, and work in a positive manner.

Variation
When students are comfortable playing melodies alone, increase the level of difficulty by adding accompaniment.
**SKILL: PLAYING BY EAR**

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**Lesson #2: Let’s Share a Tune**

| Functional keyboard skill objective | Students will exhibit proper balance while performing a melody or the accompaniment by ear with a partner. |
| Cooperative skill objectives       | Students will create a learning experience within parameters designed by the teacher. The experience culminates in a final presentation in which each student contributes equally. |
| Cooperative learning method        | *Learning Together (Johnson & Johnson)* |
| Cooperative method definition      | In the *Learning Together* format, group members work together to produce one worksheet or project and are graded as a group based on that final product. Each person in the group must contribute equally to the final presentation. The students are encouraged to create their learning experience within parameters set by the teacher. These guidelines set by the teacher help to keep the students unified within a framework in which all group members are able to succeed. Without parameters, the students might struggle to keep the project simple enough for each person in the group to succeed while at the same time creating enough challenge for the more advanced students. |
| Cooperative method application     | The students decide what role each partner will fill as they practice the melody and accompaniment by ear. In the final performance, the students perform equally. |
| Time required                      | 12 minutes |
| Group size                         | Pairs |
| Preparation                        | The teacher provides a list of melodies appropriate to the students’ skill level (see Appendix A). The teacher assigns students to pairs and sets the controller so that partners hear each other. |
| Plan                               | Step One (3 minutes)  
- Pairs choose from the list one melody with which both students are familiar and decide which partner will play the melody and which partner will play the harmony. |
• Pairs determine key, tempo, starting pitch, starting accompaniment chord, and possible chord choices (for example I, IV, and V chords).

Step Two (4 minutes)
• One student sets the tempo by counting one measure out loud.
• The pair plays the melody and harmony together, listening for proper balance.
• The partners work together to make changes to the melody or the accompaniment as needed.

Step Three (3 minutes)
• The pair plays the piece again, while the teacher assesses balance (and other elements) using the performance rubric (Appendix B).
• The teacher suggests adjustments in balance to the melody or the accompaniment as needed.

Assessment
2 minutes

Functional skill: In Step Three, the teacher assesses balance.

Cooperative skills: The teacher changes the controller setting so that two pairs hear each other. Each student pair discusses with another pair how well they worked together to perform the final melody and harmony.

Variation
Students might reverse roles and repeat Steps Two and Three so that each partner plays the melody and the accompaniment.
SKILL: PLAYING BY EAR

Lesson #3: Do You Hear What I Hear?

Functional keyboard skill objective
Students will listen to their partner’s recorded melody with accompaniment and will attempt to re-create the accompaniment.

Cooperative skill objective
Students communicate through aural description a clear explanation of a building process so that partners are able to reproduce the model.

Cooperative learning method
Play-What-I-Play (based on Kagan’s Build-What-I-Write)

Cooperative method definition
The students build structures using materials provided by the teacher. Each student writes a narrative description of his model. The intent of the writing is to produce a clear explanation of the building process so that a second student is able to reproduce the model. The student covers the model with a paper bag or other covering so that it is hidden from the partner. The partner reads the description and attempts to build the same structure with a second set of materials. The students compare their models, discussing why they do or do not resemble each other and attempting to understand the cause of any discrepancies. The students are encouraged to determine ways to improve their written communication.

Cooperative method application
This lesson uses an adaptation of the Build-What-I-Write method, which the author has titled Play-What-I-Play. In this modified version, the students recreate an aural project after listening to an aural rendition rather than creating a physical project from a written description. As in the Build-What-I-Write method, the students compare performances and assess their ability to communicate through the recordings.

Time required
17-20 minutes

Group size
Pairs

Preparation
The teacher chooses and assigns written melodies with block chord Roman numeral harmonization suited to the students’ ability levels (examples are found in the Appendix A).

The teacher assigns students to pairs. Students are assigned melodies different from their partners.
Plan

Step One (5 minutes)
- The students individually practice their melodies with harmonization. Students should vary the accompaniment patterns (for example Alberti bass, arpeggiated chord, and broken chord patterns).

- The students record the harmonized melodies on their keyboards, setting the tempo by playing one measure on the tonic pitch (for example, if the song is in C major and 4/4 time, the student would play four C’s in time before performing)

Step Two (4-5 minutes)
- The students switch places at the keyboards and listen to the recording made by the partners.

- Each student attempts to play the accompaniment by listening to and playing with the recording.

Step Three (3-4 minutes)
- The teacher changes the controller setting so that pairs hear each other.

- Student A performs the accompaniment while playing with the recording of Student B.

- The students assess each other’s performance using the performance rubric (Appendix B).

Step Four (3-4 minutes)
- The students switch roles and repeat Step Three.

Assessment

2 minutes

Functional skill: During Step Three, the students assess accompaniment accuracy and discuss the answers.

Cooperative skills: During Step Three, the students discuss their ability to accurately communicate through playing and imitating the performance recordings.
**SKILL: PLAYING BY EAR**

**Lesson #4: Melody Formation**

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Student groups will perform a melody by singing the correct solfège pitches while walking on a large floor staff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Students will cooperate in an effort to group themselves so that they form the answer to the teacher’s question.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><em>Formations (Kagan)</em></td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>Students use their bodies to form answers to the teacher’s question (for example, students might hold hands to form the shape of a triangle or a letter of the alphabet). This method gets students out of their seats and actively moving about the room.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>In this lesson, the students form the melody with their bodies as they walk on the large staff. This approach is helpful for students who may need large motor movement to solidify concepts. Because the students sing the pitches while they represent the notes with their bodies, physical and auditory learning is combined.</td>
</tr>
<tr>
<td>Time required</td>
<td>13-14 minutes per group*</td>
</tr>
<tr>
<td>Group size</td>
<td>Groups of 4</td>
</tr>
<tr>
<td>Preparation</td>
<td>The teacher creates a large staff on the floor using tape or other materials. Each line of the staff should be twelve inches apart and each measure should be a minimum of two and a half feet wide to accommodate adult-size feet and bodies. Depending on how much space is on the floor, the staff will have four to eight measures marked with bar lines. If the room is not large enough to accommodate eight measures in a row, the teacher might employ other options for completing the activity: 1) breaking up the staff so that four measures are situated underneath another four measures; 2) making a staff of only four measures and reusing the same four measures for subsequent parts of the melody; 3) having the students sing a portion of the melody rather than singing the entire melody. The teacher chooses diatonic melodies with which the students are familiar. Melodies should be comprised of mostly step-wise motion or small intervals.</td>
</tr>
</tbody>
</table>
*The teacher assigns the students to groups of four. Only one group at a time will be doing this activity. The other students should work individually on a different assignment until it is time for their group to participate.

Plan

Step One (2 minutes)
- The teacher names a melody and chooses a key.
- The group chooses a singing tempo, and one student sets the tempo by counting one measure out loud.
- The group sings the melody one time using solfège syllables.

Step Two (2 minutes)
- The group members stand on the staff, with each student standing one or two measures apart (depending on how many measures each student will sing).
- The student in measure 1 walks one or two measures of melody while singing the correct pitches using solfège syllables.
- The group members assess if the pitches are correct and suggest changes as necessary.

Step Three (3-4 minutes)
- Each student takes a turn walking on the lines and spaces of the staff while singing the solfège pitches for his section of the piece.
- After each person sings his section, the group members assess pitch accuracy, making changes as necessary.

Step Four (2 minutes)
- The students perform the melody again—all group members sing the solfège pitches as each student takes turns walking through his measure(s).
- The teacher notes student performance on the assessment tool (Figure 25).

Step Five (2 minutes)
- The students perform the entire melody by ear on their individual keyboards.
**Assessment**

2 minutes

**Functional skill:** During Step Three, the students determine if the pitches are correct. During Step Four, the teacher assesses accuracy of the final group performance.

**Cooperative skills:** Each group discusses how well they assisted each other in representing the melody while walking and singing.

**Variation**

To extend the activity, the students might transpose the piece into a key of the teacher’s choice as they sing and walk on the appropriate pitches of the new key.

<table>
<thead>
<tr>
<th>Measure</th>
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<tbody>
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<td>Group 3</td>
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</tbody>
</table>

*Figure 25. Sample assessment tool for Let’s Make a Chord.*
## SKILL: PLAYING BY EAR

### Lesson #5: Numbered Ears Together

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will perform a melody chosen by the teacher in a key and tempo set by the group members.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objectives</td>
<td>Students will check for peer understanding of material. Students will work together to ensure understanding of every group member.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><em>Numbered Heads Together (Kagan)</em></td>
</tr>
<tr>
<td>Cooperative method definition</td>
<td>The students are divided into groups. Each student in the group is assigned a number, with the same numbers being used for each group. The teacher calls out a question. The group members put their heads together and discuss possible answers. The students help their fellow group members to know the answer and understand the answer. After a pre-determined period of time, the teacher calls one number—the student with that number in each group raises his hand. The teacher calls on one student with a raised hand to give an answer. If the answer is not correct, the teacher may opt to discuss with the class why the answer is not correct; or the teacher may call upon another student to give an answer. Points may be awarded for each correct answer. This format requires all of the students to learn the answers (in case their numbers are called) in an effort to score points for their team. The students must be taught to not blame their team members if wrong answers are given. Each person on the team is responsible for his partners’ learning. If the team does not do well, the group must determine how they can work together in a more effective manner to improve learning and performance.</td>
</tr>
<tr>
<td>Cooperative method application</td>
<td>The students in these groups are expected to help their fellow group members learn and perform a melody by ear. Because the group score is determined by individual performance, the premise of <em>Numbered Heads Together</em> is that the students will ensure that their classmates understand the material so that they can perform well. The students don’t want their partners to fail, so they will practice the material until they all are comfortable with it, coaching each other as needed.</td>
</tr>
<tr>
<td>Time required</td>
<td>13-18 minutes</td>
</tr>
<tr>
<td>Group size</td>
<td>Groups of 3 to 4</td>
</tr>
</tbody>
</table>
Preparation

The teacher assigns the students to groups of 3-4 and sets the controller so that the students hear only the members of their group.

The teacher assigns a number to each student in each group (each group has the same numbers).

The teacher assigns a melody for playing by ear to each group. (For melody examples, see Appendix A).

Plan

Step One (4-5 minutes)

- Students determine as a group the key, tempo, and starting pitch that they will use for the performance.

- The students coach their fellow group members so that each person is able to play the melody by ear. If some students don’t know the melody, other group members will need to teach it to them.

Step Two (2-3 minutes)

- The teacher calls out a number; the students who were assigned that number are allowed to raise their hands.

- The teacher calls on the first student who raises a hand and asks that student to play the melody with accompaniment.

- The student names the melody, states the key in which he will perform, counts one measure out loud, and plays the melody.

- The student may earn a point for his team if he performs with steady tempo and no mistakes.

Step Three (5-8 minutes)

- The teacher calls a different number and listens to a different student perform.

- The activity continues until all of the teams have earned points.

Assessment

2 minutes

Functional skill: During the performances, the teacher assesses student skill using the performance rubric (Appendix B). The teacher ensures that over the course of several class periods all students have a chance to perform.
Cooperative skills: Each group discusses how well the members helped each other to understand and prepare for the performance.

Variation To increase difficulty, students might be required to play accompaniment with the melody.
Section G

TECHNIQUE LESSON PLANS
Lesson #1: Fingering Fun

**Functional keyboard skill objective**
Students will perform a scale with a steady tempo and correct fingerings.

**Cooperative skill objective**
The students will share ideas and reach a consensus of answers. Pairs of students will share answers with another pair and will make changes to the answers as needed.

**Cooperative learning method**
*Think-Pair-Square (Kagan)*

**Cooperative method definition**
The teacher assigns a task and the students work individually to devise an answer. The students are then paired with partners who share their answers and discuss any discrepancies. The pairs work to reach a consensus of answers, seeking to disagree politely, affirming partners’ answers, and exhibiting patience as they work together. After a predetermined period of time, each pair combines with another pair to share answers; more discussion occurs as the group compares answers. This grouping ensures that more students are actively participating in the sharing process, since groups of four are sharing simultaneously rather than the entire class evaluating one answer at a time.

**Cooperative method application**
*Think-Pair-Square* is an effective method for helping students learn and improve scale fingerings; student pairings create effective use of class time as students receive individual help from each other. As students work independently, they may struggle to remember and apply fingerings to the various scales. As they perform the scales, they might not be able to assess whether their fingerings are accurate. When students share their answers with a partner, discrepancies can be clarified and discussed. Pairing the students usually creates a non-threatening way to learn material, as peers often exhibit patience while helping their struggling classmates. If both partners are not adept at scale fingerings, the pair works together to improve answers and a sense of teamwork results. Pairs then check the work of other pairs and provide necessary feedback to correct answers and understanding of the material.

**Time required**
18 minutes

**Group size**
Pairs

**Preparation**
The teacher chooses scales appropriate to the students’ skill level and
assigns one scale to the students.

**Plan**

Step One (2 minutes)
- The students practice the scale fingerings individually.

Step Two (3 minutes)
- Using the controller, the teacher groups the students so that pairs hear each other.

- One student performs the scale (one hand at a time or hands together) while the other student evaluates the fingerings, correcting as necessary.

- The students reverse roles.

Step Three (1 minute)
- The pair performs the scale together, maintaining constant tempo while executing correct fingerings.

Step Four (5 minutes)
- Using the controller, the teacher combines two pairs.

- One pair performs the scale for the other pair.

- The second pair evaluates the fingering and tempo accuracy of the first pair, suggesting fingering changes if necessary.

- The pairs reverse roles.

Step Five (3 minutes)
- The group of four students performs the scale for the teacher who assesses the performance using the performance rubric (Appendix B).

**Assessment**

4 minutes

**Functional skill:** During Step Five, the teacher assesses scale performance.

**Cooperative skills:** Student pairs discuss how well they helped each other learn the fingerings.

**Variation**

If the students in a pair possess unequal keyboard abilities, the more advanced student might be challenged by playing
the scale at a faster pace than his partner (for example, the less advanced student might play quarter notes while the more advanced student would play 8th notes or triplets in the same pulse)—adapted from Yvonne Enoch (1974), p. 103.
**SKILL: TECHNIQUE**

**Lesson #2: Technique Tournament**
Adapted from a lesson plan by Christopher Fisher (2006)

<table>
<thead>
<tr>
<th><strong>Functional keyboard skill objective</strong></th>
<th>Students will practice and improve the performance of various aspects of keyboard technique including scale fingering, arpeggio fingering, and etudes.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooperative skill objectives</strong></td>
<td>Students coach each other to learn material and then compete individually to perform the material and earn points for the team.</td>
</tr>
<tr>
<td><strong>Cooperative learning method</strong></td>
<td><em>Student Teams-Achievement Divisions (STAD) and Teams-Games-Tournament (TGT)</em>—(Slavin)</td>
</tr>
</tbody>
</table>
| **Cooperative method definition**      | *Student Teams-Achievement Divisions (STAD):* Heterogeneous groups of 4-5 students work on the material with the goal that each student in the group improves his performance (based upon a previous score). The smaller student groups should be heterogeneous in nature (with regard to race, gender, socioeconomic status, achievement ability) in order to be a smaller representation of the classroom environment. The assumption in using groups of this nature is that it provides a broader perspective of ideas, and it is a situation in which students might have to work harder to cooperate since they are not necessarily in a group with like-minded friends. The students are tested individually, but group scores are given based upon group improvement over previous scores. Because the group as a whole receives a score based upon each member’s improvement, the students help each other to improve so that each person’s score can increase.  

*Teams-Games-Tournament (T-G-T):* This method is similar to the STAD method in that students compete on teams and try to earn points through performance improvement. The difference between T-G-T and STAD is that in T-G-T students play games and compete in tournaments instead of being tested with quizzes. Students perform against other teams and earn points by demonstrating knowledge of the material. The students have the opportunity to earn extra points for the team by challenging high scorers and “bumping” them down a level if they win the challenge. |
| **Cooperative method application**     | Using the *Teams-Games-Tournament* format of testing might take some pressure off the students who do not test well. Competing as a “team” can create a sense of teamwork and camaraderie among the students. Students are part of a group that can score points even if the individual is not able to score many points. If the focus is on each
student improving scores from previous performances, all students are able to contribute to the overall team score. Students may be more apt to help their fellow teammates succeed so that the entire team may perform competitively.

**Time required**
Various steps over the course of the entire semester

**Group size**
Teams of 3 to 5

**Preparation**
The teacher groups the students into teams and instructs them to schedule one or two sessions per week outside of class to prepare for the tournament.

**Plan**

**Step One**
- The teams are occasionally allowed 5-10 minutes in class to work on specific skills or exercises.

**Step Two (10 minutes)**
- Weekly “match-ups” are conducted for the purpose of providing student feedback and teacher monitoring of group progress. An example of a match-up activity is that one team member asks a fellow team member to play a scale; the student plays out loud while the rest of the team plays silently (headphones off, sound off); group members coach each other on pitch accuracy. The teacher assesses fingering accuracy of the performing student.

**Step Three (20-30 minutes)**
- A practice tournament is held mid-way through the semester. The setting is less formal than the final tournament (no points are awarded).

**Step Four (50-60 minutes)**
- The final Technique Tournament is held near the end of the term.
  - Each round of the tournament tests one technical element; one student from each team is chosen to perform for each round. The teacher uses the performance rubric (Appendix B) to assess each performance.
  - Team points are awarded based on performance accuracy and speed of execution.
  - Individual grades may also be awarded for individual
performances, including a grade for improvement from the practice tournament.

- The team with the most points “wins” and might receive some sort of reward.

**Assessment**

5-10 minutes

**Functional skill:** Assessment for this activity is on-going throughout the semester and consists of team assessment and teacher assessment of individual as well as group progress.

Evaluation based on the performance rubric is given in the form of grades—grades might be comprised of group effort during the tournament as well as individual skill achievement.

**Cooperative skills:** Verbal evaluation pertaining to group communication, social skills, and individual skill development is given by the teacher and fellow group members during the course of the semester.
Lesson #3: Match Me

**Functional keyboard skill objective**
Students will correctly match fingering patterns with scale names and will perform the scale with a partner.

**Cooperative skill objective**
Students match the information on their puzzle pieces with information on the puzzle pieces of other students.

**Cooperative learning method**
*Puzzled People (Kagan)*

**Cooperative method definition**
Each student has one piece of a puzzle. Students walk around the room trying to match their card with other students who have the remaining piece(s) of the puzzle.

**Cooperative method application**
*Puzzled People* requires students to get up and move around the room, which can be a good mixing activity for new students. Because the groupings are random, this activity forces students to work with students with whom they might not normally group, which is a good way to create new learning partnerships.

**Time required**
12 minutes

**Group size**
entire class

**Preparation**
The teacher prepares sets of cards that match—for example, one card consists of a scale name (such as F Major). The matching cards would contain either the right hand fingering for F Major (1 2 3 4 1 2 3 4), the left hand fingering (5 4 3 2 1 3 2 1), or fingerings for both hands.

The teacher creates an assessment tool for the students to use (Figure 26).

The keyboards should have two sets of headphones connected to them so that one pair of students is able to work at the same keyboard.

**Plan**
Step One (1 minute)
- Each student takes a card. When the teacher indicates the start of the activity, the students try to match the appropriate scale and fingering cards.
Step Two (3 minutes)
- When all of the students are matched, two pairs check each others’ answers.
- The matched students go to a keyboard and play the scale with the fingerings listed on their cards (either right hand alone, left hand alone, or both hands together).

Step Three (6 minutes)
- The activity continues through various rounds with students using different cards. Students match new cards at the teacher’s direction.

Assessment 2 minutes

Functional skill: Students note their performance on the assessment tool (Figure 26) and discuss how well they knew the scale fingering and were able to perform the scale.

Cooperative skills: Students discuss as a class how well they matched the cards and how encouraging they were to their fellow students.

Directions: Mark a √ in the box if you are able to perform the task. Mark an X in the box if you are not able to perform the task.

<table>
<thead>
<tr>
<th>(Student Name)</th>
<th>(Scale #1 Name)</th>
<th>(Scale #2 Name)</th>
<th>(Scale #3 Name)</th>
<th>(Scale #4 Name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was able to match my partner</td>
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<tr>
<td>I was able to play the scale with correct fingerings</td>
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</tbody>
</table>

Figure 26. Sample assessment tool for Match Me.
**Lesson #4: Jigsaw Scales**  
Based on a lesson plan by Emily Book McGree (2010)

<table>
<thead>
<tr>
<th>Functional keyboard skill objective</th>
<th>Students will learn scale fingerings and will perform scales with correct fingerings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperative skill objective</td>
<td>Students learn information within one group and then communicate that information to a second group so that each student is able to demonstrate understanding.</td>
</tr>
<tr>
<td>Cooperative learning method</td>
<td><em>Jigsaw I (Aronson)/Jigsaw II (Slavin)</em></td>
</tr>
</tbody>
</table>
| Cooperative method definition      | *Jigsaw I:*  
Students in each group are assigned different readings pertaining to one topic. Students are then re-grouped to work with other students having the same topic (jigsaw groups); the goal is to read, discuss, and study together to become “experts” on that topic. After working for a pre-determined time, the students return to their original groups and teach their team members the information they have learned while in their jigsaw groups. The students take individual tests on the collective material. In this method, team members rely on each other to accurately learn and teach the information.  

*Jigsaw II:*  
This method is similar to *Jigsaw I* except that individual test grades are combined into group scores, with emphasis on individual and group improvement (similar to the *STAD* scoring system). |
| Cooperative method application     | In this lesson, the students learn scale fingerings with the jigsaw group members and then teach thosefingerings to the original group members. Students rely on each other to teach and learn the fingerings correctly so that the team is able to demonstrate mastery through performance. |
| Time required                      | 12-15 minutes |
| Group size                         | Groups of 3 to 4 |
| Preparation                        | The teacher groups the students and assigns a different scale to each student in the group. |
Plan

Step One (3 minutes)
- Students who have been assigned the same scales form jigsaw groups.
- The teacher sets the controller so that jigsaw members hear each other.
- The students who have been assigned the same scale work in their jigsaw groups to learn the fingerings.

Step Two (6-7 minutes)
- The students return to their original groups.
- The teacher changes the headphone setting so that the original group members hear each other.
- The students take turns teaching their fellow group members the scale they learned in their jigsaw groups.
- After each student teaches the scale, the group plays the scale together for the teacher.

Assessment

3-5 minutes

Functional skill: In Step Two, the teacher listens to each group perform, and uses the performance rubric (Appendix B) to evaluate the skill of the group. The students receive a group grade based on the total score.

Cooperative skills: Students discuss with the jigsaw groups how well they were able to teach the scale fingerings to their work group.
CHAPTER V
SUMMARY AND RECOMMENDATIONS

This study was conducted to explore the use of cooperative learning methods in collegiate group piano classes. The intent was to create a teaching guide to be used in the teaching and learning of functional keyboard skills. The lesson plans in this guide were created for use with collegiate undergraduate music majors whose primary instrument was not piano. At the outset of this endeavor, the assumption was made that cooperative learning methods could be beneficial when used in the collegiate group piano setting. This belief arose from a teaching situation in which students learned in pairs and small groups in an effort to maximize class time. This learning approach seemed to produce positive results in student academic achievement and social interaction. It was discovered that this type of teaching and learning might fit within the scope of cooperative learning. Further exploration into the subject revealed that not much research existed in the area of cooperative learning and group piano instruction. The available research suggested that using cooperative learning methods in group piano instruction was beneficial to students in a variety of areas. In addition, some research findings pertaining to cooperative learning in academic subjects seemed to generalize to group piano instruction.

At the onset of this project, numerous resources existed for teachers of academic subjects to implement cooperative learning methods in their classrooms; however, in the area of group piano study no comprehensive resource was available to teachers for incorporating cooperative learning methods. A variety of group piano curricula were available, but none of these books focused on cooperative learning methods in the teaching of functional skill
Upon further exploration, it was discovered that only two college professors in the United States, Cremaschi (2000) and Fisher (2006), had published lesson plans containing cooperative activities for collegiate group piano students. These plans were available in an online forum for piano teachers and as part of a doctoral dissertation. Because these plans varied in scope and format, and because there were no other available documented lesson plans, it was determined that a unified cooperative learning teaching guide might be beneficial for collegiate group piano instruction. Such a guide offered a unique approach to the teaching of functional keyboard skills because it focused on cooperative learning methodology.

The idea of creating a cooperative learning teaching guide was presented to a number of piano teachers—those who used cooperative methods and those who did not. This cross section of teachers included well-known pedagogues in the piano education community, some of whom had published group piano curriculum and resources, several college teachers who had been teaching group piano for 10-25 years, as well as newly-graduated doctoral students who were beginning their careers as group piano teachers. The response to this proposal resulted in positive support for the teaching guide and a belief that this guide could be beneficial in guiding group piano students to learn and improve keyboard skills with their peers.

The next step was to begin writing the plans. Detailed lesson plans were necessary to the success of the teaching guide. If teachers were confused by ambiguous directions or unclear objectives, they might not use the plans. Many of the plans, therefore, were created in a group piano lab where the equipment and setup of the classroom was available for testing some of the lesson steps. Care was taken to make the lessons as succinct as possible so that group piano teachers would not need to do much advanced preparation and so that they could complete the plans during a class session with minimal difficulty.
Discussion of Teaching Guide Components

Thirty-six lesson plans were included in the final version of the teaching guide. A minimum of four plans were created for each of the seven functional skills so that an equal number of plans existed for most of the sections. Research in the area of group piano instruction revealed that not all functional skills seemed to receive equal emphasis (Chin, 2002; March, 1998; Young, 2010). The skill of harmonization seemed to be one skill that was emphasized in many group piano classes. It is possible that this particular skill was easier to teach in a group setting, or perhaps teachers felt more equipped to teach harmonization due to additional training in music theory classes. A similar finding evolved during the construction of the teaching guide—the application of cooperative methods seemed easier to implement while creating harmonization lesson plans; interestingly, that section of the guide contained the greatest number of plans.

Twenty different cooperative methods were used in the plans. The cooperative methods chosen for inclusion in the teaching guide were methods that seemed to work well for group piano instruction. Eight cooperative methods had been used to create lesson plans prior to this study. Several of those methods, as well as seventeen additional cooperative methods, were included in the teaching guide. With such a variety of cooperative approaches, group piano teachers had many options for teaching functional skills.

Some of the same cooperative methods were found in multiple sections of the guide, indicating that certain cooperative methods were able to be used to teach a variety of functional keyboard skills. The methods that were used most frequently in this teaching guide were Learning Together (used seven times), a variation of the Think-Pair-Share method (used five times) including Think-Pair-Square and Think-Write-Pair-Compare, and the Jigsaw methods (used five times). It is possible that these particular cooperative methods were better suited to group piano activities than were other cooperative methods. Perhaps the authors of the plans that included these methods were simply more comfortable with these formats.
The plans in the teaching guide utilized a variety of student groupings. Some of the plans called for individualized work, followed by pair comparisons, and finally full-class sharing and evaluation. Other lessons incorporated two different work groups—a jigsaw group for learning material and another group for teaching the learned material. Some lessons required the students to change partners throughout the activity so that multiple student pairings occurred. The variety of student groupings found in the lesson plans offered many options to potential teachers for combining their students into suitable peer groups for their unique situations.

Limitations and Complications

This study varied in format from typical dissertation projects in that new teaching material was created rather than existing material being tested. Many of the lesson plans originated from the ideas of group piano teachers who had used these ideas in their collegiate piano classes. The creation of lesson plans presented many challenges as the various elements of the plans had to be analyzed for clarity, consistency, accuracy, succinctness, and relevance. Although care was taken to craft each lesson, certain limitations evolved during the creation of the teaching guide. For instance, some of the plans in the teaching guide were not tried in actual teaching situations. Even though the plans were written with as much foresight as possible to anticipate the needs of the teacher and students, it is possible that some steps of the plans would not work or would need to be modified for greater effectiveness.

Another stumbling block in the creation of the plans was the condition of remaining within functional skill objectives. Some of the plans did not have objectives that fit the definition of functional skills as listed in this document. Instead of incorporating functional objectives, several of the plans focused on music theory activities, aural training skills, ensemble repertoire playing, and solo repertoire learning and polishing. These plans were eliminated from the teaching guide because they did not highlight functional keyboard skills as defined in this project. The remaining
plans focused on harmonization, transposition, improvisation, sight-reading, accompanying, playing by ear, and technique.

Other lessons also were eliminated throughout the creative process. Some plans were ambiguous and difficult to put into practice. Some lessons were basically duplications of previous ideas with only slight variations in the steps. It was often difficult to create new lesson ideas while always remaining within the bounds of functional skill objectives and cooperative guidelines. The final number of plans was smaller than originally anticipated, especially as the author had planned to receive input from many other teachers who might have used cooperative learning and could contribute ideas to the teaching guide. The final number of lesson plan contributors was only four.

It was difficult to determine the extent to which cooperative learning methods were currently being employed by group piano teachers, outside of those teachers whose experience was documented in the research literature. Other teachers who have explored this literature may already have been implementing cooperative learning methods into their group piano instruction without any definite documentation. Some teachers might also have been teaching in a cooperative manner without realizing that their teaching practices fit into the parameters of cooperative learning theory and methodology.

Although the plans are limited in scope and overall number, the author believes that the teaching guide presents a solid foundation of lesson plans that group piano teachers can use and build upon. It is hoped that collegiate group piano teachers will use this teaching guide to explore cooperative learning methods with their students. Possibly, some of these teachers will create new knowledge in the realm of cooperative learning and group piano and will contribute additional findings for other teachers to use.
Suggestions for Future Research

Only five studies were available with regard to cooperative learning and its success in collegiate group piano instruction. In this handful of studies, there was a wide variety of research methods used, a number of cooperative and group piano aspects reviewed, and several approaches taken. One study was described as descriptive research (Fisher, 2002)—well-known cooperative methods were applied to group piano teaching methods. Book McGree (2010) used a combination of qualitative and quantitative data to look at achievement, self-efficacy, practice habits, and attitudes of group piano students in cooperative learning situations. Two of the studies that used experimental techniques seemed to have issues with reliability—one study was limited due to the fact that it was only six weeks in length and had a small participant base (Emmeleus, 1993); the other study seemed to have too many variables, too many types of research involved, and several setbacks in implementation (Goliger, 1995). Baker (2008) also used experimental research to discover the connection between sight-reading skills and peer tutoring. Most of the researchers also focused some on the affective responses of students, citing anecdotal material in their discussions (Baker, 2009; Book McGree, 2010; Fisher, 2006; Goliger, 1995).

Building on the work of these researchers, it would seem beneficial to explore experimental research methods that might confirm the effectiveness of cooperative learning methods in teaching functional keyboard skills. Researchers might also compare the use of various cooperative methods in group piano instruction to determine whether certain cooperative methods are more effective than others in increasing functional skill achievement. Additionally, research that compares the effectiveness of various groupings of piano students (including individualized practice) might be beneficial in determining the most effective grouping for piano instruction.

Because all of the lesson plans in this teaching guide were not tested in the classroom, applied research might also be conducted with this teaching guide to determine the effectiveness of each plan in teaching functional keyboard skills. It is possible that through this testing, changes
will need to be made to the teaching guide to make it more effective. Researchers might also compare results from each of the functional skills to determine if cooperative learning is more effective in teaching certain skills or if all of the skill acquisition is equal.

Because this teaching guide was limited in scope and format, further exploration could expand the current knowledge in the area of cooperative applications to group piano. For example, the teaching guide was designed to be used with college students. Group piano teaching and learning has occurred with students of all ages. It is possible that some of the activities in the plans do not work well with adult students and may work better when used with younger students. Studies comparing the effectiveness of the activities for different ages of students might be conducted to assess this idea.

In addition to being designed for a specific population, this guide focused solely on the learning of functional keyboard skills. Group piano instruction might encompass a variety of music skills such as learning to read music, demonstrating steady beat, playing in an ensemble, memorizing music, playing solo repertoire, polishing solos and ensemble pieces, and learning written and aural theory. Future investigations might explore the application of cooperative learning methods to some of these other activities to determine if cooperative learning methodology is effective for all aspects of piano instruction.

The teaching guide incorporated twenty different cooperative learning methods, many of which had not been documented in use with group piano instruction prior to this study. There are many more cooperative methods available that have been applied to various academic subjects. Some of these methods might also be applied to group piano instruction. In exploring the large number of available cooperative methods, future teachers and researchers may create innovative applications of those methods to group piano instruction.

Finally, this study focused only on the benefits of increased academic achievement and positive social skills development, using these two areas to inform the lesson plan objectives. In
addition to increased academic achievement and positive social skills development, other benefits were cited in the research as resulting from cooperative learning experiences. Some of these benefits were a) positive student feelings relating to self-esteem, emotional well-being, altruistic tendencies, and creating an accepting environment, b) improved ethnic relations, c) promotion of cultural democracy, d) increased successful mainstreaming, e) increased occurrence of students encouraging each other to do their best, f) increased high internal locus of control, and g) improved time on-task and positive general classroom behavior (Johnson & Johnson, 1975; Kagan, 1989; Sharan, 1990; Slavin, 1990). Further research might explore potential connections between these benefits and the use of cooperative learning in group piano. Additional benefits of using cooperative learning (maybe some that are unique to group piano) may be added to this list.

In conclusion, it might be possible that some group piano teachers struggle to teach functional keyboard skills using traditional teaching methods. These teachers might explore the use of cooperative learning methods in their curriculum to determine if such methods could be beneficial for their students. Current national and regional piano teacher organizations might be encouraged to discover those individuals who could already be using cooperative learning in their teaching. Those organizations might then create a network for teachers who desire to learn more about this methodology. Teachers might be encouraged to continue to develop the pedagogy and scholarship of implementing cooperative learning methods into group piano classes. In the future, a group piano curriculum might be developed that focuses solely on using cooperative methods for teaching functional keyboard skills.

Cooperative learning could be an effective method for teaching functional keyboard skills to collegiate group piano students. This teaching guide is an attempt to take one step forward into the realm of education that examines peer learning and peer assessment. Further exploration into the implications of using cooperative learning in group piano instruction should be conducted and assessed for student benefit. Educators should always be encouraged to seek out innovative
methods for maximizing student learning; cooperative learning may be one approach that helps reach this goal in group piano instruction.
References


Appendix A

Melody List for Harmonization

Primary Chords (I–IV)

A Tisket, A Tasket
Alouette
Chopsticks
Clementine
Did You Ever See a Lassie?
Down in the Valley
Farmer in the Dell
Go Tell Aunt Rhody
He’s Got the Whole World in His Hands
Hush, Little Baby
Itsy Bitsy Spider
Lightly Row
London Bridge
Mary Had a Little Lamb
Oh Where Has My Little Dog Gone
Polly Wolly Doodle
Row, Row, Row Your Boat
Skip to My Lou
Ten Little Indians
Three Blind Mice
Yellow Rose of Texas

Primary Chords (I–IV–V)

Amazing Grace
Angels We Have Heard on High
Auld Lang Syne
Battle Hymn of the Republic
Bingo
Brahms’ Lullaby
The Caissons Go Rolling Along
Camptown Races
Clementine
Ding Dong, Merrily on High
Doxology
The First Noel
For He’s a Jolly Good Fellow
Go Tell Aunt Rhody
Good King Wenceslas
Good Night Ladies
Happy Birthday
He’s Got the Whole World in His Hands
Hickory Dickory Dock
If You’re Happy and You Know It
Jolly Old St. Nicholas
Joy to the World
Lavender’s Blue
Lightly Row
Little Brown Jug
Long, Long Ago
Love Somebody
Marine’s Hymn
Mexican Clapping Song
Muffin Man
My Country ’Tis of Thee
Oh! Susanna
Oh Where Has My Little Dog Gone?
Old Gray Mare
Old MacDonald Had a Farm
On Top of Old Smoky
Pop! Goes the Weasel
Red River Valley
Rock-a-bye Baby
Rudolf, the Red-Nosed Reindeer
Shoo, Fly
Silent Night
Skip to My Lou
This Land Is Your Land
This Old Man
Three Blind Mice
Turkey in the Straw
Twinkle, Twinkle Little Star
When the Saints Go Marching In
Yankee Doodle

Secondary Dominants

America the Beautiful
The Ash Grove
Aura Lee
Deck the Halls
Do Re Mi
English Country Gardens
Home on the Range
Jingle Bells
Morning Has Broken
My Bonnie Lies Over the Ocean
Ode to Joy
Over the River and through the Woods
Simple Gifts
Star-Spangled Banner
Yankee Doodle Boy
You’re a Grand Old Flag

Minor

Chim Chim Cher-ee
Erie Canal
Greensleeves
Joshua Fit the Battle of Jericho
Scarborough Fair
We Three Kings
When Johnny Comes Marching Home Again

## Appendix B

### Performance Rubric

<table>
<thead>
<tr>
<th>Student’s name</th>
<th>Date</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Score each item according to the descriptions in each category. Add the scores for each item and divide by the number of categories to determine the final score for that item. Specific scoring criteria may need to be modified for the various functional skills.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pitch</td>
<td>All pitches are correct</td>
<td>1 or 2 incorrect pitches</td>
<td>3-4 pitches incorrect</td>
<td>More than 5 pitches incorrect</td>
<td></td>
</tr>
<tr>
<td>Rhythm</td>
<td>All rhythms are correct</td>
<td>1-2 incorrect rhythms</td>
<td>3-4 incorrect rhythms</td>
<td>More than 5 incorrect rhythms</td>
<td></td>
</tr>
<tr>
<td>Tempo</td>
<td>Steady tempo—no stopping</td>
<td>1-2 hesitations per excerpt; steady tempo during the remainder of the excerpt</td>
<td>3-4 hesitations or stopping per excerpt</td>
<td>More than 5 hesitations or stopping per excerpt</td>
<td></td>
</tr>
<tr>
<td>Chord pitches (harmonization)</td>
<td>All chords contain correct pitches</td>
<td>1 or 2 chords contain incorrect pitches</td>
<td>3-4 chords contain incorrect pitches</td>
<td>5 or more chords contain incorrect pitches</td>
<td></td>
</tr>
<tr>
<td>Chord progressions (harmonization)</td>
<td>All chords progress in a logical order</td>
<td>1-2 chords do not fit in the progression</td>
<td>3-4 chords do not fit in the progression</td>
<td>More than 4 incorrect chords occur in the progression</td>
<td></td>
</tr>
<tr>
<td>Chord inversions</td>
<td>All chords are played/sung/named in the correct inversion</td>
<td>1-2 chords are not played/sung/named in the correct inversion</td>
<td>3-4 chords are not played/sung/named in the correct inversion</td>
<td>More than 4 chords are not played/sung/named in the correct inversion</td>
<td></td>
</tr>
<tr>
<td>Fingering</td>
<td>All fingerings are proper</td>
<td>1-2 improper fingerings</td>
<td>3-4 improper fingerings</td>
<td>Consistently incorrect fingerings</td>
<td></td>
</tr>
<tr>
<td>Balance</td>
<td>All hands/parts are performed with proper dynamic balance</td>
<td>One hand/part is too loud or too soft for a portion of the excerpt</td>
<td>One hand/part is too loud or too soft for the entire excerpt</td>
<td>All parts are out of balance for the entire excerpt</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

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