Article

The Effects of Peer Tutoring on the Aural Skills Performance of Undergraduate Music Majors

Victoria J. Furby[1]

Abstract

As workloads of faculty and staff increase in higher education, it seems important for new learning opportunities to be devised to improve individual progress through basic musicianship courses. Many university music departments rely on in-class instruction and individual work sessions with the instructors of these courses to enhance student understanding. The purpose of this project was to determine the effect of peer tutoring on the aural skills performance of undergraduate music majors. Success within the aural skills classroom was determined through evaluation of performances of sight-singing examples and melodic and rhythmic dictation exercises. While no significant differences were found between the control and treatment groups, informal positive benefits of peer tutoring were noted.

The development of aural skills has been the subject of extensive research in an attempt to find the best methodologies and practices to teach these valuable and necessary musical skills. Musical and nonmusical abilities and behaviors that have been found to contribute to aural skills success include aural imagery, frequency of sight-reading experience, range of difficulty of sight-reading experience, style of thinking and external locus of control, speed of information intake, and acquired expertise in the field (Kopiez, Weihs, & Ligges, & Lee, 2006). Some of the requisite skills are innate and cannot be externally controlled. Many students achieve the required standards through in-class instruction, but others need supplementary one-on-one instruction to be successful.

To improve student achievement, it is important to assess and assist students individually. In the collegiate setting, with increased emphasis on retention and enrichment of students, studies leading to superior instructional practices are vital to the knowledge surrounding the teaching and learning process. "Peer tutoring . . . is now an accepted strategy to promote learning and academic achievement across the curriculum" (Darrow, Gibbs, & Wedel, 2005, p. 16).

For the purposes of this study, the impact of a structured, peer-tutoring program on the acquisition of aural skills by collegiate freshman was examined. The teaching and tutoring practices used in this study were research based and applicable to K–12 music instruction, as well as collegiate aural skills courses.

Many studies have been undertaken to determine the most effective methodology of sight-singing instruction, and although no formal studies of dictation methodologies have been completed, teacher narratives about preparation have been published. The design and implementation of the tutoring program used in this study were based on common practice in aural skills instruction.

Along with the unique challenges posed by determining the most effective teaching methodologies for aural skills acquisition come additional demands on the university professoriate in teaching situations.

> Student numbers across the higher education sector have risen and the challenge of creating effective learning experiences grows more complex. It is necessary to provide prompt feedback on current progress and areas for development to improve quality of future work and impact individual motivation. (Cooper, 2008, p. 155)

Many strategies have been implemented to improve the quality of instruction and feedback in higher education, including written comments, iPod feedback, electronic communication, and peer tutoring (Cooper, 2008; Furby, 2011).

[1]State University of New York–Buffalo State College, Buffalo, NY, USA

Corresponding Author:
Victoria J. Furby, State University of New York–Buffalo State College, 1300 Elmwood Avenue, Rockwell Hall 203, Buffalo, NY 14222, USA.
Email: furbyvj@buffalostate.edu

Peer tutoring is defined as "an arrangement in which two students work together on an academic activity with one student providing assistance, instruction and feedback to the other" (Darrow et al., 2005, p. 15). Heron, Goddard, and Welsch (2003) defined several different types of peer tutoring at the K–12 level, including classwide peer tutoring: entire class divides into pairs; cross-age tutoring: tutor dyads comprise students of unequal ages; small group tutoring: dyads from classwide peer tutoring team up to form larger small groups; and one-on-one tutoring: tutoring for only the students who need help.

Tutoring efficacy has been well-documented, comparison of the different types of peer tutoring has shown that "[o]lder students are effective in implementing behavior improvement, but no single condition has produced universal gains" (Heron et al., 2003, p. 299). However, research into discipline-specific peer tutoring as an instructional strategy is in its infancy. Many benefits of peer tutoring have been observed for both tutor and tutee in disciplines within and outside the arts (Darrow et al., 2005; Sheldon, 2001). In a study of school-aged students, Sheldon (2001) observed that peer tutoring increased student achievement, problem-solving skills, independence, and self-initiative in tutees, and elevated levels of volunteerism and positive attitudes toward school for tutors. In addition, greater development of cognitive and performance skills and a quickened pace of learning were observed for both tutors and tutees. "[Peer tutoring] encourages tutors to stay on task, articulate the problem, and lead the tutee to the correct response" (Darrow et al., 2005, p. 19).

Studies that are specialized in the arts have shown that the benefits for tutors and tutees can reach across academic boundaries. "The [tutors] are making vital contributions to [tutees] and growing through the experience" (Thurston, 1994, p. 42). In a discussion of team teaching and learning the "key benefits of team teaching were seen as exposure to new ideas and additional feedback" (Wolner & Ginsborg, 2011, p. 318). Informal observation by Liebhaber (2001) showed that when tutors work with struggling students they reinforce their own dictation and solfège skills.

> [T]he student receiving the assistance benefits from the situation because having a peer explain something can sometimes be clearer than getting teacher feedback. Peers explain ideas differently than teachers do, and often that different way of communication is very beneficial. (Liebhaber, 2001, p. 35)

The studies of peer tutoring, within and outside the arts, have shown peer tutoring to be a viable and effective experience for all participants.

McClung (2001) documented seven commonly used melodic sight-singing systems including (a) interval names, (b) inflected pitch names, (c) noninflected pitch names, (d) fixed-do solfège, (e) movable-do solfège, (f) numbers, and (g) neutral syllables. Most studies have found no significant difference in effectiveness between pitch systems (Brown, 2001; Buchanan, 1979; Henry & Killian, 2005). However, multiple studies from throughout the United States have suggested that movable-do solfège is the most popular method of sight-singing instruction (Bradley, 2006; Collins, 1979; Demorest, 2001; McClung, 2001). Reasons for this popularity may include that movable-do solfège allows students to transpose easily between keys, solfège syllables provide the proper basis for good intonation, and syllables can be altered for chromatic pitches (Jeno, 1971; Rawlins, 2006).

Demorest (1998) discovered that students who received regular, individualized evaluation were significantly more successful in sight-singing. It was suggested that the added expectation of demonstration of individual performance skills might have helped increase student progress by motivating them to increase their individual practice. In addition, students who sight-sang successfully were more likely to have received instruction about specific sight-singing systems, preparatory strategies for individualized sight-singing examinations, and strategies for working on sight-singing tasks outside class (Furby, 2008; Henry & Killian, 2005).

The development of dictation skills has not been as rigorously researched as sight-singing skills; however, there are a number of instructional sources that contain practices that may be helpful. Many teachers have emphasized the importance of instructor and/or peer feedback (Liebhaber, 2001), isolation of rhythm and melody (Banton, 1995; Bland, 1984; Root, 1931; Wilson, 1954), listening before writing (Banton, 1995), recognizing patterns aurally (Banton, 1995; Bland 1984; Root, 1931), and singing silently or aloud while dictating (Klonoski, 2006).

Root (1931) suggested strategies that have become common practice in the aural skills classroom, regardless of age or level of proficiency. These suggestions included laying a foundation of tonality; familiarizing students with musical symbols; associating pitches with their location on the staff; inculcating an acute sense of rhythmic accent; teaching scales, modes, and intervals; explaining rhythmic forms and representations; including harmonies and modulation; and sharpening memory and concentration. Klonoski (2006) also recognized that the isolation of musical elements, including melody, harmony, and rhythm, is a traditional approach to teaching individual dictation skills. He emphasized that "[a]s students develop proficiency with individual skills, they must be taught to integrate these skills into a unified listening experience" (p. 58).

Students enter collegiate-level music departments with varying levels of training in the skills that comprise most aural skills curricula: sight-singing and dictation.

However, training in these skills is not necessarily a prerequisite for admittance to a music degree program, and some students begin their musical degrees with little or no training in these essential skills.

It can be assumed that the more time a student spends in music-making experiences, the more successful he or she is likely to be in the preparation and performance of aural skills. At the collegiate level, however, all students must attain a certain level of proficiency within a prescribed aural perceptions sequence, often limited to 2 years of instruction (or similar time constraints in other group-performance classes). In addition, students who have been given specific aural skills instruction within a group setting have been found to be higher achievers, yet peer/colleague instruction as a teaching tool has not been studied. The purpose of this study was to examine the effects of a structured peer-tutoring program on the aural skills performance of first-year undergraduate students.

Method

The aural skills course under investigation met for 1 hour, three times a week for 15 weeks, and was worth one academic credit at the institution, a 4-year liberal arts college with a music department of 150 majors. To determine effectively the impact of peer tutoring, it was first necessary to make decisions concerning the most advantageous sequence of instruction and choose melodic and rhythmic syllable systems for sight-singing and dictation instruction. In this way, students were assured a uniform delivery of material using a common language and understanding of functional building blocks. The beginning steps of aural skills instruction suggested by research and used during this study included (a) establish an aural background of familiar scale and chord patterns through listening and singing; (b) become acquainted with symbols and associate the aural understanding with the appropriate symbol; (c) isolate musical elements such as melody, harmony, and rhythm; (d) begin with stepwise motion, moving to thirds using the major and then minor scales; (e) begin with simple intervals in dyads, moving to triads using the tonic, dominant and then subdominant chord functions; and (f) begin with common time and 6/8 rhythmic instruction, moving from simple subdivisions to more complex rhythms including syncopation.

In-class sight-singing instruction included exercises to internalize movable-do solfège skills, to learn intervals, and to lay a foundation of tonality; there were melodic examples in which students moved from simple, duple, stepwise melodies in a major key to exercises in a variety of keys, tonalities, and time signatures with more difficult rhythmic and melodic patterns. In-class dictation instruction included common time and 6/8 rhythmic dictation, simple interval dictation, solfège recognition, tonality recognition, chord quality recognition, and eventually melodic and two-part melodic dictation integrating the skills learned through sight-singing.

Instruction took place during the first two class meetings each week, and each Friday students were given either a sight-singing performance or dictation assessment (called quizzes for the purposes of this course.) Students were administered sight-singing and dictation quizzes on alternate weeks of the semester. They completed a total of 10 weekly assessments (five singing/ five dictation), as well as midterm and final examinations, which contained both sight-singing and dictation components.

The weekly assessments, along with midterm and final examinations, were designed to complement in-class instruction, were sequential in nature, and were uniform in design and delivery. Original musical examples were developed for the purposes of this study. The examples were evaluated by three independent experts (a college instructor, a professional performer, and a music graduate student) for validity and found to be of appropriate length and difficulty for first-year undergraduate students. Although no formal calculation of reliability was completed, the same assessments from Fall 2010 were delivered in Fall 2011 and were stored in a secure location to address consistency issues. Quizzes and examinations were collected each week and were stored in a locked file cabinet in the instructor's office. In addition, the instructor of record for both semesters of the course remained the same, using the same in-class preparatory examples, so consistent instruction was provided for the control and treatment groups.

Scores on sight-singing and dictation quizzes were recorded as measures of student performance. Pretest scores consisted of the scores of the students on the first two weekly quizzes, one dictation, and one singing assessment. Posttest scores consisted of the scores on the final exam for the course, composed of both dictation and singing sections. The researcher, instructor of record for the course, was responsible for the scoring of all singing and dictation assessments for all students. Scores on assessments were recorded as measures of student performance on the two skills of sight-singing and dictation.

Scores for sight-singing assessments were calculated using the following point systems:

- Melody: 3 points for each measure—1 point in each measure for rhythm, 2 points in each measure for pitch
- Rhythm: 2 points for each measure
- Chords: 5 points for each chord sung correctly on solfège, both ascending and descending—1 point for solfège, 2 points ascending pitches, 2 points descending pitches
- Intervals: 2 points each interval—1 point ascending, 1 point descending

- Chord progressions: 2 points for each chord, 2 points for maintaining tonal center

Scores for melodic dictation assessments were calculated using the following point systems:

- Melody: 3 points for each measure—1 point in each measure for rhythm, 2 points in each measure for pitch
- Rhythm: 2 points for each measure
- Intervals: 2 points each interval—1 point type, 1 point quality
- Chords: 2 points for each chord—1 point for chord quality, 1 point for correct inversion symbol
- Chord progressions: 2 points for each chord, 2 points for maintaining tonal center
- Soprano-Bass dictation: 3 points for each measure—1 point in each measure for rhythm, 2 points in each measure for pitch

This scoring system was developed by the researcher and was previously agreed on by all instructors of record for all sections of the Aural Perceptions sequence at the college. This scoring system was adapted from the one developed for use in the Henry and Killian (2005) study (p. 58).

All assessments (both quizzes and examinations) included more than one musical example and a variety of activities for the students to complete. For example, a sight-singing assessment might ask the student to correctly count a rhythmic example, correctly sing several intervals on solfège, and correctly sight-sing a melodic example. Dictation assessments had similar variety. Raw scores were determined for each example by finding the number of pitches and/or rhythms sung or dictated correctly. All scores were converted into percentages by taking the total number of correct points divided by the total number of possible points on each assessment. Percentages were calculated and used so that the numerical differences between the assessments would not present a problem.

After identifying the weakest performers of the 2011 Aural Perceptions class ($n = 9$; 50%) on the first two assessments, the students were encouraged to participate in the peer-tutoring program and were defined as the treatment group. Approval of the Institutional Review Board was gained during the Summer of 2010, and students completed informed consent forms. These forms stated (a) students were not required to participate in the program and (b) the potential benefits of their participation, including increased knowledge of the subject matter, and potential success for the remainder of the four-semester Aural Perceptions sequence. All students identified as low performers elected to participate in the tutoring program and the research study. In addition, the Aural Perceptions staff selected five

tutors for the program, enlisting only those students who had successfully completed all four semesters of the Aural Perceptions sequence. Peer tutors were paid $10 per hour, for 10 weeks of tutoring services.

Each tutor worked individually with two of the identified freshmen from the Aural Perceptions I course, for an additional hour each week. Tutors had already received the instruction as former members of the class and were encouraged to use movable-do solfège and give specific and valid feedback during the tutoring sessions. Any specific focus for the tutoring sessions was at the discretion of the tutor and the tutee, depending on weaknesses observed during the tutoring session or during in-class activities and quizzes. Tutors also received a study packet created by the researcher each week and met with their students to prepare them for the weekly dictation or singing quizzes, as well as for the midterm and final examinations. For continuity, tutors were provided with an outline of course objectives to be reached by the end of the semester.

At the conclusion of the semester, comparisons of scores on both pretests and posttests between the control group (low 50% of 2010 Aural Perceptions I freshman class who received no peer tutoring) and the treatment group (low 50% of 2011 Aural Perceptions I freshman class who received peer tutoring) were undertaken. Also the subjects from the treatment group completed a brief survey to comment on their peer-tutoring experience.

Results

Comparison of Means

A t test for independent samples, conducted on the pretest data, yielded no significant difference between the two groups ($t_{18} = 1.54$, $p = .15$). The first two assessment scores (averaged to identify weakest performers) comprised the pretest for this study. Each group had a mean score between 85.00% and 90.00% on the pretest, the control group was slightly higher at 89.09% and the treatment group was slightly lower at 84.10%. Given the small number of participants in both the control ($n = 10$) and the treatment ($n = 9$) groups, there was no statistically significant difference between them on the posttest ($t_{18} = 1.58$, $p = .15$; see Table 1).

At the end of the 15-week instructional period, both groups' mean scores on the posttest had decreased from pretest scores. This outcome was expected, as the assessments become more challenging over the time period of the course. As seen in Table 1, the control group had a change score of (−11.96%) between the pretest and the posttest, whereas the treatment group had a change score of only (−1.45%). While the difference between groups was not statistically significant, the treatment group did have a descriptively higher performance in comparison with the control group on the posttest.

Table I. Means and Standard Deviations for Pretest and Posttest Sight-Singing.

	Pretest		Posttest	
	M	*SD*	*M*	*SD*
Control group	88.74	4.68	76.78	8.47
Treatment group	84.10	7.71	82.65	7.42

A comparison of the entire classes from both years revealed that there was no significant difference between classes from 2010 and 2011 on either the pretest (t_{37} = 1.03, *p* =. 21) or the posttest (t_{37} = 1.06, *p* = .21). Scores of nonparticipants (high-scorers) also revealed no significant difference between groups (see Table 2).

Figure 1 indicates that sometime around the midterm exam, the treatment group of low scorers began to perform at a descriptively higher level than the control group, a trend that continued for the rest of the semester.

Questionnaire Responses

At the conclusion of the semester, students from the treatment group were asked to complete a questionnaire to discuss their experiences. In response to the question "How often did you meet with your tutor?," eight of nine students reported meeting every week, with one or two missed sessions, while one reported missing more than three sessions. It should be noted that the student who missed multiple sessions was the only person not to achieve a passing grade for the course in the 2011 semester.

In response to the question "Are you happy you agreed to participate in this study?," every student indicated that they were pleased to have participated in the study. In response to the question "At the beginning of the semester, how did you feel about being selected to participate in the tutor study?," most students did not indicate any particular feelings at the beginning of the study. Responses ranged from "fine" to "had no feelings about the study." One student indicated that she was nervous about being selected to participate as she thought it meant she was behind in the coursework, and another indicated that he was excited for the extra help as he already knew he was struggling with the content. In response to the request to "describe a typical tutoring session," all students indicated that they worked from the assigned tutor packet. Only one student indicated that they worked beyond the tutor packet to things that she was really struggling with on quizzes and in class.

In response to the question "What was your relationship with your tutor?," all students indicated that they had positive tutor/tutee relationships, and that they considered their mentors to be friends and confidants. One student indicated that she had found it easier to integrate into department activities having developed a relationship with an upperclassman. Another student indicated that she felt comfortable approaching her tutor for a variety of different issues, including help with music theory and performance classes after working with her in the Aural Perceptions tutoring program.

In response to the request to "Describe your feeling about the tutor study today, at the end of the semester. Did your feeling change?," every student who participated indicated that they had positive feelings about their participation within the study, and that they were glad they participated. No one indicated that they had a change in feelings between the beginning and the end of the semester. One student answered, "This was great, I hope it continues to be offered to students in the future," while another wrote "I learned a lot from my tutor and think I have really improved in AP this semester."

## Discussion and Implications for Teachers

There are a number of qualifications that need to be made to the study's results. Since reliability was not calculated on the assessments in the current study, it is impossible to know whether there may be embedded error in the participant responses, which may also call into question the study's generalizability. Since quality of the peer tutoring and time spent in sessions were not controlled in the study, there are factors that could have been extraneous variables in the current study that would be useful to investigate in future peer-tutoring studies. Also any causal implications should be qualified when looking at the low scorers in comparison with the high scorers since regression is a possible reason for the low students' improvements.

Quite possibly due to the extremely small sample size, it is unsurprising that there were no statistically significant differences between the treatment and the control groups, although there may be some possible informal benefits that can be attributed to the peer-tutoring program. Although it is impossible to determine that the peer-tutoring instruction is the cause of these benefits, students within the treatment group also scored an average of 82.65% on the final exam, whereas the control group scored an average of 76.78%. It is possible that some part of the increased scores on the final exam may be attributed to the peer tutoring instruction received in this study. It should be noted that, without statistical significance, it is also possible that peer tutoring had no effect on the aural skills of sight-singing and dictation.

Although this study was undertaken at the undergraduate collegiate level, there may be implications for teachers in both the college and K–12 school situations.

Table 2. Means and Standard Deviations for Pretest and Posttest Sight-Singing for all Subgroups.

	Pretest		Posttest	
	M	*SD*	*M*	*SD*
2010 Nonparticipants (High scorers)	97.17	2.48	89.26	6.23
2011 Nonparticipants (High scorers)	97.72	1.96	87.23	6.07
2010 Entire class (Control + nonparticipants)	93.46	5.77	82.28	8.88
2011 Entire class (Treatment + nonparticipants)	90.25	8.81	85.76	7.48
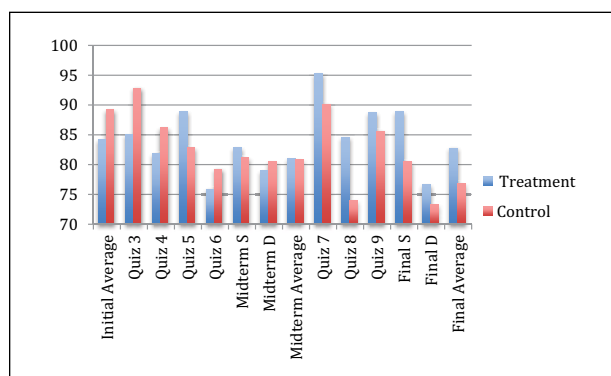
Figure 1. Average scores for the treatment and control group on each assessment.

The members of the tutor group described several possible perceived musical and nonmusical benefits. The idea that tutees felt comfortable approaching their tutor for a variety of different issues, including help with music theory and performance classes, after working with them in the Aural Perceptions tutoring should not be overlooked. Also, integration into department activities is an important part of belonging to a small collegiate music department, as it is to any program or classroom in which teamwork and ensemble plays an important role. Finally, all tutees indicated that they enjoyed participating in the study, enjoyed working with their tutor, and several suggested that this program be continued for future student populations. Providing individualized instruction for students (without seriously overloading the schedule of already busy teachers) through the use of peer tutoring seems to have provided enjoyable and valuable experiences for students.

Finally, looking ahead to the continued participation of the study participations within the described music department, it should be noted that eight members of the treatment group successfully completed the four-semester aural skills curriculum in the appropriate 2-year timeline, while only five members of the control group were successful in completing the coursework. The members of both the control group and the treatment group who failed to complete the coursework in four semesters dropped out of the music major (a typical reaction in the described department) for a retention rate of 88% and 50%, respectively. The poststudy information gathered may suggest that students who are successful may be more likely to be retained within a program; this should be a consideration for both K–12 and collegiate music educators.

Additional applications for teachers at elementary, secondary, and collegiate level can be gleaned from the relevant research. The study of peer-tutoring research provides some practical applications for teachers. Several different types of peer tutoring may be useful, including classwide peer tutoring, small group tutoring, one-on-one tutoring, and the one this study was based on, cross-age tutoring. Since several different types of peer tutoring have been documented as successful, perhaps teachers should explore the various options for incorporating peer tutoring, in that research has suggested possible benefits for both tutors and tutees. The advantages of using peer tutoring may include the following: increased student achievement, elevated levels of volunteerism, greater development of performance skills, increased independence, exposure to new ideas, increased and varied feedback, and better relationships within the classroom (Heron et al., 2003; Sheldon, 2001; Wolner & Ginsborg, 2011).

The review of literature surrounding the teaching of aural skills leads to several applications for teachers. The importance of sequential instruction cannot be overlooked. Research both within and outside the music curriculum supports moving from the known to the unknown and from easier to more difficult material as the most effective methodology for teaching new information. The research also has indicated that movable-do solfège and counting on numbers are the most frequently used melodic and rhythmic symbol systems in the United States (Bradley, 2006; McClung, 2001). Although no one symbol system has been found to be superior to the others, a consistent application of methodology throughout a student's musical education has been found to provide the highest rates of success (Brown, 2001; Demorest, 2001). Finally, it has been proposed that aural skills should be practiced everyday (Demorest, 2001) and that individualized testing of

aural skills may improve student motivation (Demorest, 1998; Henry & Killian, 2005).

Since musical and extramusical benefits of peer tutoring have been suggested, and applications for teachers of all ages have been discussed, it is important to continue research on this topic. Limitations of the current study include the small-sample size, the limited age range of the students, the lack of reliability information on the assessment measurements, threats to internal validity, and the lack of information gathered from the tutors. Further research studies in this area could be attempted to address these limitations and to determine the efficacy and effects of peer tutoring in the music curriculum. Suggestions for further study include (a) focusing on the benefits of peer tutoring to the tutor (rather than the tutee), (b) conducting a study with a larger population of aural skills students, (c) examining technological tools designed to facilitate aural skills peer tutoring from a distance, (d) investigating the impact of peer tutoring on other musical skills including performance and/or music theory, or (e) investigating aural skills peer tutoring in which the tutor determines what will be taught in the tutoring session. This continued research may help (a) to improve the performance and enjoyment of music students, (b) to lead to more classroom or department involvement by music students, and (c) to increase retention in music programs.

Declaration of Conflicting Interests

Funding

References

Banton, L. J. (1995). The role of visual and auditory feedback during the sight reading of music. *Psychology of Music*, *23*(1), 3–16.

Bland, L. (1984). *Sight singing through melodic analysis*. Chicago, IL: Nelson Hall.

Bradley, K. (2006). Teaching strategies related to successful sight singing in Kentucky choral ensembles. *Update: Applications of Research in Music Education*, *25*(1), 70–81.

Brown, K. D. (2001). *Effects of fixed and movable sight singing systems on undergraduate music students ability to perform diatonic, modulatory, chromatic and atonal melodic passages* (Unpublished doctoral dissertation). University of Oregon, Eugene.

Buchanan, W. (1979). *Comparison of fixed-do and movable solfege in teaching sight singing from the staff* (Unpublished doctoral dissertation). University of Michigan, Lansing.

Collins, T. (1979). *Current attitudes and trends in the teaching of sight singing in higher education* (Unpublished doctoral dissertation). Temple University, Philadelphia, PA.

Cooper, S. (2008). Delivering student feedback in higher education and the role of podcasting. *Journal of Music, Technology and Education*, *1*, 153–162.

Darrow, A., Gibbs, P., & Wedel, S. (2005). Use of classwide peer tutoring in the general music classroom. *Update: Applications of Research in Music Education*, *24*(1), 15–26.

Demorest, S. (1998). Improving sight singing performance in the choral ensemble: The effect of individual testing. *Journal of Research in Music Education*, *46*, 182–192.

Demorest, S. (2001). *Building choral excellence: Teaching sight singing in the choral rehearsal*. New York, NY: Oxford University Press.

Furby, V. J. (2008). *Process and product: An investigation of the sight singing backgrounds and behaviors of first-year undergraduate students* (Unpublished doctoral dissertation). The Ohio State University, Columbus.

Furby, V. J. (2011, October). *The effect of varying feedback situations on the sight singing performance of undergraduate music majors*. Poster presented at the 2012 International Society of Scholarship and Teaching and Learning Conference, Hamilton, Ontario, Canada.

Henry, M., & Killian, J. (2005). A comparison of successful and unsuccessful strategies in individual sight singing preparation and performance. *Journal of Research in Music Education*, *53*, 51–65.

Heron, T., Goddard, Y., & Welsch, R. (2003). Applications of tutoring in specialized subject areas. *Remedial and Special Education*, *24*, 288–300.

Jeno, A. (1971). *Growing in music with movable do: Translation of the original Kodály method*. Highland Park, NJ: Georgiana Petersen Press.

Klonoski, E. (2006). Improving dictation as an aural skills instructional tool. *Music Educators Journal*, *93*(1), 54–59.

Kopiez, R., Weihs, C., Ligges, U., & Lee, J. (2006). Classification of high and low achievers in a music sight reading task. *Psychology of Music*, *34*(1), 5–26.

Liebhaber, B. (2001). Steps toward successful dictation. *Teaching Music*, *8*(6), 32–36.

McClung, A. (2001). Sight singing systems; Current practice and survey of all-state choristers. *Update: Applications of Research in Music Education*, *20*(1), 3–8.

Rawlins, R. (2006). Sight singing for instrumentalists. *American Music Teacher*, *55*(3), 26–29.

Root, F. (1931). *Methodical sight singing: Lessons in vocal culture*. Bryn Mawr, PA: Theodore Presser.

Sheldon, D. A. (2001). Peer and cross age tutoring. *Music Educators Journal*, *87*(6), 33–38.

Thurston, J. K. (1994). Art partners: A new focus on peer tutoring. *School Arts*, *94*, 41–42.

Wilson, H. R. (1954). *Sing a song at sight: A practical and rapid method of developing music reading*. Chicago, IL: Hall & McCreary.

Wolner, C., & Ginsborg, J. (2011). Team teaching in the conservatoire: The views of music performance staff and students. *British Journal of Music Education*, *28*, 301–323.