AN EXAMINATION OF METHODS USED TO TEACH
PRACTICE STRATEGIES IN THE COLLEGE VOICE STUDIO

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by

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The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

AN EXAMINATION OF METHODS USED TO TEACH
PRACTICE STRATEGIES IN THE COLLEGE VOICE STUDIO

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AN EXAMINATION OF METHODS USED TO TEACH
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ABSTRACT

This study was designed to inform researchers and educators about practice instruction in the college voice studio by gathering baseline data about the current methods used by voice instructors for teaching practice strategies. In addition, the value instructors placed on specific practice strategies, the extent to which they used specific practice strategies themselves, and the methods used to assess students' practice habits were examined. Voice instructors from accredited institutions in three Midwestern states were invited to participate in a researcher-designed survey. Survey items were designed to answer research questions pertaining to (a) the types of practice strategies addressed in the college voice studio and to what extent, (b) the methods used to assess students' musical achievement, and (c) the value instructors placed on specific practice strategies. Forty-six respondents completed the survey, resulting in a useable response rate of 21.39%.

Results of this study indicated that participants used logs and journals to keep track of students' progress in lessons and practice time. There was almost no consensus among these voice instructors regarding how final grades were calculated for applied lessons, however, weekly preparation and studio class participation were frequently considered when assigning grades. Participants tended to address a variety of practice strategies in the voice studio at least to some extent. Results indicated that they valued

and used score study more often than any other practice strategy, but other strategies also were rated highly. Findings suggest that although these collegiate voice instructors seemed to be incorporating a variety of assessment and teaching strategies into their studio instruction, no obvious, universal formula for teaching college singers to practice could be identified.

CHAPTER ONE

Introduction

Learning how to practice is a vital part of young singers' development into successful, independent musicians. Singers practice using a variety of strategies, such as altering the song's tempo, repeating small fragments, isolating the most difficult sections of a piece, or speaking the text in rhythm, yet some singers are not aware of how the strategies chosen for independent practice affect their musical growth. Without an intentional practice plan, singers can waste their practice time focusing on trivial tasks instead of working to achieve a specific goal. Voice instructors can help their students understand how to set goals, assess their performance, and choose effective practice strategies for improvement; however, doing so is a challenging task. Most teachers would agree that practicing is important for students in order for them to master the techniques and musical skills required to perform, yet studio instructors do not seem to agree upon how to introduce practice techniques in private lessons with their students. The teacher's role, however, plays an important part in teaching musicians how to practice effectively. The style of the teacher should accommodate each student's individual personality and musical goals in order to find the best method for teaching students how to practice most effectively.

The Influential Role of the Teacher

The effective practice strategies recommended by the body of related literature are not linked consistently to the reality of what takes place during students' practice and lesson times. The lesson format used by the studio instructor has been found to influence

how students spend their practice time (Barry, 2007). When structured practice was not enforced during lessons, the college-aged students became less structured during their actual practice time (Koopman, Smit, de Vugt, Deneer, & den Ouden, 2007). The teacher's role during the lesson is therefore instrumental in shaping students' practice. Several experts agree that teaching students how to practice should be a consistently emphasized goal in every lesson if students are expected to develop good practice habits (Barry, 2007; Barry & McArthur, 1994; Cooper, 2004; Wolfe, 1984).

Studio teachers have reported that they discussed the importance of practice and shared practice strategies with their students, although details were revealed that would lead to a different conclusion (Barry & McArthur, 1994). Barry and McArthur found that despite the strong positive evidence for certain practice strategies supported by the literature, teachers' perceptions of their instruction of those strategies did not match the reality of what happened during lesson times. This study has revealed a potential flaw in the methods used by some teachers during lessons.

Teachers have perceived their students to be practicing more efficiently than the students reported (Kostka, 2004). Even when teachers do prescribe effective practice strategies for students, it cannot be guaranteed that the students will engage in those strategies when practicing independently. The lack of a practice routine was evident in data collected from studies in which researchers observed students practicing (Leon-Guerrero, 2004; Miksza, 2007).

It appears that there is a communication gap between teachers' perceptions of their practice instruction and students' actual practice behavior. Studio instructors must stay diligent in bridging this gap so that students can learn how to make the most of their

practice time. One way teachers can do so is to strive for consistency when it comes to incorporating practice strategies into studio instruction. Observing students practicing during lesson time, using questioning as a method for students to self-assess technical successes or failures, or documenting short- and long-term goals on a weekly practice plan are examples of possible methods for teachers to use for informing students' practice habits. The teacher plays an important role in guiding students to think independently and to choose strategies for practicing that work best for them.

Types of Practice Strategies

The most commonly investigated practice strategies in the research literature may be divided into the following categories: using models for practice, structured practice, supervised practice (including parental supervision), mental practice, and amount of practice time. It is important for teachers to understand what strategies work best and why so that they may better teach their students how to use those strategies.

Many researchers have explored the usefulness of modeling as a practice tool, with varied results (Anderson, 1981; Barry & McArthur, 1994; Barry & Hallam, 2002; Dickey, 1992; Henley, 2001; Linklater, 1997; Puopolo, 1971; Rosenthal, 1984; Rosenthal, Wilson, Evans, & Greenwalt,1988; Zurcher, 1975). While not consistent throughout all the literature, studies have indicated that modeling can help students gain achievement in specific musical techniques.

In addition to the use of models for practice, another commonly researched practice technique is to provide students with a structured practice plan. When students are specifically guided through their practice sessions, they are more able to achieve performance success (Barry, 1992; Barry & Hallam, 2002). Teachers can design a

practice "prescription" that is customized for the individual learner (Barry, 1992). The specific techniques used in such structured practice sessions could be shared with students as a way to tailor their individual practice sessions to meet specific singing goals.

Supervised practice has yielded positive results similar to those of structured practice. Several researchers have studied the role of parents in student practice sessions. The overall quality of the students' practice was improved when being supervised by an adult (Barry & McArthur, 1994; Brokaw, 1983; Sperti, 1970). Parental supervision of students practicing at home was found to be strongly associated with student achievement (Brokaw, 1983). The fact that students seem to achieve in a structured, supervised practice environment is further evidence that students are in need of guidance for individual practice time.

When compared to other practice strategies, a large quantity of research has indicated that the amount of time spent practicing is not a factor contributing to successful performance. Researchers have examined practice techniques such as supervised practice, structured practice, use of models, and amount of time spent practicing only to find that time alone was not an indicator of achievement (Anderson, 1981; Barry & McArthur, 1994; Bathgate et al., 2011; Brokaw, 1983; Linklater, 1997; Madsen, 2004; Rubin-Rabson, 1940). The way time is distributed for practice, however, was found potentially to be helpful for musicians (Dail & Christina, 2004; Duke, Simmons, & Cash, 2009; Shea, Lai, Black, & Park, 2000; Tsutsui, Lee, & Hodges, 1998). The existing literature that questions the relevance of time spent practicing to music achievement strengthens the need for teachers to instruct students how to use their

practice time strategically to meet specific goals, rather than focus on a specific time quota.

Of all the practice strategies, mental practice has been the least researched. Mental practice has been considered as an effective practice strategy by a few authors (Barry & Hallam, 2002; Barry & McArthur, 1994; Connolly & Williamon, 2004; Rosenthal et al., 1988). Several researchers have discovered that mental practice may be the most effective when combined with physical practice (Brooks, 1995; Coffman, 1990; Ross, 1985). Still, more research would be informative regarding the effectiveness of mental practice for musicians.

Need for the Study

Although general guidelines have been offered regarding which practice strategies are most effective and how to introduce them to novice musicians, the vast majority of the extant literature has focused on instrumental players. Few specific applications have been made available for vocalists, and there is very little research to be found related to vocal music practice behaviors and strategies. Knowledge about the practice habits of vocalists may help teachers choose strategies more confidently and effectively. Voice practice may differ from instrumental practice in terms of structure, time spent, or strategies used. Also, vocalists seem to start private lessons with a professional instructor at a later age than instrumental students, which may cause additional differences in practice habits. It seems that an appropriate place to begin to fill the gap in literature is with an investigation of the current teaching practices of college voice instructors. More specifically, understanding the practice strategies taught, the methods of assessment used,

and the value placed on practice strategies may help inform researchers and teachers about practice instruction.

Statement of Purpose

The purpose of this study was to inform teachers and researchers about the methods used by voice instructors to address practice strategies in college-level studio instruction. Baseline data were gathered about current voice teaching methods with the goal of understanding the practice strategies used and valued, the methods used to assess students' musical achievement, and the influential role of the teacher. The findings have the potential to provide voice instructors with ideas for implementation in their studios, and information for determining how their own instruction of practice strategies compares with those of their peers.

I posed several research questions regarding the instruction of practice strategies in the voice studio to guide this research. In order to gather information about current practices in college voice instruction regarding practice strategies, I sought to answer the question, "What types of practice strategies are addressed in the college voice studio and to what extent?" The responses to this question enabled me to compare the current practices of college voice instructors to the existing literature on practice, and also allowed me to identify trends in practice instruction among the participants.

Given that musical achievement is the main goal of practice and lessons, it is important to know how instructors are monitoring and evaluating their students' musical progress through practice and lessons. Thus, I posed the second research question, "How do voice instructors assess students' musical achievement?" with the intention of understanding the overall assessment methods of students, as may be related to practice.

Two subquestions were used to address practice and lesson achievement more specifically: Question 2a, "How do voice instructors keep track of students' practice?" and Question 2b, "How do voice instructors keep track of students' progress in lessons?" Because grades provide a direct method of documenting achievement, I wished to gather additional information about the assessment methods used by voice instructors by asking Question 2c, "What criteria are used by voice instructors to assign grades to students, and how are these weighted?" From my personal experiences as a college voice instructor, I wondered how much weight was assigned to jury performances, attendance, and other assignments (such as weekly preparation or studio participation) when determining a student's final grade. The weight an instructor chooses to place on these activities could reveal how much they value such tasks. For example, if an instructor placed more weight on weekly preparation versus the jury, perhaps there was more interest in monitoring students' weekly progress, which likely has a direct relationship to the practice that occurred during the week.

The instructor plays an important role in shaping students' practice habits. Because instructors choose the strategies included in lessons, students tend to model practice sessions after their typical lesson format (Barry, 2007; Cooper, 2004; Kostka, 2002). Based on this information, I posed my third research question, "How do voice instructors influence student practice?" To find more specific information, I asked the following sub-questions: (3a) "What types of practice strategies are used in a typical voice lesson?" (3b) "How much do voice instructors value specific practice strategies?"

It seems logical to consider that teachers would teach strategies that they themselves used in their own vocal practice. In the absence of prior related literature I

was interested in exploring this idea further, and so sought responses to the question

labeled 3c: "What are the practice habits of voice instructors?"

Definitions

The following definitions were used in this study:

1. A *lesson/practice log* is a document used by the student to record strategies used and amount of time spent in a practice session.

2. A *practice plan* is a list of practice goals used for a single practice session with strategies for reaching each goal.

3. A *lesson journal* is a student-created document used to track daily progress in lessons and/or practice.

4. A *lesson contract* is a document usually created by both the student and teacher, which sets short- and long-term goals for the student to achieve.

5. A *model recording* is an audio or video representation of an ideal sound quality for the student to achieve.

6. *Structured practice* is a method of practicing in which a student uses a strategic plan to meet practice goals.

7. *Supervised practice* is the term for a practice session in which a parent or teacher observes the student and may or may not give feedback during the process.

8. *Distributed practice* is the act of dividing practice into several, short sessions instead of one, long session.

9. *Mental practice* is the act of internally visualizing the elements of a quality performance.

10. The terms *voice instructor* and *teacher* are used interchangeably to refer to the leader of the lesson.

11. The terms *student* and *singer* are used interchangeably to refer to the person receiving instruction.

12. The terms *college* and *collegiate* are used interchangeably to refer to instruction at universities, conservatories, private colleges, community colleges or other post-secondary institutions.

CHAPTER TWO

Review of Literature

This study was intended to provide researchers and educators with information about practice instruction in voice by gathering baseline data about current teaching methods of college voice instructors. Voice instructors at accredited institutions in Illinois, Iowa, and Missouri were invited to participant in a survey designed to address the research questions.

This review of literature is organized into three main sections: (a) practice motivation and self-regulation of private voice students, (b) the teaching style of the studio instructor and its influence on student practice, and (c) types of practice. Extant literature has focused on the identifying trends among self-regulated learning habits of musicians and has informed instructors of ways to motivate independent learners to practice through goal setting, practice records, and self-evaluation. Professional literature also has reported that the teaching style of studio instructors and the way lessons are structured have influenced student practice. The types of practice referred to in existing research—structured, supervised, mental practice, modeling, and amount of practice time—are reviewed in the final section of this chapter.

Factors that Inform Practice

Self-regulated learners have the ability to set practice goals, plan and implement strategies for practice, and assess their own progress (Prichard, 2012). A music student who can successfully self-regulate is one who engages in practice that results in the improvement of a particular skill (Ali, 2010; Miksza, 2012). In order to be a fully self-

regulated learner, one must engage in self-observation, self-judgment, and self-reaction (Ali, 2010). Self-efficacy is a person's belief in his or her own ability to reach a certain goal (Frey-Monell, 2010). McPherson and Zimmerman (2002) identified students' self-beliefs, or self-efficacy, as a primary motivator for music learning. Musicians with high self-efficacy were shown to have used higher order thinking skills when practicing, and were able to use a larger variety of practice strategies (Cahill-Clark, 2013). Thus, the level of self-efficacy felt by a musician may have an impact on his or her self-regulatory capabilities.

The relationship between practice strategies and self-regulation. Several researchers made connections between the self-regulatory abilities of students and the number of practice strategies used. In a survey of sixth-grade musicians, researchers found that students who were able to use more practice strategies had higher self-regulation skills than students who only reported using one strategy for practicing a difficult piece of music (Austin & Berg, 2006). Using a greater number of practice strategies was linked to higher self-regulation skills in a similar study conducted by Rohwer and Polk (2006). Participants in this study were eighth-grade instrumentalists who were asked to articulate practice strategies during 5-minute practice sessions. Researchers compared participants' performance scores to the number of practice strategies they were able to articulate. Results indicated a positive correlation between performance improvement and the number of verbalized practice strategies. The authors also concluded that the participants with the lowest mean gain scores for performance did not stop to fix errors during their practice session, whereas students who continuously analyzed and corrected errors made significantly more performance gains. Therefore, the

ability to choose from a variety of practice strategies and to detect errors resulted in increased performance achievement (Rower & Polk, 2006). The ability to vary practice strategies is an important step to becoming a successful, self-regulated learner (Kim, 2008). The evidence in the existing literature supports the idea that teachers must make a wide variety of practice strategies accessible to students so that they are more able to become self-regulated learners.

Although the key to self-regulation has been identified as the ability to use a variety of practice strategies, many young musicians are still unable to self-regulate successfully (Austin & Berg, 2006; Hallam, 2001; McPherson & Renwick, 2001; Pitts, Davidson, & McPherson, 2000; Pritchard, 2012; Stambaugh, 2010). Through many observational studies, researchers have found that beginning music students often chose from a limited bank of practice strategies, and were unable to correct their mistakes (Leon-Guerrero, 2004; Lisboa, 2008; McPherson & Renwick, 2001; Miksza, 2007; Miksza, Prichard, & Sorbo, 2012; Rohwer & Polk, 2006). The most commonly cited strategy used for practice was repetition (Lisboa, 2008; Leon-Guerrero, 2004; Miksza, Prichard, & Sorbo, 2012; Prichard, 2012). Slowing or reducing the tempo to increase accuracy, also was listed as a common practice tool for young musicians (Christensen, 2010; Leon-Guerrero, 2004; McPherson & Renwick, 2001; Miksza, Prichard, & Sorbo, 2012; Rohwer & Polk, 2006). Focusing on difficult passages and marking or analyzing music were cited as effective strategies in the literature, but these strategies were not the most popular among musicians who participated in observational studies (Leon-Guerrero, 2004; Miksza, 2007; Rohwer & Polk, 2006). Because musicians have not been using all of the practice strategies known to be effective, intervention is necessary.

Without explicit instruction, students did not know how to transfer skills learned in lessons to their own practice sessions or how to detect errors, which resulted in the internalization of musical mistakes (Lisboa, 2008). Despite the evidence that young musicians may not be able to self-regulate with success, Prichard (2012) emphasized that young musicians who do self-regulate, even if poorly, "are more likely to practice harder, achieve greater success, and be more confident in their abilities than are peers who do not possess the tools necessary for self-regulated practice" (p. 58). Perhaps persistent and explicit communication of goals is the key when instructing students to be self-regulated in the practice room.

The importance of setting goals. Authors of professional literature have expressed that students who play an active role in their learning tend to be more engaged and motivated (Barry & Hallam, 2002; Bathgate, Sims-Knight, & Schunn, 2011; Brändström, 1995/1996; DeMaris, 2012; Mackworth-Young, 1990; Zarro, 2003). Having students set their own learning goals for lessons and individual practice is a specific way for students to be engaged in the learning process (Barry & Hallam, 2002; Bathgate, et al., 2011; Brändström, 1995/1996; Wolfe, 1984). Several experts have stressed the importance of goal setting in the private music studio (Brändström, 1995/1996; Christensen, 2010; Clemmons, 2006; Johnson, 2009; Kenny, 1998; Kim, 2008; Miksza, 2012; Oare, 2011; Prichard, 2012). Oare (2011) described how goal setting increased students' motivation: "When teachers instruct their students to set clear, challenging, and proximal goals, students become empowered to learn on their own" (p. 44). More specifically, setting clear and realistic goals can make students feel successful, competent, and more confident, which facilitates a positive rapport between teacher and

student (Clemmons, 2006). In order to establish a routine of setting goals, a method of documenting ongoing goals for each student must be developed.

  Designing practice records. Extant literature emphasizes the positive potential of journals, practice sheets, portfolios, and/or contracts as assessment tools when incorporated into studio instruction, (Barry & Hallam, 2002; Bathgate et al., 2011; Boyd, 2013; Brändström, 1995/1996; Johnson, 2009; Koopman et al., 2007 Mackworth-Young, 1990; Oare, 2011; Peterson, 2001; Wolfe, 1984; Zarro, 2003) although it must be noted that these types of tools can be de-motivating if used inappropriately (i.e., tracking minutes or other non-musical goals) (Smeltz, 2012). In order to determine the most appropriate self-report measure of self-regulated practice behaviors of beginning and intermediate instrumentalists in grades six through eight, Miksza (2012) tested the reliability and validity of several factors to incorporate into practice questionnaires. He determined that self-efficacy, method and behavior, time management, and social influences were the most informative factors for teachers to address with their students as the students learned to self-regulate their practice habits. This four-factor model described by Miksza was consistent with the assertions of McPherson and Zimmerman (2002) that self-regulation theory indeed has a place in music education research. Practice sheets, journals, and other assessment tools that address the four factors identified in research can enable teachers to better understand their students' needs, and whether or not those needs have been met. Templates and sample practice sheets have been shared by many experts and can be utilized by teachers when planning lessons and practice sessions with students (Johnson, 2009; Oare, 2011; Peterson, 2001). Students also can use

practice sheets to evaluate what they accomplished in each practice session in order to inform their future learning goals.

Self-evaluation. Self-evaluation has been identified as a key element if students are to develop self-regulatory practice skills (Brändström, 1995/1996; Brown, 2009; Kim, 2008; Johnson, 2009; McPherson & Renwick, 2001). A combination of goal setting, the appropriate use of a variety of practice strategies, and self-evaluation (self-reflection) is the ideal model for effective practice (Johnson, 2009; Kenny, 1998; Kim, 2008). Diaries or practice journals are useful tools for encouraging students' self-evaluation and can enhance the self-regulatory learning experience (Brändström, 1995/1996; Kim, 2008; McPherson & Renwick, 2001). However, not all students may be receptive to the idea of journaling. Kim (2008) warned that unless an instructor can convince students of the potential learning benefits, "the desire or motivation to keep a diary can wane if one loses interest or does not see immediate fruits of one's labor" (p. 10). Another limitation of journaling is that students may only write what they assume the instructor wants to hear rather than a true reflection of their progress (Brown, 2009). Students must be given explicit instruction of learning outcomes when incorporating practice journals or diaries into their practice strategies.

Lesson contracts and motivation. Lesson contracts can be used to create a reward program that motivates the student to work diligently not only in their lesson, but during their individual practice time (Barry & Hallam, 2002; Boyd, 2013; Wolfe, 1984). Wolfe (1984) insisted that, "In order for practicing to be productive, the teacher must assume responsibility for assisting the students in structuring the practice routine (music environment) so that the student will learn behaviors necessary for achievement" (p. 34).

In order to establish good practice behavior, Wolfe suggested that the beginning student and teacher create a contingency contract, which contains a set of practice goals in clear terms, with a "menu" of rewards or incentives that both the student and teacher agree upon. Boyd (2013) found that the use of incentives allowed students to work at their own pace on a clear path to success and receive recognition, which motivated them to reach new levels of achievement. Using contracts to set practice goals together as a student/teacher team also can build rapport in the music studio.

Rapport and motivation. In addition to the personal musical goals, the emotions and psychological needs of students should be considered so that a teacher can create the best learning environment for each student (Mackworth-Young, 1990). Students must believe that teachers value their thoughts and feelings so they can be confident and successful outside of the lesson environment (i.e., in a practice room). To summarize, Clemmons (2006) stated:

> The emotional connection rapport creates between teacher and student is dynamic and significant. This connection creates a sense of relatedness in the student that fosters motivation. Because the relationship between rapport and motivation is so strong, the relationship's success can be an indication of the success of the student. (p. 209)

Teaching Styles and Perceptions of Studio Instructors

The teacher's role is an important part of teaching musicians how to practice effectively. The style of the teacher should accommodate each student's individual personality and musical goals in order to find the best method for teaching students how to practice most effectively. Teaching styles vary depending on the philosophy of the

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teacher, but the existing research tends to favor a student-centered learning environment in order to achieve success in studio instruction (Bathgate et al., 2011; Beheshti, 2009; Koopman, Smit, de Vugt, Deneer, & den Ouden, 2007; Mackworth-Young, 1990; Zarro, 2003). When comparing traditional teachers to constructivist teachers in the applied music studio, Zarro (2003) found that students who were taught using the constructivist (student-centered) approach were more able to think independently and creatively than students taught under the traditional model (teacher-centered). The students taught by constructivist teachers, who placed their attention on the student's personal goals, could essentially educate themselves because they were taught to think about and evaluate the successes and failures in a lesson. Furthermore, identifying a student's dominant learning style can enable a teacher to fully develop an individualized instructional approach (Beheshti, 2009). Understanding the most effective learning style of the student (i.e., visual, kinesthetic, or auditory) can help determine which practice strategies will work best and should change the way a teacher approaches each student's lesson time.

  Metagconition in student-centered instruction. Metacognition, or thinking about thinking, is a natural occurrence in student-centered instruction (Bathgate et al., 2011; Barry & Hallam, 2002). In one study, students who received metacognitive training scored higher on performance tests than students who had not received such training (Bathgate et al., 2011). The adolescent students were taught under the following metacognitive teaching structure: (1) Plan—students analyzed music, identified problem spots, and verbalized ways they could address those problems; (2) Play—students played the piece while listening to their performance; (3) Evaluate—students identified their successes and challenges, the strategies they used, and determined the value of those

strategies; (4) New strategies—students described new ideas for practicing the piece

(Bathgate et al., 2011). The students' success was a result of their verbalization of

learning processes and reflection upon their learning, which also caused them to practice

more effectively (Bathgate et al., 2011).

Toner (2010) also recommended engaging young students in metacognition by (a)

using questioning as a teaching method during lessons and (b) using practice charts

during lessons for detailed note taking. The use of questioning allowed students to

develop error detection skills with the guidance of their teacher. The students and their

parents read the lesson notes each day. As a result, Toner insisted that, "My expectation

rose, many students improved, and I realized that all students can engage in effective

practicing if given the right support" (2010).

Incorporating lesson notes and questioning involves more instruction and slightly

less playing time, but this shift in pedagogy has not been found to hinder students' self-

evaluation accuracy or music performance (Hewitt, 2011). Students in grades 5 through

8 were divided into three treatment groups: one group that received self-evaluation

instruction; one group that completed self-evaluation without instruction; and a control

group that did not complete a self-evaluation. There were no significant differences in

music performance scores or the accuracy of the self-evaluations among groups, which

indicated that taking the time for metacognition would not thwart any performance goals

(Hewitt, 2011). In one study, students who were engaged in more verbal communication

during lessons also performed better (Henniger, Flowers, & Councill, 2006), which is

contrary to the belief that spending more time playing and less time talking would result

in better performance achievement.

Despite the potential benefits of a student-centered teaching style, many studio instructors rely upon traditional teaching based on the master-apprentice method, in which the teacher is in control of the goals and procedures of each lesson, and is the primary facilitator of feedback (Koopman et al., 2007; Mackworth-Young, 1990; Zarro, 2003). There are some negative outcomes of this teacher-directed environment. For example, lessons taught using the master-apprentice approach require students to incorporate specific directions from the teacher when working on a specific piece, but the students cannot transfer the techniques learned to other pieces beyond the lesson (Koopman et al., 2007). This "traditional" teaching method trains students to wait for direction from their teacher, instead of exploring and solving problems on their own (Zarro, 2003). Also, students in this type of environment are left with little creative opportunity, because the teacher is molding the student according to the teacher's own experiences rather than shaping the lesson to the individual student's needs (Zarro, 2003). Students can become frustrated with or distressed when the teacher loses touch with their individual goals (Mackworth-Young, 1990).

Teacher perceptions of student practice. The effective practice strategies recommended by the body of literature are not linked consistently to the reality of what takes place during students' practice and lesson times. The lesson format used by the studio instructor has been found to influence how students spend their practice time (Barry, 2007; Cooper, 2004; Kostka, 2002). Students used the techniques emphasized in their lessons by their instructor for their personal practice time (Barry, 2007). When structured practice was not enforced during lessons, the students became less structured during their actual practice time (Koopman et al., 2007). The teacher's role during the

lesson is therefore instrumental in shaping students' practice. Several experts agree that

teaching students how to practice should be a consistently emphasized goal in every

lesson if they are expected to develop good practice habits (Barry, 2007; Barry &

McArthur, 1994; Cooper, 2004; Pedrick, 1998; Wolfe, 1984).

Teachers have perceived themselves as teaching effective practice strategies, but

have provided contradictory evidence on the matter. In a survey of members of the Music

Teacher's National Association (MTNA), teachers claimed to have discussed the

importance of practice and shared practice strategies with their students, although details

were revealed that would lead to a different conclusion (Barry & McArthur, 1994).

When asked more specific questions regarding exact strategies shared, teachers had

various responses. Most teachers reported instructing students to increase tempo

gradually, analyze their music, mark their music, set practice goals, distribute practice

time, use a metronome, and play hands separately (pianists)—all of which are proven to

be effective strategies (Barry & McArthur, 1994). Teachers indicated less often that they

taught students to engage in mental practice, use a structured practice format, be

supervised during practice, record practice time, and listen during practice. Parental

involvement in practice of pre-college age students, employing written records of

practice, and using audiotapes as models were some of the least reported strategies

enforced by teachers, despite the strong positive evidence for these strategies supported

by the literature. This study suggested that teachers' perceptions of how they instructed

students to practice did not match the reality of what happened during lesson times (Barry

& McArthur, 1994). While this study cannot account for the entire population of studio

instructors, it has revealed a potential flaw in the methods used by some teachers during

lessons. It also raises an important question: How do students apply what they learn in lessons to their practice?

The body of research literature has informed teachers about which practice strategies are most effective for students, but whether or not the students actually use these strategies is another matter. In a 2002 survey, Kostka discovered that college studio teachers' perceived their students to be practicing more efficiently than the students had reported. Student participants, who were music majors, had the general attitude that practice was tedious, although necessary. The majority of the student participants (55%) admitted to having no established practice routine, claimed to have never discussed practice with their teachers, and did not have a regularly scheduled practice time–even though most teachers expected their students to be using a practice plan, and 67% of teachers reported having discussed practice strategies with their students (Kostka, 2004). The lack of a practice routine was evident through other studies in which researchers observed students practicing (Leon-Guerrero, 2004; Miksza, 2007). It was indicated in both studies through observation that students spent most of their time using repetition as their main practice strategy. In addition to repetition, the high school wind player participants in Miksza's (2007) research also spent time marking their scores. After careful organization of all the practice behaviors recorded, Miksza suggested that behaviors such as repeating a section, playing under tempo, and playing only the most difficult musical sections led to higher performance achievement. In summary, it seems that despite efforts of some teachers to demonstrate practice strategies to students, the students often disregard the advice, or are unable to use the techniques appropriately

(Oare, 2011). This discrepancy regarding practice habits between students and teachers needs further investigation in order to determine how to best bridge the gap.

Categories of Practice

The most commonly investigated practice strategies may be divided into the following categories: using models for practice, structured practice, amount of practice time, supervised practice (including parental supervision), and mental practice. It is important for teachers to understand what types of practice work best and why. A summary of the existing literature regarding the different categories of practice can be helpful in determining which type may be most effective under given circumstances.

Use of models. Many researchers have explored the usefulness of modeling as a practice tool, with varied results (Anderson, 1981; Daughery & Brunkan, 2012; Dickey, 1992; Folts, 1973; Henley, 2001; Hewitt, 2001; Linklater, 1997; Puopolo, 1971; Rosenthal, 1984; Rosenthal et al., 1988; Zurcher, 1975). While not consistent throughout all the literature, studies have indicated that modeling can help students gain achievement in specific musical techniques.

The use of models to improve pitch discrimination and rhythmic accuracy has yielded mixed results in the extant research. Zurcher (1975) investigated the use of practice tapes with 43 beginning brass students and found better pitch discrimination, pitch matching abilities, and rhythmical accuracy in students who used the tapes. Modeling was credited with improving pitch accuracy, although not significantly, and participants who engaged in silent practice scored higher than the model group for rhythmic accuracy (Rosenthal et al., 1988). In another study that involved the use of practice tapes with high school instrumentalists, Henley (2001) determined that the

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students who used modeling tapes were better at learning rhythms and mastering tempo, but results about pitch discrimination were inconclusive.

Overall performance ability was higher in students who used models versus students who did not (Hewitt, 2001; Puopolo, 1971; Rosenthal, 1984; Rosenthal et al., 1988). Of the students who gained in performance achievement due to the use of a taped practice model, those with an IQ below average improved significantly more than students with an above-average IQ (Puopolo, 1971), which suggests that modeling could be more beneficial to less academically or musically advanced students. When linked to self-evaluation, modeling yielded positive performance results for junior high instrumentalists in terms of tone, melodic accuracy, rhythmic accuracy, interpretation, and overall performance, but not intonation, technique/articulation, or tempo (Hewitt, 2001).

In one unique case, no significant differences were discovered among students who did or did not use a taped model as a practice tool (Anderson, 1981). The results of Anderson's study are not consistent with the results of prior research conducted by Folts (1973), Puopolo (1971), and Zurcher (1972). The lack of significance was attributed to experimental flaws, however, and the author believed that had the experiment been conducted over a longer period of time, the results would have been in favor of using the taped models (Anderson, 1981).

Researchers have employed various types of modeling when attempting to determine the effects on performance quality (Hewitt, 2001; Linklater, 1997; Rosenthal, 1984). The effects of home practice using three types of models—videotaped, modeling audio-taped, and non-modeling audio-taped—on the performance achievement of 5th and

6th grade clarinetists were investigated, and the group using the videotaped model scored significantly higher on visual aspects of performance (e.g., embouchure, hand position, instrument position, and posture) than did the non-modeling group (Linklater, 1997). Longitudinal results revealed that the videotaped model group scored significantly higher on tone quality/intonation than did the non-modeling group, although their visual/physical performance achievement had not been retained (Linklater, 1997).

Without regular access to visual models, beginners may not be able to employ appropriate physical habits when performing their instrument. The effectiveness of three modeling strategies—guided model (a combination of verbal and aural examples); model only (aural example); guide only (verbal only)—were measured against a control group (practice only) in terms of the accuracy of advanced collegiate instrumentalists' performance (Rosenthal, 1984). The model only group scored significantly higher in terms of correct notes, rhythm, dynamics, tempo, and phrasing/articulation than the other groups. The guided model group scored significantly higher than the guide only and practice only groups (Rosenthal, 1984). In this case of advanced musicians, verbal explanations were not as effective as aural models, and verbal explanations did not stand alone as an effective strategy for practice.

Structured practice. Many authors have indicated that a structured or deliberate practice routine could be linked to higher musical achievement (Barry, 1990; Barry, 1992; Barry & Hallam, 2002; Barry & McArthur, 1994; DaCosta, 1999; Ericsson, Krampe, & Tesch-Römer, 1993; Fakhouri, 2002; Hopkins, 2007a; Kenny, 1998; McPherson & Davidson, 2002; Miksza, 2011; Pedrick, 1998; Peterson, 2001; Rainero, 2012; Zhukov, 2009). Practitioners have shared ideas for introducing structured practice

through a variety of means. By using a template, Hopkins (2007a) suggested a routine

that included warm-up activities, scales and maintenance, exercises for skill preservation

and development, special projects (i.e., solo performance, standard repertoire, and current

music), and non-playing tasks (i.e., composition, transcription of recorded examples,

score analysis, and listening). A similar template for structured practice was introduced

by Peterson (2001), but was set up as a seven-week long checklist for the following

skills: breathing, warm-up, scales, articulation studies, rhythm studies, vibrato, long

tones, tone quality, technical studies, singing, solo/duet/chamber, orchestral excerpts,

improvisation, composition, listening/evaluating, and composer research. A shorter

checklist also could be used on a week-to-week basis that allows students to choose two

or three practice goals for the week. Sample goals included: take a deeper breath before

each phrase, play with a clear sound, increase endurance, place the mouthpiece correctly,

tongue notes clearly, count rhythms aloud each day, and play more softly when dynamic

markings are *mf, p,* or *pp* (Kenny, 1998).

No matter what template or checklist format is used, students must be explicitly

guided through practice planning each week in order to make the best use of their

practice time (Cooper, 2004; Johnson, 2009; Pedrick, 1998). Furthermore, the weekly

lesson can be structured in such a way that informs the student of how to approach

practicing independently. Rainero (2012) shared specific strategies for applying

deliberate practice to a new piece of vocal repertoire. Her suggestion was to identify the

elements of a new song (e.g., text, melody, rhythm, diction and form) and guide singers

to practice the elements separately in order to develop the skills to perform the piece in its

entirety. This method for deliberate practice could be modeled in the lesson so that the students would learn to practice independently in a similar manner.

Students' perceptions of structured practice generally have been found to be positive in qualitative studies on the subject (Da Costa, 1999; Townsend, 2012). With regards to using a structured practice plan, 28 instrumentalists of various ages and socio-economic backgrounds were interviewed; 79% of the participants thought the structured practice plan introduced them to useful ways to practice. The participants also increased their enjoyment of practicing (57%), perceived an improvement in fluid playing (54%), and liked having control over how they practiced (46%). All participants in the study believed that the practice sheets made a difference (Da Costa, 1999). The results of a case study by Townsend (2012) verified several of the perceptions from Da Costa's study (1999). Three college-aged cello students with no prior experience using a routine for practice adopted a practice routine developed by the researcher. The participants unanimously agreed that the freedom to choose their own solutions while practicing a specific technical challenge made practicing more enjoyable, and that because they were more focused during practice, it seemed more beneficial (Townsend, 2012). The positive response of participants to structured practice is indicative that students crave a routine and want to be more effective in the practice room, yet may not have been guided properly to understand how to structure practice for themselves.

Many researchers have conducted experimental studies comparing structured practice to other methods of practice (Barry, 1990; Barry, 1992; Cecconi-Roberts, 2001; Ericsson, Krampe, & Tesch-Römer, 1993; Rosenthal et al., 1988; Sloboda & Davidson, 1996; Sloboda, Davidson, Howe, & Moore,1996). Based on the results of these

investigations, it seems that structured practice is important for the development of musical skills at all levels, and could potentially be more beneficial than free practice. In a study conducted by Barry (1990), high school students who participated in teacher-designed practice and student-designed practice were able to correct more performance errors than the students who engaged in free practice. Two years later, Barry (1992) investigated the effects of structured practice on 55 brass and woodwind students, and found similar results to her previous study. Once again, students who used structured practice were more apt to improve their performance skills than those in the free practice group. The students in the experimental group were guided through their practice sessions according to the following instructions: increase tempo gradually over time, use a metronome, learn fingerings through silent practice, tap the rhythms, identify problem spots and practice them slowly in isolation, and mark the music. As a whole, the students in the free practice group practiced too fast, did not mark their music, did not use a metronome, and left out silent practice and rhythmic exercises (Barry, 1992). The practice strategies used by the more successful students in Barry's research (e.g., gradually increasing tempo, silent practice, rhythm exercises, identifying difficult sections) have been examined by other researchers, who have also found them to be effective tools (Leon-Guerrero, 2004; Lisboa, 2008; Miksza, 2007; Miksza, Prichard, & Sorbo, 2012; McPherson & Renwick, 2001; Rohwer & Polk, 2006).

Although researchers attribute musical achievement to structured practice (formal practice), free practice (informal practice) also has been deemed valuable in certain cases (Cecconi-Roberts, 2001; Ericsson, Krampe, & Tesch-Römer, 1993; Rosenthal et al., 1988; Sloboda & Davidson, 1996; Sloboda et al., 1996; Sikes, 2013). Free practice was

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found to be just as effective as gradually increasing tempo, repeating small sections, and playing an excerpt multiple times in a study of collegiate string players, which conflicted with the theory that guided practice strategies were better for improving the performance of advanced musicians (Sikes, 2013). The advanced level of the players involved in the study and the limited amount of time spent practicing (one 10-minute session) were possible limitations of the research that could account for the unique results (Sikes, 2013).

Balancing structured practice and free practice time has also proven to be successful. Young musicians who engaged in high levels of structured practice and moderate levels of free practice from an early age had higher levels of musical achievement when compared to other young musicians (Sloboda & Davidson, 1996; Sloboda et al., 1996). In addition, high achieving musicians (a) spent twice the amount of time engaged in formal practice than moderate achievers, (b) four times more than underachievers, and (c) almost eight times more than musicians who stopped playing altogether (Sloboda & Davidson, 1996). If young musicians are to become expert performers, it is likely that they will use deliberate practice throughout their lifetimes, but will carefully limit their deliberate practice in order to avoid burnout (Ericsson, Krampe, & Tesch-Römer, 1993).

Amount of practice time. Although evidence exists indicating that a considerable amount of practice time is necessary for the acquisition of musical skills, musical success cannot be attributed to time alone (Ericsson, Krampe, & Tesch-Römer, 1993; Madsen, 2004; Sloboda et al., 1996). This is why Madsen (2004) advised against specifying a set amount of total lifetime practice necessary to achieve an expert level of

performance. Participants in Madsen's 30-year follow-up study of actual applied music practice versus estimated practice were convinced that the level of their past success correlated to the amount of time they had spent practicing, but results indicated that the participants' memories were incorrect. There was no relation between practice time and their highest level of performance (Madsen, 2004). Thus, the idea of time as an indicator of performance level has somehow been engrained in musicians to be of value, yet evidence has shown otherwise.

Researchers have compared practice techniques such as supervised practice (Brokaw, 1983), structured practice (Barry & McArthur, 1994), use of models (Anderson, 1981; Linklater, 1997), and metacognition (Bathgate et al., 2011) to the amount of time spent only to find that time is not a sole indicator of performance achievement. Instead, quality of practice rather than quantity of practice should be the main goal for musicians (Duke, Simmons, & Cash, 2009; Prichard, 2012). More specifically, the number of accurate trials (Prichard, 2012) and the ability to detect errors and use a variety of practice strategies (Duke, Simmons, & Cash, 2009) contributed to musical achievement more so than the amount of time spent practicing.

The way time is distributed for practice also has been examined. Distributed practice refers to dividing practice sessions into several shorter sessions rather than one, massed session. Rubin-Rabson (1940) compared pianists' practice time in distributed and massed settings. She concluded that distributed practice time was potentially helpful for beginners, but that advanced pianists were successful under either condition.

Additional research has revealed that distributed practice over time was more beneficial than massed practice when skills were to be recalled at least 24 hours after the

practice ended (Dail & Christina, 2004; Shea, Lai, Black, & Park, 2000; Tsutsui, Lee, & Hodges, 1998). Simmons (2011) advanced the field of distributed practice research by comparing the amount of time between practice sessions of non-pianists attempting to learn a simple keyboard sequence. Participants engaged in three practice sessions that were five minutes, six hours, or 24 hours apart. Members of all three groups improved in performance speed during session two, and the 6-hour and 24-hour groups improved in performance speed during session three. The findings of this research suggested that sleep-based consolidation may enhance performance accuracy and that both sleep- and wake-based consolidation may enhance speed, which confirms that, "distributing practice across time is an advantageous course of action in nearly all domains of human learning" (Simmons, 2011, p. 365). The existing literature regarding the time spent practicing strengthens the need for instructing students to use their practice time strategically.

Supervised practice. Several researchers have studied the effect of supervised practice on musical achievement. In general, parental involvement in practice and in actual lessons has been strongly encouraged due to positive research results (Peterson, 2001; Sosniak, 1985; Toner, 2010; Woody, 2004; Zhukov, 2009). Therefore, continuing meetings between parents and teachers have been suggested as a way to keep parents involved in a positive way (Oare, 2011).

The technical and musical quality of students' practice improved when being supervised by an adult (Barry & McArthur, 1994; Brokaw, 1983; Sperti, 1970). Brokaw (1983) found supervised practice to be more effective than amount of time spent practicing. A possible reason for this was that having a parent present while the student practiced helped the student set and maintain a regular practice schedule (Davidson,

Sloboda, & Howe, 1995/96; Oare, 2011). Parents may hold students accountable for being productive during the time spent away from their teachers and motivate them to practice (Woody, 2004). Young musicians enrolled in Suzuki music lessons have traditionally relied on parents as home teachers, and have been shown to have highly productive home practice sessions (O'Neill, 2003). In O'Neill's study of 30 Suzuki students and their home teachers (parents), the parents used directive cues and positive reinforcement at a high frequency, which resulted in efficient practice sessions (2003). The Suzuki students spent only 2% of their practice time in off-task behavior (O'Neill, 2003).

Although supervised practice has been supported by researchers as an effective strategy, the results of Barry's (1994) survey of 94 applied music teachers were mixed regarding parental involvement. Of the respondents, 41% indicated that they "always" or "almost always" discussed practice strategies with parents, but only 32% actually encouraged parents to be involved. In fact, 46% of the respondents "rarely" or "never" requested that parents observe lessons. Furthermore, 45% of teachers claimed to supervise students practice techniques "always" or "almost always," yet 46% "rarely" or "never" required students to audiotape their practice sessions for review. The results of this study suggested that teachers' approaches to practice were not consistent with the extant literature (Barry, 1994). Despite the potential benefits of parental involvement in lessons and students' practice, perhaps teachers have not considered the positive role parents can play in their students' musical success.

Mental practice. Mental practice has been regarded by authors to be an effective practice strategy (Barry & Hallam, 2002; Barry & McArthur, 1994; Rosenthal et al.,

1988), but especially when used in the beginning and end stages of learning a piece (Connolly & Williamon, 2004). A majority of respondents to Barry and McArthur's (1994) survey indicated that they required students to practice a piece mentally before they learn to play it. Mental practice has been deemed most effective, however, in combination with physical practice (Brooks, 1995; Coffman, 1990; Ross, 1985). In a study of college instrumentalists, the group who used mental practice improved significantly more in rhythmic accuracy than students who were in the singing and control groups (Rosenthal et al., 1988). Gaylen (2006), however, found mental practice to be the least effective method of improving rhythmic accuracy. High school band students used structured mental practice, unstructured mental practice, physical practice, or free practice to learn a musical excerpt over a 6-week period (Gaylen, 2006). The structured mental practice group had the highest mean gain scores in pitch, tone quality, and rhythm, and significantly higher gains over the control group in all three performance areas. The unstructured mental practice group made significant improvement in rhythm when compared to the control group (Gaylen, 2006). Mental practice also has been shown to be an effective technique for memorizing music (Rubin-Rabson, 1940). The research evidence as a whole suggests that mental practice is indeed a wise, effective strategy for musicians. More research is needed perhaps to convince teachers to require mental practice of their students.

Summary. The existing literature on practice has focused mainly on young instrumentalists, with some research addressing collegiate level students but almost no research related to vocalists' practice. Research is needed to determine what strategies work best for college singers, because it is uncertain whether or not the strategies used by

instrumentalists can be successfully applied to vocalists. Because researchers have reported that students tend to mimic their lesson experiences in practice, the strategies used and valued by studio instructors during lessons may influence students' practice habits. While research has revealed which practice strategies studio instructors used most often, more research is needed in order to understand *why* instructors choose those strategies. In addition, if the goal of students' practice is to obtain higher musical achievement, understanding what methods are used to assess students' musical progress would be useful, although no research on the assessment methods used by studio instructors could be found at the time of this study. Before attempting to determine how to teach singers to establish successful practice behaviors, a baseline investigation of the current teaching practices of college voice instructors seems warranted.

CHAPTER THREE

Method

The purpose of this study was to collect baseline data from college voice teachers concerning issues related to practice. I designed this study to investigate the methods used by college voice instructors to teach students how to practice, how the instructors assessed student progress, and the instructors' values related to their students' and their own personal practice. Prior research concerning practice has focused mainly on the achievement of individual goals, the teacher's role in facilitating effective practice instruction, and the use of effective practice strategies. These strategies may be divided into five categories: modeling, structured practice, supervised practice, amount of practice time, and mental practice. Because much of the existing research related to practice is based on instrumental instruction, an investigation of current practices in the voice area seemed merited. The findings of this study may advance college voice studio instruction by providing instructors with ideas for incorporating strategies of teaching practice into their voice studios.

Research Design

This research study was descriptive, utilizing an author-designed survey instrument. An online electronic survey was used in order to facilitate the efficient collection of data from a large and widely spread population (Fink, 2009). Because the survey was online, I could download the data collected to an electronic database for analysis. Another benefit of the online survey was the ability for participants to upload electronic files to be examined for further analysis.

Participants

I selected colleges and universities from the central region of the National Association of Teachers of Singing (NATS) for this investigation because the students of the division compete against each other in district NATS competitions, and therefore are held to similar goals and standards for performance (NATS, 2013). In addition, the schools in the central region—Illinois, Iowa, and Missouri—are comparable in location and culture. I selected institutions accredited by the National Association for Schools of Music (NASM) within each state due to their common educational standards, goals, and curricula. I chose to include all voice instructors employed at each institution regardless of their full-time or part-time status.

Using the NASM online database (NASM, 2013), I searched for schools that were located in each state included in the central NATS division. I used the links to school websites provided for each institution, and searched for the voice faculty at each school. I recorded the faculty member's name, institution, and email address on an electronic database for ease of sending the survey via electronic mail. When no email address was listed for an instructor, I attempted to find it either by sending an email message to a different faculty member from the same institution, or by sending a message to the music department's Facebook page. Out of the 261 faculty members listed online, I was unable to find the email addresses of 31 people, and 15 survey invitations were undeliverable via email due to inactive or incorrect addresses, which left me with 215 potential participants to whom I distributed the online survey.

Upon receiving the invitation to participate in the study, 12 instructors sent an email message with various reasons for not wishing to participate. Six instructors did not

currently teach voice and six instructors responded that they were too busy to participate in the research.

Two weeks after the initial invitation to participate, I sent a reminder message to notify participants of the deadline (see Appendix E). I sent reminder messages to all potential participants because the online survey was anonymous and did not show individual survey responses, so there was no way of knowing who had already responded. From the total number of voice instructor surveys distributed ($N = 215$), 48 participants responded to the online survey. Two participants did not complete the survey, resulting in 46 usable responses and a response rate of 21.39%.

The distribution of voice instructors among the three states was generally even, although a slightly higher number of instructors were from Illinois. While a higher number of responses from Illinois teachers would have been ideal in order to reflect the actual distribution of teachers among states, I determined the response rate, although low, to be acceptable based on the fairly even distribution of responses representing the three states. Overall, there seemed to be sufficient data to analyze to provide a picture of the current practices of college voice instructors included in the participant pool. Table 1 lists the response frequencies and percentages for each participating state.

Table 1

Frequencies and Percentages of Survey Responses by State

State	Useable Surveys Returned N	Overall % of Total
Illinois	15	32.61
Iowa	15	32.61
Missouri	16	34.78
Total	46	100.00

Survey Instrument

In order to highlight the simultaneous practices of voice teachers across a wide population, I used a cross-sectional survey design for this study (Fink, 2012). I designed the survey instrument based on (a) effective practice strategies discussed in the existing professional literature, (b) recommendations from professional voice instructors who participated in the pilot survey, (c) a similar study by Barry and McArthur (1994) that investigated how applied music instructors taught practice strategies, and (d) my own five years of experience as a college voice instructor. I collected data via an online survey instrument, Qualtrics, which was accessed through the University of Missouri (Qualtrics Lab, Inc., 2013).

I divided the survey into four sections containing quantitative (e.g., closed/guided response) questions (see Appendix A for the complete survey). The first section was designed to collect demographic information about the participants. I designed the remaining three sections of the survey to answer the following research questions:

1. What types of practice strategies are addressed in the college voice studio and to what extent?

2. How do voice instructors assess students' musical achievement?

   a. How do voice instructors keep track of students' practice?

   b. How do voice instructors keep track of students' progress in lessons?

   c. What criteria are used by voice instructors to assign grades to students, and how are these weighted?

3. How do voice instructors influence student practice?

   a. What types of practice strategies are used in a typical voice lesson?

b. How much do voice instructors value specific practice strategies?

c. What are the practice habits of voice instructors?

Demographic information. I designed the first section of the survey to collect demographic and general data regarding the institution and teaching experience of the instructor. The first survey question required participants to identify the state in which their institution was located. This enabled me to determine whether the response rate from each state was able to represent the population of the central NATS region.

Due to the variety of NASM accredited institutions in the central NATS region, the second survey question asked the participants to identify the type of institution where they were teaching (e.g., university, conservatory, community college, private college, or other). Because of the differences in performance and educational experiences required to teach at each type of institution, I asked participants to provide information regarding their degree earned in music, specialization in music, current position title, and years of teaching experience (survey items 3–6). Data from these questions enabled me to describe the sample.

Assessment of students. I designed section two of the survey to answer research question 2: "How do voice instructors assess students' musical achievement?" Assuming that the intention of practice is to result in learning, leading to improved performance, investigating record-keeping, and assessment methods can provide a way of determining how teachers are monitoring student progress and learning. In survey items 7 through 11, respondents provided information pertaining to record-keeping methods for practice and assessment of students' progress in lessons. Many researchers have investigated the use of practice records (Barry, 2002; Bathgate, Sims-Knight, & Schunn, 2011; Brandstrom,

1995/1996; Johnson, 2009; Koopman, Smit, de Vugt, Deneer, & den Ouden, 2007; Mackworth-Young, 1990; Wolfe, 1984; Zarro, 2003), so it was important to identify what type of records, if any, that participants were using to track students' practice (survey item 7), and also students' progress during lessons (survey item 8). Respondents chose from the following options for both items: Log, Journal, Contract, Recording, or Other. If "other" was chosen, the respondents were prompted to provide a specific example.

Based on my personal teaching experiences as a college voice instructor, I wanted to know the weight placed on jury performances, attendance, and other assignments (such as weekly preparation, studio participation, etc.) when determining a student's final grade. The main goal of practice is improving students' musical achievement; therefore I would consider it ideal for instructors to assess students via methods that are a reflection of the students' progress. I designed questions 9 through 11 in order to gain an understanding of how instructors weighted various types of assessment. In survey item 9 and 10, respondents indicated the amount of a student's final grade that is determined by jury performances and attendance (respectively). Respondents were asked in survey item 11 to indicate any other type of assignments used for assessment:

- Listening journals

- Recital attendance

- Studio class participation

- Written reflections (i.e., practice journals, lesson logs)

- Weekly preparation

- Other

Practice strategies. I designed the third section of the survey to answer research question 1: "What types of practice strategies are addressed in the college voice studio and to what extent?" The existing literature pertaining to effective practice strategies reveals several categories of practice: modeling, structured practice, supervised practice, amount of practice time, and mental practice. Items in this section of the survey were based on research according to each category of practice.

For many years, researchers have examined the effectiveness of modeling as a means for improving student performance (Anderson, 1981; Bathgate et al., 2011; Dickey, 1992; Henley, 2001; Hewitt, 2001; Linklater, 1997; Puopolo, 1971; Rosenthal, 1984; Rosenthal et al., 1988; Zurcher, 1975). I designed survey item 12 to examine how often respondents used three methods of modeling in typical lesson instruction: listening to model recordings during a student's lesson, assigning model recordings to students to use for practice, and modeling with their own singing voice. Responses were limited to a 5-point, Likert-type scale: 5 (almost always), 4 (frequently), 3 (often), 2 (sometimes), and 1 (never) in regards to the frequency of the three modeling methods listed.

In addition to modeling, structured practice also has been known to be an effective practice strategy. Researchers in the field of instrumental music have investigated the potential benefits of structured practice (Barry, 1990; Barry, 1992; Barry & Hallam, 2002; Barry & McArthur, 1994; Christensen, 2010; DaCosta, 1999 Johnson, 2009; Leon-Guerrero, 2004; Miksza, 2012; Pedrick, 1998). Rainero (2012) transferred the ideas of structured practice to her voice studio and found that the students showed "enormous progress in vocal technique, musical expressivity, and memorization" (p. 213). I designed survey item 13 to retrieve information about how instructors prepare

students to structure practice sessions. Using the same 5-point, Likert-type scale from the

survey item 12, respondents indicated the extent to which they did the following:

- Provide the student with a practice plan (a list of practice goals for

  practice sessions with strategies for reaching each goal)

- Create a practice plan with the student

- Ask the student to describe a typical practice session in step-by-step detail

- Discuss strategies for practice

- Provide the student with specific practice strategies for learning a piece

Based on extant research regarding supervised practice (Barry & McArthur, 1994;

Brokaw, 1983; O'Neill, 2003; Peterson, 2001; Sosniak, 1985; Sperti, 1970; Toner, 2010;

Woody, 2004; Zuhkov, 2009), I asked respondents via survey item 14 to indicate to what

extent they engaged in the following strategies related to supervised practice:

- Supervise the student's practice outside of lessons

- Supervise the student's practice during lessons

- Observe the student's recordings of their practice session

Responses were based on a 5-point, Likert type scale that represented the frequency of

each behavior: 5 (almost always), 4 (frequently), 3 (often), 2 (sometimes), and 1 (never).

Experts have discredited considering the amount of time spent practicing as an

effective practice strategy (Anderson, 1981; Barry & McArthur, 1994; Bathgate et al.,

2011; Brokaw, 1983; Duke, Simmons, & Cash, 2009; Johnson, 2009; Linklater, 1997;

Madsen, 2004; Rubin-Rabson, 1940; Simmons 2011; & Stambaugh, 2010). Survey item

15 highlights how often respondents emphasized the amount of student practice time

during a typical lesson using the same 5-point, Likert-type scale used previously (survey items 7, 12–14). Specific prompts included:

- Ask the student about the amount of time they spent practicing

- Suggest to the student a length of time to spend practicing

- Require a set amount of time for the student to practice

- Require the student to report minutes practicing on a form or chart

Mental practice is perhaps the least researched among the extant literature on practice strategies. Although suggested to be beneficial (Barry & Hallam, 2002; Brooks, 1995; Gaylen, 2006), instructors have not consistently presented this strategy to students (Barry & McArthur, 1994). I asked respondents to indicate the extent to which they engaged in strategies related to mental practice via the 5-point, Likert-type scale (also used for items 7, and 12–15). Strategies listed for response were:

- Discuss the benefits of mental practice with your student

- Guide the student through mental practice during the lesson

- Provide the student with guidelines for mentally practicing a specific piece or part of a piece

Teacher influence on student practice. I created the fourth section of the survey to answer research question 3: "How do voice instructors influence student practice?" Existing literature supports the conclusion that students use strategies for practice that were emphasized most during lessons (Barry, 2007; Cooper, 2004; Kostka, 2002), therefore the strategies chosen by the teacher will potentially influence the effectiveness of students' practice. I designed survey items 17 and 18 to understand how often respondents focused on specific practice strategies, and how they valued specific practice

strategies. The strategies chosen were the most commonly discussed in the extent literature pertaining to effective practice. Responses for item 17 were based on a 5-point, Likert-type scale: 5 (almost always), 4 (frequently), 3 (often), 2 (sometimes), and 1 (never). I asked respondents to indicate how often they used these strategies listed during a typical lesson:

- Gradually increase tempo to improve accuracy

- Repetition to improve accuracy

- Instruct student to analyze of mark the music

- Encourage mental practice

- Listen to models for guidance

- Supervise a student practicing during the lesson

- Encourage the student to practice with a set of goals

- Provide the student with strategies to meet their practice goals

- Focus on the most difficult sections of the music

- Review written practice records with the student's input

- Set long-term practice goals with the student

- Ask the student to reflect on a specific technical achievement of failure

In order to become informed of any connection between strategies most frequently used and teachers' values of strategies, I asked respondents to indicate the extent to which they valued specific strategies (survey item 18) using a 4-point, Likert-type scale: 4 (a lot), 3 (somewhat), 2 (very little), 1 (not at all). Unlike survey item 17, which focused on strategies to be used during lessons, survey item 18 included strategies that could be used both during and outside of lesson time. Including more strategies

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allowed me to increase the amount of information about teachers' values. The following strategies were included:

- Offering the student a variety of practice strategies

- Knowing how the student spends their practice time

- Understanding the student's feelings about singing goals

- Gradually increasing tempo as a means to improve accuracy

- Using repetition as a means to improve accuracy

- Analyzing or marking music

- Setting long-term practice goals

- Setting short-term practice goals

- Distributing practice time over several, short sessions instead of one, long session

- Focusing on the most difficult section of a piece

- Mental practice

- Supervising student practice

- Recording practice time

- Keeping written practice records

- Use of model recordings for guidance

I designed the final survey items (19–20) to reveal the practice strategies used by the teachers themselves. Respondents answered, "Yes" or "No" to the question, "Do you currently consider yourself to be a performer who practices regularly?" (survey item 19). If "No" was selected, they were directed to the end of the questionnaire. If "Yes" was selected, respondents continued to the final survey item (20). Survey item 20 was

designed to discover which strategies respondents used most often during their own practice sessions. Answers were guided by a 5-point, Likert-type scale of 5 (almost always), 4 (frequently), 3 (often), 2 (sometimes), and 1 (never). Responses were elicited from the following list of strategies based on previous questions (17–18). I asked, "With regards to YOUR practice, to what extent do you engage in the following strategies?":

- Gradually increase tempo as a means to improve accuracy

- Repetition as a means to improve accuracy

- Analyze or mark music

- Set long-term practice goals

- Set short-term practice goals

- Distribute practice time to several, short sessions instead of one, long session

- Focus on the most difficult section of a piece

- Mental practice

- Aurally or visually record practice time

- Keep written practice records

- Use model recordings for guidance

The final survey item was an open-ended request for respondents to provide any other information that they felt represented their views on practice in the college voice studio. To conclude the survey, I asked respondents to upload any supporting documents from their voice studio (e.g., syllabi, assignments, practice log templates, or other items) that they were willing to provide. The final item of the survey was a brief message of

gratitude to the instructors for taking part in the research project and provided them with an email address to which they could send a message to retrieve a summary of the results.

Pilot Testing

The survey instrument was pilot tested by five voice professors outside the population area for this study. The pilot study participants all had experience teaching voice at the collegiate level. The web address of the online survey was distributed to each of the participants. Pilot study participants were asked to complete the survey, report how much time it took them to complete the survey, and make any suggestions to clarify or refine the content of the questionnaire. Revisions were made based on the feedback received from the pilot study participants. These included the addition of "weekly preparation" to the list of potential assessment methods used by studio instructors, and the addition of "full professor" to the list of position titles. It was also suggested that I allow respondents to type in all numerical responses instead of my original plan to have them choose from a pre-set range of numbers.

Validity

Content validity of the survey instrument was established in two ways: (a) information reported in the research literature pertaining to effective practice strategies in studio instruction, and existing literature regarding individualized studio instruction, provided a basis for the questionnaire items; and (b) pilot study participants who provided feedback were instructors with expertise and experience teaching collegiate voice lessons.

Procedures

Prior to distributing the survey, I submitted the participant invitation letter, an informed consent letter, and the survey instrument to the university's Internal Review Board (IRB) for approval (see Appendix B). In both the invitation letter and the informed consent letter, participants were assured that all data would remain confidential. All three documents were approved by the campus IRB and prepared for electronic distribution. The opening page of the survey consisted of the informed consent letter (see Appendix C). Upon clicking to begin the survey, respondents confirmed their informed consent to participate in the study.

Invitations to participate in the study were sent to each potential participant via an electronic mail message. In the message, the purpose of the study, minimal risks involved, protection of their personal and institutional information, and a Uniform Resource Locator (URL) link to the online survey were included. I used a mail merge function in the online survey system to send individual messages in order to maximize the response rate. This also decreased the chances of invitations being delivered to participants' junk mail. A copy of the electronic mail invitation can be found in Appendix D.

The online survey was open to participants for 4 weeks and a reminder message was sent 2 weeks after the initial invitation to participate. Uploaded documents from respondents were printed and stored in a secure location to ensure the privacy of the participants.

Data Analysis

Descriptive statistics—frequencies, percentages, means, and standard deviations—were used to summarize the collected data of the closed response questions. The online survey program provided these calculations for some of the survey item responses, but this information was not sufficient for interpreting the results of the study. I exported the responses to a Microsoft *Excel* spreadsheet to generate more meaningful data, including means, frequencies, and standard deviations for each closed-response survey item. For each response to the Likert-type scale item questions (12–18, 20) percentages were calculated. For questions 6, 9, and 10, respondents were asked to write in a numerical response, so I calculated the percentages, response frequencies, means, and standard deviations of the responses. Because respondents were given the opportunity to specify information when selecting "other" in the closed-item questions (items 4, 7, and 11), text responses were categorized in order to present meaningful data. Tables were constructed for many survey items in order to clearly communicate the information collected (American Psychological Association, 2010).

Responses to the open-ended question were analyzed by assigning codes, combining those codes into themes, and displaying the data (Creswell, 2007). I used keyword coding to determine the categories that emerged from the participant responses. I aimed to find elements of the written responses that could be matched to the research questions. Once I had identified the keyword codes, I grouped the codes into four larger categories for data presentation. I included interpretations of and quotations from participant responses in the presentation of the data in order to provide a descriptive narrative of each category.

For reliability purposes, a music education professor reviewed the open-ended responses. This person was given the responses with a list of codes that had emerged based on my analysis, and assigned codes to the data using the provided list. We attained agreement of 90% based on comparison of our initial assigned codes. We discussed coding differences until we reached an agreement level of 100%.

CHAPTER FOUR

Results

The purpose of this study was to inform educators and researchers about current procedures related to practice strategy instruction in the college voice studio. I investigated the teaching methods of voice instructors who were from both (a) the central region of the National Association of Teachers of Singing (NATS), and (b) institutions accredited by the National Association of Schools of Music (NASM). A secondary purpose was to compare the current teaching strategies of voice instructors to the strategies identified in the research literature. Two hundred fifteen voice instructors from 49 institutions were contacted to participate in the study. The response rate of usable surveys was 21.39% ($N = 46$).

Practice Instruction in Voice

Demographic information. The first section of the survey was designed to collect demographic information about the voice instructors' educational training and musical background. In survey item 1, respondents indicated the state in which they currently taught at the time the survey was completed. Of the 46 respondents, 32.61% ($n = 15$) were from Illinois, 32.61% ($n = 15$) were from Iowa, and 34.78% ($n = 16$) were from Missouri.

The next five survey items were created to determine the background and current teaching experiences of the participants (all 46 participants responded to each item on the survey, unless a different N is indicated for a given item). In survey item 2, respondents were asked to identify their institution as a university, conservatory, community college,

private college, or other. Most instructors described their institution as a university or a

private college (see Table 2).

Table 2

Frequencies and Percentages of Institution Types (N = 46)

Institution Type	Response Frequency	%
University	25	54.35
Private College	16	34.78
Conservatory	4	8.70
Community College	1	2.17
Other (Please specify)	0	0.00
Total	46	100.00

In survey items 3 and 4, respondents were asked to indicate their highest degree

earned in music, as well as their specialization. The degrees held by participants are

shown in Table 3. As might be expected, almost all of these collegiate-level instructors

held a graduate degree.

Table 3

Frequencies and Percentages of Instructor Degrees

Degree	Response Frequency	%
DMA	24	52.17
MM	14	30.43
PhD	3	6.52
MA	2	4.35
BM	2	4.35
BA	1	2.17
Total	46	100.00

In response to question 4, three respondents indicated having two areas of

specialization for their highest degree earned in music, so the rate of responses for each

area of specialty do not total the actual response rate of the question ($N = 45$). A majority

of the respondents ($n = 37$) indicated performance as the main area of their highest degree earned in music. Respondents ($n = 4$) indicated "other" areas of specialty in pedagogy ($n = 3$) and vocal literature ($n = 1$). All response rates for the degree areas can be seen in Table 4.

Table 4

Frequencies and Percentages of Degree Area

Degree Area	Response Frequency	%
Music Performance	37	82.22
Conducting	4	8.89
Other (Pedagogy)	3	6.67
Music Education	2	4.44
Other (Vocal Literature)	1	2.22
Total	45	104.44

Note: Total exceeds 100.00% due to rounding and respondents who selected more than one degree area.

Respondents were asked to indicate their current position title. The distribution among the five types of positions was fairly even with the exception of those who held an artist-in-residence position, who were less represented in this survey. Table 5 lists the frequencies and percentages of all responses to survey item 5.

Table 5

Frequencies and Percentages of Position Titles

Position Title	Response Frequency	%
Full professor	12	26.09
Associate professor	11	23.91
Adjunct instructor	11	23.91
Assistant professor	9	19.57
Artist-in-residence	3	6.52
Total	46	100.00

The final item in the first section of the survey asked respondents to indicate how many years they had been teaching voice at the collegiate level. In question 6, all 46 respondents indicated having between 2 and 45 years of teaching experience ($M = 17.61$, $SD = 11.70$), with 25 being the most common number of years ($n = 4$). Seventeen participants had 10 years of experience or less (36.92%). Thirteen participants had between 11 and 20 years of experience (28.23%). The remaining participants had between 21 and 45 years of experience ($n = 16$, 34.74%). Years of teaching experience, frequencies, and percentages are reported in Table 6.

Table 6

Frequencies and Percentages of Years of Teaching Experience

Years	Response Frequency	%
2	3	6.52
4	2	4.34
5	3	6.52
6	3	6.52
7	1	2.17
8	2	4.34
9	1	2.17
10	2	4.34
13	1	2.17
14	2	4.34
15	3	6.52
16	1	2.17
17	3	6.52
18	1	2.17
20	2	4.34
25	4	8.69
26	1	2.17
28	3	6.52
29	1	2.17
30	1	2.17
34	1	2.17
35	1	2.17
36	1	2.17
39	1	2.17
42	1	2.17
45	1	2.17
Total	46	99.89

Note: Total is not equal to 100.0% due to rounding.

Assessment of students. Survey items 7 through 11 were designed to answer the second research question: "How do voice instructors assess students' musical achievement?" In survey item 7, thirty-five respondents reported the methods they used for keeping track of students' practice (research question 2a). The methods used for keeping track of students' progress in lessons were reported in item 8, with a total response rate of $N = 37$ (research question 2b). For both items 7 and 8, respondents were

asked to select all that applied from the following list: log, journal, contract, recording, or

other (please specify). Logs and journals were the most commonly selected responses to

items 7 and 8. Specific frequencies and percentages are listed for methods used to track

students' practice (see Table 7), and the frequencies and percentages of methods used to

track students' progress in lessons are listed in Table 8. Logs and recordings were used

more frequently to track lesson progress than practice, with journals and contracts used

more frequently to track practice.

Table 7

Frequencies and Percentages of Methods to Track Students' Practice

Method	Response Frequency	%
Log	20	57.14
Journal	20	57.14
Recording	11	31.43
Contract	10	28.57
Other (None)	2	5.71

Table 8

Frequencies and Percentages of Methods to Track Students' Progress in Lessons

Method	Response Frequency	%
Log	26	70.27
Journal	14	37.84
Recording	13	35.14
Contract	5	13.51
Other (None)	0	0.00

Survey items 9 and 10 were designed to answer Research question 2c, "What

criteria are used by voice instructors to assign grades to students, and how are these

weighted?" In survey item 9, respondents were asked to reveal what percentage of a

student's final grade was determined by the student's jury performance. Of the 42 useable

responses, most respondents indicated that jury performances accounted for 20–25% of

the student's final grade ($n = 22$, 52.37%) with a mean of 22.05% ($SD = 10.37$). The

overall range of responses was between 0% and 50%. Frequencies and percentages for

jury performance weight are listed in Table 9.

Table 9

Frequencies and Percentages of Jury Performance Weight in Percent of Final Grade

Percentage	Response Frequency	%
20	12	28.57
25	10	23.80
10	5	11.90
15	4	9.52
30	4	9.52
0	2	4.76
33	2	4.76
50	2	4.76
40	1	2.38
Total	42	99.97

Note: Total is not equal to 100.0% due to rounding.

Survey item 10 was designed to determine what percentage of a student's final

grade was determined by attendance. A wide range of responses was revealed as

respondents indicated between 0% and 90%. The most popular responses were 0% ($n = 5$,

12.82%), 20% ($n = 5$, 12.82%), and 50% ($n = 5$, 12.82%). A majority of the respondents

($n = 29$, 74.26%) indicated that attendance accounted for 50% or less of a student's final

grade. Table 10 lists the frequencies and percentages for the weight of attendance on the

final grade.

Table 10

Frequencies and Percentages of Attendance Weight in Percent of Final Grade

Percentage	Response Frequency	%
0	5	12.82
20	5	12.82
50	5	12.82
10	4	10.26
40	4	10.26
25	3	7.69
15	2	5.13
60	2	5.13
75	2	5.13
80	2	5.13
90	2	5.13
33	1	2.56
65	1	2.56
67	1	2.56
Total	39	100.00

Survey item 11 was used to determine what other types of student work was used in determining a final grade. Respondents ($N = 42$) checked all that applied from the following list: listening journals, recital attendance, studio class participation, written reflections (e.g., practice journals, lesson logs), weekly preparation, or other (please specify). "Weekly preparation" was the most commonly chosen response ($n = 37$, 88.09%) followed closely by "studio class preparation" ($n = 36$, 85.71%). Seven respondents selected "other" and specified examples. I sorted the "other" responses into three categories: score study ($n = 4$, 9.52%), recital performance ($n = 2$, 4.76%), and reading reflection ($n = 1$, 2.38%). All assigned student work is listed along with the frequencies and percentages in Table 11.

Table 11

Frequencies and Percentages of Assigned Student Work

Assignment	Response Frequency	%
Weekly preparation	37	88.09
Studio class participation	36	85.71
Recital attendance	21	50.00
Written reflections	21	50.00
Listening journals	6	14.29
Score study	4	9.52
Recital performances	2	4.76
Reading reflection	1	2.38

Practice strategies. The third section of the survey, containing items 12 through 16, was designed to answer research question 1, "What types of practice strategies are addressed in the voice studio and to what extent?" Each of the five survey items included specific strategies related to each category of practice: (a) modeling, (b) structured practice, (c) supervised practice, (d) amount of time spent practicing, and (e) mental practice. Instructors indicated the extent to which each strategy was used in a typical lesson by responding to a 5-point, Likert-type scale: almost always (5), frequently (4), often (3), sometimes (2), or never (1). Frequencies, percentages, means, and standard deviations were calculated for each strategy in the five practice categories.

Modeling. "Model using your own singing voice" was the strategy most used by instructors for modeling ($M = 3.35$, $SD = 1.09$). Twelve instructors (27.90%) each reported using their own voice for modeling "sometimes" or "often". The remaining instructors reported using their own voice as a model "frequently" ($n = 11$, 25.58%) or "almost always" ($n = 8$, 18.60%). No respondent indicated that they "never" used their own voice as a model. The second highest rated modeling strategy was, "assign model recordings for the student to use as an aural/visual guide during practice" ($M = 2.52$, *SD*

= 0.92), although most respondents indicated using this strategy only "sometimes" (n =

17, 40.48%) or "often" (n = 13, 30.95%). No one claimed to use the strategy "almost

always." Respondents chose "listen to model recordings during lesson time" the least

among the three modeling strategies (M = 1.88, SD = 0.79), and 58% of them indicated

using the strategy "sometimes" (n = 25). Specific frequencies, percentages, means, and

standard deviations for each modeling strategy are displayed in Table 12.

Table 12

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Practice Strategies Related to Modeling

Strategies	1	2	3	4	5			
	(Never)	(Sometimes)	(Often)	(Frequently)	(Almost always)	N	M	SD
Model using your own singing voice	0 (0.00%)	12 (27.90%)	12 (27.90%)	11 (25.58%)	8 (18.60%)	43	3.35	1.09
Assign model recordings for the student to use as an aural/visual guide	5 (11.90%)	17 (40.48%)	13 (30.95%)	7 (16.67%)	0 (0.00%)	42	2.52	0.92
Listen to model recordings during lesson time	13 (30.23%)	25 (58.14%)	2 (4.65%)	3 (6.98%)	0 (0.00%)	43	1.88	0.79

Note: Responses based upon a 5-point, Likert-type scale

Structured practice. The most frequently used strategies for teaching structured

practice were "discuss strategies for practice" (M = 3.60, SD = 1.00) and "provide the

student with specific practice strategies for learning a particular piece" (M = 3.58, SD =

0.96). All respondents selected at least "sometimes" for these two strategies. Eighteen

respondents indicated discussing practice strategies with students "often" (41.86%) and

fifteen respondents indicated that they provided students with specific practice strategies

for a particular piece "frequently" (34.88%). No respondents indicated that they "never"

discussed practice strategies or "never" provided specific strategies for learning a

particular piece. The remaining three strategies: providing a practice plan ($M = 2.81$, SD

$= 1.22$), creating a practice plan with the student ($M = 2.86$, $SD = 1.23$), and asking the

student to describe practice ($M = 2.60$, $SD = 1.03$) were most frequently indicated as

being used "sometimes." See Table 13 for descriptive statistics of the five strategies used

for teaching structured practice.

Table 13

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Strategies Related to Structured Practice

Strategies	1 (Never)	2 (Sometimes)	3 (Often)	4 (Frequently)	5 (Almost always)	N	M	SD
Discuss strategies for practice	0 (0.00%)	5 (11.63%)	18 (41.86%)	9 (20.93%)	11 (25.58%)	43	3.60	1.00
Provide the student with specific practice strategies for learning a particular piece	0 (0.00%)	6 (13.95%)	14 (32.56%)	15 (34.88%)	8 (18.60)	43	3.58	0.96
Create a practice plan with your student	4 (9.30%)	16 (37.21%)	12 (27.90%)	4 (9.30%)	7 (16.28%)	43	2.86	1.23
Provide a student with a practice plan	5 (11.63%)	16 (37.21%)	9 (20.93%)	8 (18.60%)	5 (11.63%)	43	2.81	1.22
Ask the student to describe a typical practice session in detail	4 (9.30%)	20 (46.51%)	10 (23.26%)	7 (16.28%)	2 (4.65%)	43	2.60	1.03

Note: Responses based upon a 5-point, Likert-type scale

Supervised practice. Respondents indicated "never" or "sometimes" most often

on all strategies related to structured practice. Over 90% of respondents ($n = 39$) said they

never supervised their students practicing outside of lessons ($M = 1.09$, $SD = 0.29$). Some

instructors supervised students' practice during lessons ($M = 2.30$, $SD = 1.34$) and

observed students' practice recordings ($M = 1.47$, $SD = 0.85$), but the majority of

respondents did not use any of the three strategies often or more frequently. The complete

list of frequencies, percentages, numbers of responses, means, and standard deviations of

strategies related to supervised practice are shown in Table 14.

Table 14

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Strategies Related to Supervised Practice

Strategies	1 (Never)	2 (Sometimes)	3 (Often)	4 (Frequently)	5 (Almost always)	N	M	SD
Supervise the student practicing during lessons	13 (30.23%)	18 (41.86%)	4 (9.30%)	2 (4.65%)	6 (13.95%)	43	2.30	1.34
Observe the student's recordings of their practice session	29 (67.44%)	11 (25.58%)	1 (2.33%)	1 (2.33%)	1 (2.33%)	43	1.47	0.85
Supervise the student practicing outside of lessons	39 (90.70%)	4 (9.30%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	43	1.09	0.29

Note: Responses based upon a 5-point, Likert-type scale

Amount of practice time. Most instructors indicated "never" when asked if they

required students to report minutes spent practicing on a form or chart to be turned in to

them ($n = 25$, 58.14%). Similarly, instructors selected "never" ($n = 10$, 23.26%) or

"sometimes" ($n = 12$, 27.90%) when asked if they required a set amount of time for

students to practice, although 25.58% ($n = 11$) indicated that they "almost always"

required a set amount of time of practice. "Sometimes" was the most frequent response (n

$= 17$, 39.53%) pertaining to how often instructors asked their students about the amount

of time they spent practicing. The statement, "Suggest to the student a length of time to

spend practicing" yielded the highest mean ($M = 3.72$, $SD = 0.96$) with "frequently"

being the most popular response ($n = 18$, 41.86%). See Table 15 for descriptive statistics

of the four strategies related to amount of practice time.

Table 15

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Strategies Related to Amount of Time Spent Practicing

Strategies	1 (Never)	2 (Sometimes)	3 (Often)	4 (Frequently)	5 (Almost always)	N	M	SD
Suggest to the student a length of time to spend practicing	1 (2.33%)	3 (6.98%)	12 (27.90%)	18 (41.86%)	9 (20.93%)	43	3.72	0.96
Ask the students about the amount of time they spent practicing	1 (2.33%)	17 (39.53%)	9 (20.93%)	8 (18.60%)	8 (18.60%)	43	3.12	1.20
Require a set amount of time for the student to practice	10 (23.26%)	12 (27.90%)	5 (11.63%)	5 (11.63%)	11 (25.58%)	43	2.88	1.55
Require the student to report minutes practicing on a form or chart to be turned in to you	25 (58.14%)	12 (27.90%)	1 (2.33%)	0 (0.00%)	5 (11.63%)	43	1.79	1.28

Note: Responses based upon a 5-point, Likert-type scale

Mental practice. For all three strategies listed for mental practice, respondents selected "sometimes" most frequently (tied with "often" for discussing benefits of mental practice). Fourteen of 43 instructors (32.56%) reported they "sometimes" discussed the benefits of mental practice with their students, and fourteen (32.56%) indicated they "often" discussed the benefits of mental practice with their students. Twelve instructors (27.90%) responded that they "sometimes" guided a student through mental practice during the lesson, and seventeen instructors (39.53%) indicated that they "sometimes" provided a student with guidelines for mentally practicing a specific piece, or part of a piece. Discussing the benefits of mental practice was the strategy with the highest mean ($M = 3.14$, $SD = 1.01$). See Table 16 for descriptive statistics of the three mental practice strategies.

Table 16

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Strategies Related to Mental Practice

Strategies	1 (Never)	2 (Sometimes)	3 (Often)	4 (Frequently)	5 (Almost always)	N	M	SD
Discuss the benefits of mental practice with your student	0 (0.00%)	14 (32.56%)	14 (32.56%)	10 (23.26%)	5 (11.63%)	43	3.14	1.01
Provide a student with guidelines for mentally practicing a specific piece or part of a piece	4 (9.30%)	17 (39.53%)	11 (25.58%)	7 (16.28%)	4 (9.30%)	43	2.77	1.13
Guide a student through mental practice during their lesson	11 (25.58%)	12 (27.90%)	9 (20.92%)	8 (18.60%)	3 (6.98%)	43	2.53	1.26

Note: Responses based upon a 5-point, Likert-type scale

Teacher influence on student practice. The fourth section of the survey, containing items 17 through 20, was designed to answer research question 3, "How do voice instructors influence student practice?" Item 17 was intended to answer the first sub-question of Research question 3, "What types of practice strategies are used in a typical voice lesson?" Respondents were asked to indicate to what extent they used each of the twelve strategies in a provided list. The strategies listed were a compilation of the five types of practice investigated in this study. The strategy with the highest mean ($M =$ 4.28, $SD = 0.77$) was "instruct students to analyze or mark the music." Nineteen of 43 respondents (44.19%) indicated "almost always" doing this, which was the highest reported frequency among all of the twelve strategies listed. Tied for second highest mean ($M = 3.93$, $SD = 0.94$) were the strategies, "encourage the student to practice with a set of goals" and "focus on the more difficult sections of the music." The complete list of descriptive statistics for strategies used in a typical lesson are displayed in Table 17.

Table 17

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Strategies
Used in a Typical Lesson

Strategies	1	2	3	4	5	N	M	SD
	(Never)	(Sometimes)	(Often)	(Frequently)	(Almost always)			
Instruct student to analyze or mark the music	0 (0.00%)	1 (2.33%)	5 (11.63%)	18 (41.86%)	19 (44.19%)	43	4.28	0.77
Focus on the more difficult sections of the music	0 (0.00%)	6 (13.95%)	6 (13.95%)	16 (37.21%)	15 (34.89%)	43	3.93	1.03
Encourage the student to practice with a set of goals	0 (0.00%)	3 (6.98%)	11 (25.58%)	15 (34.89%)	14 (32.56%)	43	3.93	0.94
Ask the student to reflect on a specific technical achievement or failure	1 (2.33%)	7 (16.28%)	6 (13.95%)	12 (22.64%)	17 (39.53%)	43	3.86	1.19
Repetition to improve accuracy	0 (0.00%)	5 (11.63%)	11 (25.58%)	13 (30.23%)	14 (32.56%)	43	3.84	1.02
Provide the student with strategies to meet their practice goals	1 (2.33%)	4 (9.30%)	11 (25.58%)	12 (22.64%)	15 (34.89%)	43	3.84	1.09
Encourage mental practice	3 (6.98%)	10 (23.26%)	8 (18.60%)	13 (30.23%)	9 (20.93%)	43	3.35	1.25
Gradually increase tempo to improve accuracy	0 (0.00%)	12 (27.91%)	13 (30.23%)	16 (37.21%)	2 (4.65%)	43	3.19	0.91
Set long-term practice goals with the student	3 (6.98%)	15 (34.89%)	10 (23.26%)	12 (22.64%)	3 (6.98%)	43	2.93	1.10
Listen to models for guidance	5 (11.63%)	22 (51.16%)	7 (16.26%)	6 (13.95%)	3 (6.98%)	43	2.53	1.10
Supervise a student practicing during a lesson	14 (32.56%)	16 (37.21%)	6 (13.95%)	2 (4.65%)	5 (11.63%)	43	2.26	1.29
Review written practice records with the student's input	22 (52.38%)	14 (33.33%)	1 (2.33%)	2 (4.76%)	3 (7.14%)	42	1.81	1.17

Note: Responses based upon a 5-point, Likert-type scale

Survey item 18 was designed to answer research question 3b, "How much do voice instructors value specific practice strategies?" Respondents were asked to share the extent to which they valued each of the twelve practice strategies listed using a 4-point, Likert-type scale. These strategies were representative of the practice strategies found in the related literature. The strategy most valued by instructors was "analyzing or marking music" ($M = 3.88$, $SD = 0.32$). One hundred percent of the respondents indicated the extent to which they valued score analysis as either "a lot" ($n = 38$, 88.37%) or "somewhat" ($n = 5$, 11.63%). Distributing practice time also seemed to be of value to instructors ($M = 3.72$, $SD = 0.50$). All respondents, with the exception of one respondent (2.33%) who indicated "very little," selected "a lot" ($n = 32$, 74.42%) or "somewhat" ($n = 10$, 23.26%) with regards to their value of distributed practice. Offering a student a variety of practice strategies ($M = 3.60$, $SD = 0.58$), setting short-term practice goals ($M = 3.57$, $SD = 0.63$), and setting long-term practice goals ($M = 3.48$, $SD = 0.67$) also ranked in the top half of the list. The lowest ranking strategy was "supervising student practice" ($M = 1.77$, $SD = 0.72$) followed by "recording practice time" ($M = 2.17$, $SD = 1.03$). Of the 43 respondents, 84.43% indicated "not at all" ($n = 17$, 39.53%) or "very little" ($n = 19$, 44.90%) when asked to describe how much valued they placed on supervised practice, and 66.66% indicated "not at all" ($n = 13$, 30.95%) or "very little" ($n = 15$, 35.71%) when asked to describe how much value they placed on recorded practice. The complete list of descriptive statistics listing the value of all 15 strategies is displayed in Table 18.

Table 18

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Valued Strategies

Strategies	1 (Not at all)	2 (Very little)	3 (Somewhat)	4 (A lot)	N	M	SD
Analyzing or marking music	0 (0.00%)	0 (0.00%)	5 (11.63%)	38 (88.37%)	43	3.88	0.32
Distributing practice time over several, short sessions	0 (0.00%)	1 (2.33%)	10 (23.26%)	32 (74.42%)	43	3.72	0.50
Offering the student a variety of practice strategies	0 (0.00%)	2 (2.44%)	13 (30.23%)	28 (65.12%)	43	3.60	0.58
Setting short-term practice goals	0 (0.00%)	3 (7.14%)	12 (28.57%)	27 (64.29%)	42	3.57	0.63
Knowing how the student spends their practice time	0 (0.00%)	1 (2.44%)	19 (46.34%)	21 (50.22%)	41	3.49	0.55
Setting long-term practice goals	0 (0.00%)	4 (9.52%)	14 (33.33%)	24 (57.14%)	42	3.48	0.67
Using repetition as a means to improve accuracy	0 (0.00%)	2 (4.65%)	19 (44.90%)	22 (51.16%)	43	3.47	0.59
Understanding the student's feelings about singing goals	1 (2.33%)	1 (2.33%)	19 (44.90%)	22 (51.16%)	43	3.44	0.67
Focusing on the most difficult section of a piece	2 (4.76%)	3 (7.14%)	18 (42.86%)	19 (45.24%)	42	3.29	0.81
Mental practice	2 (4.76%)	7 (16.67%)	14 (33.33%)	19 (45.24%)	42	3.19	0.89
Gradually increasing tempo as a means to improve accuracy	2 (4.65%)	7 (16.28%)	22 (51.16%)	12 (27.91%)	43	3.02	0.80
Use of model recordings for guidance	5 (11.63%)	12 (27.91%)	16 (37.20%)	10 (23.26%)	43	2.72	0.96
Keeping written practice records	8 (19.05%)	17 (40.48%)	10 (23.81%)	7 (16.67%)	42	2.38	0.99
Recording practice time	13 (30.95%)	15 (35.71%)	8 (19.05%)	6 (14.29%)	42	2.17	1.03
Supervising student practice	17 (39.53%)	19 (44.90%)	7 (16.28%)	0 (0.00%)	43	1.77	0.72

Note: Responses based upon a 4-point, Likert-type scale

Survey items 19 and 20 were designed to reveal the practice habits of instructors, providing the answer to research question 3c. Survey item 19 asked instructors whether or not they considered themselves to be a performer who practices on a regular basis. Of the 43 respondents, 69.77% ($n = 30$) answered "yes" and 30.23% ($n = 13$) answered "no." Only those who responded "yes" were prompted to answer survey item 20 (using a 5-point, Likert-type scale), which stated, "With regards to YOUR practice, how often do you engage in the following strategies?" Consistent with the results of survey item 17 and 18, "analyze or mark music" was the strategy chosen with the highest mean ($M = 4.63$, $SD = 0.67$). Of the 30 respondents, 22 (73.33%) indicated that they "almost always" analyze or mark their scores. Sharing the second highest mean score ($M = 4.23$) were "set short-term practice goals" ($SD = 1.17$) and "distribute practice time to several, short sessions instead of one, long session" ($SD = 1.14$). For both strategies, 18 respondents indicated "almost always" (60.00%). "Repetition as a means to improve accuracy" ($M = 4.07$, $SD = 1.08$) was the only other strategy that scored a mean above 4 with "almost always" being the top choice among respondents ($n = 14$, 46.67%). The lowest ranked practice strategy was "keep written practice records" ($M = 1.73$, $SD = 1.17$). A majority of the respondents ($n = 18$, 60.00%) indicated that they never kept written practice records to keep track of their own practice. Table 19 displays the complete descriptive statistics for each practice strategy used by instructors.

Table 19

Frequencies, Percentages, Numbers of Responses, Means, and Standard Deviations of Practice Strategies Used by Instructors

Strategies	1 (Never)	2 (Sometimes)	3 (Often)	4 (Frequently)	5 (Almost always)	N	M	SD
Analyze or mark music	0 (0.00%)	0 (0.00%)	3 (10.00%)	5 (16.67%)	22 (73.33%)	30	4.63	0.67
Set short-term practice goals	1 (3.33%)	3 (10.00%)	2 (6.67%)	6 (20.00%)	18 (60.00%)	30	4.23	1.17
Distribute practice time to several short sessions	0 (0.00%)	5 (16.67%)	1 (3.33%)	6 (20.00%)	18 (60.00%)	30	4.23	1.14
Repetition to improve accuracy	0 (0.00%)	4 (13.33%)	4 (13.33%)	8 (26.67%)	14 (46.67%)	30	4.07	1.08
Set long-term practice goals	1 (3.33%)	4 (13.33%)	4 (13.33%)	7 (23.33%)	14 (46.67%)	30	3.97	1.22
Focus on the most difficult section of a piece	2 (6.90%)	1 (3.45%)	4 (13.79%)	11 (37.93%)	11 (37.93%)	29	3.97	1.15
Mental practice	2 (6.67%)	2 (6.67%)	4 (13.33%)	10 (33.33%)	12 (40.00%)	30	3.93	1.20
Gradually increase tempo to improve accuracy	2 (6.67%)	6 (20.00%)	4 (13.33%)	10 (33.33%)	8 (26.67%)	30	3.53	1.28
Use model recordings for guidance	2 (6.67%)	13 (43.33%)	4 (13.33%)	5 (16.67%)	6 (20.00%)	30	3.00	1.31
Aurally or visually record practice time	7 (23.33%)	8 (26.67%)	6 (20.00%)	5 (16.67%)	4 (13.33%)	30	2.70	1.37
Keep written practice records	18 (60.00%)	7 (23.33%)	2 (6.67%)	1 (3.33%)	2 (6.67%)	30	1.73	1.17

Note: Responses based upon a 5-point, Likert-type scale

Additional information. To conclude the final section of the survey designed to collect information about the influence of the teacher on student practice, I asked respondents to provide any other information that represented their view of teaching practice strategies in the voice studio (survey item 21; see Appendix F). Thirteen respondents provided a useable response to the open-ended prompt (three participants provided answers that were off-topic and thus not further considered.) The 13 responses

were coded and divided into four main categories: (a) lesson format, (b) motivation, (c) cognitive skills, and (d) assignments.

Lesson format. Seven respondents suggested that the strategies modeled and discussed during lessons are the most important in informing students' practice habits. Two instructors stated that they observed the students practice during lessons, and one volunteered information gained from those observations:

> The biggest challenges I've noted are: 1) students not being strategic about choosing and executing vocalizes—they do a couple of easy, familiar ones, and once they consider the voice "warmed up" they go on to songs, without thinking of vocalizes as a way to build their technique systematically (despite my reminders!); 2) singing with "practice room" voice (or these days, "practicing" in their residence hall room, which is even worse!) and thereby getting accustomed to under-supporting; 3) not pausing to think about where they are in preparation of a particular song before practicing it—simply "singing it through" without thinking about what's needed to take it to the next level.

Three instructors wrote that it was important to discuss or create practice strategies with students during the lessons so they could use those strategies in the practice room. Lesson notes were recorded by one instructor in students' notebooks, which contained assignments and strategies for independent practice. Two instructors suggested that it was necessary for students to replicate the results of the lesson outside of the studio by modeling their practice sessions after each lesson.

Motivation. Issues related to motivation were discussed by five of the 13 respondents. Three instructors suggested that intrinsic motivation was the ultimate goal. With regard to the importance of intrinsic motivation, one instructor stated: "Students need to make singing a priority for themselves, not something I foist upon them." Another instructor referred to self-motivation as "the key to a student's success." To elaborate on the idea, the same instructor stated:

> When the student graduates and goes out into the world, no one will hold their hand or set goals for them. To that end, giving them the tools to develop self-motivation, discipline, practice strategies, etc. is very important. In the end, motivation to get the work done must come from within the student.

The idea of motivating through goal setting was discussed by two respondents. One instructor believed goal setting was a way to keep students motivated. This instructor also warned against using practice time instead of achieving goals as a motivator: "My students tend to over-achieve, and I think this is the case because I do everything I can to inspire and motivate them. Making them keep track of practice time is not inspirational." Another instructor mentioned that goals should be realistic–so the students are not discouraged–yet should be "ambitious enough to maintain energetic, positive direction for the development of the vocal instrument and performance skills." One instructor had a somewhat negative perception of students' motivation: "They just do not want to follow the necessary steps it takes to learn their music well. As they get older and more responsible, their habits will change and they will start to be more responsible with their practicing."

Cognitive skills. Cognitive skills were addressed by two of the 13 respondents. One respondent emphasized the importance of understanding the learning style of the students so they could instruct them to become more independent thinkers. The same respondent also mentioned providing students with "tools of reflection and knowledge of their instrument." The second instructor also emphasized the building of cognitive skills, such as "teaching for transfer." This respondent stated, "They need to come up with their own approaches first. When they are unsuccessful, I let them know, and when they are successful, I also praise them for it."

Assignments. Two instructors felt that assignments in addition to practice would help the students prepare independently. One instructor assigned students to research each song, transcribe the text using the International Phonetic Alphabet (IPA), and perform in two recitals throughout the semester. Another instructor encouraged students to listen to model recordings in order to "develop a concept of tone and musical interpretation."

Supplemental materials. At the end of the survey, I invited participants to submit any supporting documents that they felt would enhance the data collected from the questionnaire, such as course syllabi and assignments. Seven instructors sent a total of 10 supplemental materials to an email account I created for the study. I received four syllabi, four examples of practice or lesson records, one song study form, and one rubric for a semester-long portfolio assessment.

Each of the four syllabi had a section dedicated to inform students of practice expectations with a specific amount of time listed for students to practice each week, depending on their major or lesson length. For example, non-music majors were expected

to practice 30 minutes daily, music majors taking 1 credit were expected to practice 45 minutes daily, and music majors taking 2 credits were expected to practice 60 minutes daily. Similarly, another instructor suggested 30 minutes of daily practice for students enrolled in half-hour weekly lessons, and 60 minutes (or two, 30-minute sessions) of daily practice for students enrolled in hour-long weekly lessons. Not all instructors specified the amount of daily practice, but instead suggested a total acceptable amount for weekly practice. One instructor required students to practice 6 to 7 hours a week, while another required 15 hours of practice a week for their students. In the syllabus, the instructor wrote in bold type with some words underlined: "**If you cannot commit this much time <u>and</u> <u>enjoy</u> <u>doing</u> <u>it</u>, you should change your major.**"

Time was also a common theme among the lesson and practice records submitted. Out of the four practice record templates, two included a space to enter time spent on each practice activity, suggesting that the amount of time spent practicing was considered relevant. Students also were asked to include translations, IPA, analysis of the score, and notes on one of the rubrics submitted. One instructor shared a song study form, which guided students to explore the history, analyze the score, interpret the music, and listening to model recordings for each song studied. The most comprehensive template provided by a respondent was a rubric for a vocal journal that was actually a semester-long portfolio project. In the vocal journal, students were to collect their personal and performance goals, weekly lesson plans and practice logs, performance reviews, listening logs, repertoire list, analyses of repertoire, and a list of references pertaining to the study of voice.

Summary

Results of this study indicated that the voice instructor participants were mostly trained as performers (82.22%) and had an average of 25 years of teaching experience. Most of these instructors used logs and journals to keep track of students' progress in lessons and practice time. There was almost no consensus among participants regarding how final grades were calculated for applied lessons, however, weekly preparation and studio class participation were frequently considered when assigning grades. These instructors tended to address a variety of practice strategies in the voice studio to at least some extent. They valued and used score study as a practice strategy more often than any other practice strategy, but other strategies also were highly rated. Overall, these voice instructors seem to be incorporating a variety of assessment and teaching strategies, although no obvious, universal formula was revealed among the sample studied.

CHAPTER FIVE

Discussion

In designing this study, I intended to provide educators and researchers with information regarding methods related to practice strategy instruction being used by collegiate voice teachers in their studios. I also sought to discover how the current practices of college voice instructors regarding practice instruction compared to the strategies reported in extant literature on practice. Voice instructors at Midwestern institutions accredited by the National Association of Schools of Music (NASM) and located in the central region of the National Association of Teachers of Singing (NATS) were surveyed.

Demographic Information

Applied studio instructors often are trained primarily as performers. Therefore, demographic information collected about the educational background of the participants in this study was not surprising. Most respondents (82%) held a DMA or MM in voice performance, while a few had a degree based in music education. Although the data collected in this study cannot be generalized to a wider population, they may provide a reasonable starting place for examining current trends regarding practice instruction, assessment, and values placed on practice strategies. Because the majority of participants in this study held intensive training in performance, it made me question how applied instructors who have a background rooted in performance learn to instruct their students. It may be assumed that instructors with degrees in performance have had pedagogical training in preparation for teaching, but a future investigation of where and how studio

instructors acquire their pedagogical knowledge may be useful so that these methods can be evaluated. Perhaps performers receive their teacher training via pedagogical courses in their degree programs, through apprenticeship and modeling, and/or workshops, conferences, and periodicals. A thorough investigation is needed to determine not only what methods are used to train studio instructors, but the effectiveness of those methods and the extent to which there is a need for ongoing professional development.

Practice Strategies Addressed in the College Voice Studio

In response to the first research question, "What types of practice strategies are addressed in the college voice studio and to what extent?" I could identify no obvious trends among the methods for teaching practice. Strategies related to modeling, structured practice, supervised practice, and mental practice were used by these instructors to at least some extent in their teaching. Although the instructors clearly were attempting to apply a variety of teaching strategies, there seems to be no consistency among them concerning which strategies are most important or how to introduce those strategies to students. Perhaps instructors use the strategies that they like best for themselves and/or their students, or are unaware of the benefits of providing students with a variety of practice strategies customized to meet their individual needs. Generally, there is not a clear formula for vocal practice instruction in the pedagogical literature, which suggests that instructors may not fully understand the most effective ways to teach practice.

Structured practice. Instructors who participated in this study approached structured practice through a variety of means. Discussing practice with students and providing students with specific practice strategies for learning a particular piece were the only methods that all instructors used to at least some extent. Some instructors indicated

they never provide students with a practice plan, create a practice plan with students, or ask students to describe what they do while practicing. The fact that instructors are not taking full advantage of these strategies does not align with the implications of extant practice research that has linked structured practice to increased musical achievement (Barry, 1990; Barry, 1992; Barry & Hallam, 2002; Barry & McArthur, 1994; DaCosta, 1999; Ericsson, Krampe, & Tesch-Römer, 1993; Fakhouri, 2002; Hopkins, 2007a; Kenny, 1998; McPherson & Davidson, 2002; Miksza, 2011; Pedrick, 1998; Peterson, 2001; Rainero, 2012; Zhukov, 2009).

These voice instructors indicated discussing practice strategies with students and suggesting strategies for them to use, but were not taking full advantage of the potential benefits of practice records, which has been encouraged in the literature as a way for teachers and students to assess and remediate practice habits (Barry & Hallam, 2002; Bathgate, Sims-Knight, & Schunn, 2011; Brändström, 1995/1996; Boyd, 2013; Johnson, 2009; Koopman, Smit, de Vugt, Deneer, & den Ouden, 2007; Mackworth-Young, 1990; Oare, 2011; Peterson, 2001; Wolfe, 1984; Zarro, 2003). Perhaps if more examples of practice records specific to voice are made available in future literature, more voice instructors would incorporate them into their teaching methods. Several instrumental practice records have been featured in practitioner articles, but these practice templates may not be easily accessible for voice instructors (Johnson, 2009; Oare, 2011; Peterson, 2001).

Supervised practice. Supervised practice was a rare occurrence among these voice instructors. Musicians who practice with the supervision of an adult have shown musical and technical improvements during practice (Barry & McArthur, 1994; Brokaw,

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1983; Sperti, 1970). The lack of supervised practice in the collegiate voice studio was not surprising because most of the extant research on supervised practice considered a parent as the primary supervisor of the child's practice (Peterson, 2001; Sosniak, 1985; Toner, 2010; Woody, 2004; Zhukov, 2009). In collegiate voice, parental supervision would not be appropriate, yet the possible effects of an applied studio instructor's supervision of student practice is unknown. An investigation of the effects of instructor supervision of student practice may be merited, although there would be many factors making instructor supervision *outside* of lesson time difficult. Students could videotape or audiotape their practice, but this would require extra time for the instructor to review. However, allowing students to practice for brief segments with instructor supervision *during* lessons may improve their practice habits over time. More research is needed to support this theory.

Mental practice. Mental practice has been shown to be an effective strategy for musicians (Barry & Hallam, 2002; Barry & McArthur, 1994; Brooks, 1995; Coffman, 1990; Connolly & Williamon, 2004; Gaylen, 2006; Rosenthal, Wilson, Evans, & Greenwalt, 1988; Ross, 1985; Rubin-Rabson, 1941), and the voice instructors who participated in this study discussed the benefits of mental practice with students. Fewer instructors, however, actually guided students through mental practice during lessons or provided them with guidelines for mental practice. Voice instructors may not be comfortable teaching mental practice, yet they seem to understand the benefits.

Amount of time. The participants were not in agreement about the issue of how much time students should spend practicing. The length of time suggested by a majority of respondents ranged from 3.5 to 15 hours per week. Many of the instructors reported that they required a certain length of time for practice, although the same number said

they never required a set amount of practice time. It seems that instructors have varied

philosophies of practice time as an influential component of performance success.

Research has suggested that the amount of practice is important, but is not the only

contributing factor to musical achievement (Anderson, 1981; Barry & McArthur, 1994;

Bathgate et al., 2011; Ericsson, Krampe, & Tesch-Römer, 1993; Linklater, 1997;

Madsen, 2004; Sloboda et al., 1996).

Distributed practice was highly valued by instructors who participated in this

study, which also has been supported by research. Distributed practice was beneficial to

young musicians when attempting to recall skills at least 24 hours after practicing (Dail &

Christina, 2004; Shea, Lai, Black, & Park, 2000; Tsutsui, Lee, & Hodges, 1998). For

vocalists, breaking up practice time into several shorter sessions as opposed to one longer

one could lessen the risk of vocal fatigue. Because this reportedly was a highly valued

practice strategy, it seems that instructors are aware of the benefits of distributed practice,

at least to some extent.

Modeling. Instructors reported using their singing voice as a model more often

than assigning model recordings or listening to models during lessons. Most of the prior

research on modeling is concentrated on the use of model recordings to improve

performance achievement (Henley, 2001; Linklater, 1997; Puopolo, 1971; Rosenthal et

al., 1988; Zurcher, 1975) rather than live modeling (i.e., voice instructors modeling with

their own singing voice). Because these instructors claimed to use this strategy for

modeling most often, more research is needed in order to determine the impact it has on

the success of singers. In addition, listening to model recordings during lesson time may

offer benefits such as allowing the teacher and student to communicate about the

elements making up a good performance; however, no research about this type of strategy currently exists.

Assessment of Students

Authors of extant literature have expressed positive views towards the use of assessment tools such as journals, logs, or contracts to track student achievement (Barry & Hallam, 2002; Bathgate et al., 2011; Boyd, 2013; Johnson, 2009; Koopman et al., 2007; Oare, 2011). This information prompted the second research question, "How do voice instructors assess students' musical achievement?" More specifically, methods for keeping track of students' practice (research question 2a) and students' progress in lessons (research question 2b) were examined. Participants in this study indicated using logs and journals most often to track students' practice; logs, journals, and recordings were used the most often to keep track of students' progress during lessons. Several instructors provided examples of these lesson records when asked to submit supplemental materials. It is interesting that all of the instructors who submitted samples used the practice records to track the *amount* of time students spent practicing, which should not be a main goal for musicians (Duke, Simmons, & Cash, 2009; Madsen, 2004; Prichard, 2012). Although respondents to this study definitely used some type of practice record, the efficacy of those records could not be determined. Perhaps students are not using the practice records as intended, or maybe the practice records were being used to measure something other than students' progress, such as time. Because practice and lesson records are frequently used to assess the quality of students' practice and lessons, an investigation into the efficacy of such records would be valuable.

Data collected to answer research question 2c, "What criteria are used by voice instructors to assign grades to students, and how are these weighted?" revealed inconsistencies among the instructors surveyed. Respondents' grading scales varied greatly in terms of the weight place on jury performances and attendance. A majority of instructors indicated that juries and attendance accounted for less than 50% of a student's final grade, but the wide range of percentages indicated within that range showed an inconsistency in grading scales as a whole. The participants did appear to agree that weekly preparation, studio class participation, and written reflections should be considered when determining a student's final grade. Such assignments have the potential to show students' progress, which may indicate that the instructors indeed valued monitoring musical achievement. Recital attendance was also a popular assignment among participants, but would not necessarily be used to assess students' progress. Only four respondents actually assigned score study, even though "analyze or mark the score" was the most highly rated response in terms of what instructors used and valued in lessons. The reason why only a few instructors considered score study when determining a final grade cannot be assumed without further investigation. Perhaps instructors assess score study via other means (e.g., practice logs, journals, or weekly preparation), and do not consider this a separate assignment.

Voice Instructors' Influence on Student Practice.

Researchers have found that students tend to practice using the strategies most emphasized by their teacher during lessons (Barry, 2007; Koopman et al, 2007). Therefore, it is important for voice instructors to make practice habits a goal of every lesson (Barry, 2007; Barry & McArthur, 1994; Cooper, 2004; Pedrick, 1998; Wolfe,

1984). Considering that instructors play an important role in shaping students' practice habits, the final research question was posed, "How do voice instructors influence student practice?"

Practice strategies used in a typical voice lesson. Respondents were asked to identify what types of practice strategies they used in a typical voice lesson (research question 3a). Analyzing the score, encouraging students to practice with goals, and focusing on the most difficult sections of the music were the three strategies employed most frequently. Asking students to reflect on their technical achievements or failures, providing students with practice strategies to meet their goals, and using repetition also were strategies used frequently by the majority of participants. Given that 88% of the instructors' ratings indicated that they "often," "frequently," or "always" "encourage the student to practice with a set of goals," a surprisingly low number of instructors (30%) indicated that they "frequently" or "almost always" set long-term practice goals with their students. This suggests that instructors and students are preparing on a week-to-week basis and perhaps overlooking the long term in regard to practice. Instructors' responses also revealed that supervising student practice during lesson time was rare, as was reviewing the practice record with the student. It seems that instructors may be missing out on enlightening opportunities to understand how their students practice and think about practice.

Practice strategies valued by voice instructors. I asked the instructors to indicate which practice strategies they valued (research question 3b), so that I could make comparisons between the strategies they used in a typical lesson. The practice strategies utilized and the strategies valued were somewhat consistent among respondents with only

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a few contradictions, which implies that these instructors tended to teach the strategies they value. For example, analyzing or marking music was the top-rated strategy of respondents in terms of value and emphasis. Other strategies with similar mean ratings, indicating that they were valued and used consistently, were gradually increasing tempos as a means to improve accuracy, mental practice, using repetition as a means to improve accuracy, and use of model recordings for guidance.

Respondents indicated a high value for knowing how their students spend practice time ($M = 3.49$), but according to the data collected, respondents did not employ appropriate strategies to support this. Respondents did not emphasize reviewing students' practice records ($M = 1.81$) or supervising students' practice ($M = 2.26$), which seem to be two strategies that would enable instructors to understand how students spent their practice time. Perhaps instructors need to be made aware of possible benefits of using more strategies for understanding students' practice habits.

In terms of goal setting, responses were a bit contradictory with respect to value and use. While 57.14% of instructors indicated that they valued setting long-term goals "a lot," 34.89% of instructors said they used long-term goal setting only "sometimes;" only 6.98% of respondents said they "almost always" set long-term practice goals with their students. The reason for the discrepancy between what instructors actually do and what they value is unknown. More research is needed to determine whether instructors' teaching goals and the strategies used to achieve those teaching goals are consistent. This information could help instructors understand potential flaws in their methods of instruction and perhaps inspire remediation.

Practice habits of voice instructors. Research question 3c, "What are the practice habits of voice instructors?" allowed for comparisons between what instructors reportedly used and valued in lessons to what instructors actually did in their own practice sessions. Analyzing or marking music was the top ranked strategy in all three questions. When describing their own practice routine, instructors indicated frequently analyzing or marking music, setting short-term practice goals, distributing practice time, and using repetition, which were consistently reported as valued strategies used often in lessons. Setting long-term practice goals, focusing on difficult sections, and mental practice also were rated highly among the strategies. Overall, instructors practiced using the same strategies that they valued and employed in lessons.

Comparison of practice strategy and value responses. In order to examine similarities or differences between responses to the strategies in the different contexts, Table 20 was designed to compare the means and standard deviations for strategies used by the instructors in their own practice, valued by the instructors, and used in lessons with students. The order of practice strategies used by and valued by instructors is quite consistent, so it may be assumed that instructors practice using the strategies they value most, or vice versa. The pattern of ratings for strategies used by instructors in lessons, however, includes one anomaly—"set long-term practice goals" was rated the least frequent of the strategies used in lessons out of the six, yet tied for third rank in instructor use and second for value. Based on this inconsistency between what participants reported using with students and what they valued and used themselves, the question arises as to how the instructors make decisions to choose specific strategies for use with their students in lessons.

Table 20

Means and Standard Deviations of Practice Strategies Used by Instructors, Valued and Used in Lessons with Students

Strategies	Used by Instructors		Valued		Used in Lessons	
	M	*SD*	*M*	*SD*	*M*	*SD*
Analyze or mark music	4.63	0.67	3.88	0.32	4.28	0.77
Repetition to improve accuracy	4.07	1.08	3.47	0.59	3.84	1.02
Focus on the most difficult section	3.97	1.15	3.29	0.81	3.93	1.03
Set long-term practice goals	3.97	1.22	3.48	0.67	2.93	1.10
Mental practice	3.93	1.20	3.19	0.89	3.35	1.25
Gradually increase tempo to improve accuracy	3.35	1.28	3.02	0.80	3.19	0.91

NOTE: Response scales differed, so while means indicate relative rank within columns/categories, comparison across rows/categories is not appropriate (items for "Used by Instructors" and "Used in Lessons" are based on 5-point scales; "Valued" is a 4-point scale)

Limitations

Generalization of findings. The useable response rate of this study was low (21.39%), and is a limitation of the research. I only sent one reminder to participants, however, and additional reminders may have resulted in more participants. The responses did represent each of the three states included in the project in even proportions. Another limitation is the possibility that the instructors who chose to respond were the ones most interested in the topic, or who felt they had the most to share, so may represent a positive bias towards examining approaches to practice in their studio teaching. Even with these limitations, and although generalization beyond this sample may not be warranted, the data generated do seem sufficient to provide a baseline or starting point to build on in future research.

Response scale. I used a 5-point, Likert-type scale for survey items 12–17 and 20, which allowed participants to provide a "neutral" response. Had I chosen a 4-point, Likert-type scale to force responses that were on one side or the other, I potentially could have received a more complete or concise picture of respondents' attitudes and behaviors.

Voice instructor perceptions. The results of this study were based on the voice instructors' perceptions about their teaching, rather than data based on observation. The teachers may not have accurately described their teaching methods, or their perceptions of how they teach may not match what they actually do, or what the students have learned. Future researchers should consider an investigation of voice teachers' perceptions of practice instruction compared to actual teaching methods observed. Additionally, a study comparing what voice instructors perceived to have taught to what students perceived to have learned would provide useful information. These data would reveal any discrepancies in voice instruction that could be improved upon to ensure teaching effectiveness.

Nature of the prior research. This study was based on prior research conducted mostly in the field of instrumental music teaching, which may be a limitation. It has been assumed that the practices found to be most effective in instrumental instruction can be applied to vocal music instruction, yet, due to a lack of research related to practicing vocal music, it is unclear whether the results of the extant literature can be directly and appropriately applied to vocal music. Upon further research of effective vocal music practice strategies, it could be discovered that certain strategies work differently for vocalists than instrumentalists. Thus, more research is needed to determine which practice strategies are most effective for vocalists.

Middle school and high school students were the participants in a majority of the prior research in the field of practice. The implications of research about young musicians may or may not be applicable to vocalists at the collegiate level. Factors such as age and experience may impact the effects of practice on musical achievement. Further investigation is needed in order to determine if college vocalists could benefit from the same practice strategies as younger instrumentalists. More studies with college-aged participants would further reveal what practice strategies work best for more advanced musicians.

Implications

      Future research. More research in the field of vocal music practice is needed in order to inform educators about how to teach vocalists to practice most effectively. A replication of studies in the field of instrumental music practice with a vocal music population would be valuable in order to compare results. For example, Barry investigated instrumentalists who used a structured practice plan, and found that they were able to correct more errors than students who did not use a structured plan (Barry, 1990; Barry, 1992). It would be interesting to see if vocalists would find the same benefits of structured practice. Also, Linklater (1997) investigated the effects of practice using three types of models—videotaped, modeling audio-taped, and non-modeling audio-taped—on the performance achievement of middle school clarinetists, and found that the videotaped model group scored highest in visual aspects of performance such as embouchure, hand position, instrument position, and posture. If this study were to be replicated with vocalists, perhaps there would be improvements in the visual elements of

singing—posture, facial expression, shape of articulators, and so forth—that would further inform voice instructors of the actual benefits of modeling for singers.

Once effective practice strategies for vocalists have been solidified via research, voice instructors may need to consider making accommodations in their teaching methods. Understanding more about what drives instructors to teach certain practice strategies could also be beneficial. Do instructors teach how they were previously taught? Do instructors teach the practice strategies that seemed to work best for themselves, or for their students? How have instructors been prepared to teach practice strategies? The answers to these questions would provide useful insights into what drives instructors' decisions to teach specific methods of practice, and may validate current practices or indicate that new perspectives on teaching strategies would be warranted.

Monitoring singers' practice habits after they have received various types of practice instruction would be an important research study in the field of vocal music practice. What are the characteristics of the students being taught? Do the students actually practice in the manner they were taught? What practice strategies do they use most often and why? What practice strategies work best for different types of students? Does age, experience level, or voice type influence practice habits? The list of questions for this type of research is extensive. Understanding how students practice, why they practice, and the results of their practice methods would be invaluable in shaping practice instruction for vocalists.

Establishing standards for practice instruction based on research. Instructors should consider the extant research in practice instruction when formulating a plan to teach practice. Research in the five practice categories—structured practice, supervised

practice, mental practice, amount of time, and modeling—provide implications for music instruction. Voice instructors may find music practice research irrelevant, however, given that most of it is based on instrumental music teaching. Also, they may not be aware of this research or how to apply it to vocal music. Workshops, articles, or networking opportunities such as online forums could help studio instructors become aware of practice research and how to make appropriate applications to voice instruction.

Concluding Statement

Practice instruction in the voice studio plays an important role in the facilitation of singers' independence and life-long performance achievement. Voice instructors' values and experiences as performers and teachers contribute greatly to the environment of the applied studio. How instructors choose to introduce methods of practice to their students during lessons impacts the choices students make while practicing (Barry, 2007). With proper instruction of a variety of practice strategies, experiences in goal-setting, and on-going assessment, vocalists may learn to become effective, self-regulated musicians in the practice room.

Voice instructors must have an understanding of what practice strategies work best for each student in order to assist them in developing useful practice techniques. Through goal-setting exercises, teachers can learn what each student needs and expects from voice lessons. Throughout the lesson experience, methods to track students' practice and progress in lessons can inform both instructors and students whether or not the goals are being met. A continued willingness of instructors to adjust goals, monitor practice and progress, and reinforce appropriate practice strategies could be the key to teaching singers to practice effectively.

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Voice Instruction Survey

Q1 In which state do you currently teach?
- ❍ Illinois
- ❍ Iowa
- ❍ Missouri

Q2 How would you best describe your institution?
- ❍ University
- ❍ Conservatory
- ❍ Community College
- ❍ Private College
- ❍ Other (Please specify) _____

Q3 What is your highest degree earned in music?
- ❍ DMA
- ❍ PhD
- ❍ MM
- ❍ MA
- ❍ BM
- ❍ BA

Q4 In what area was your highest degree earned in music?
- ❍ Music Performance
- ❍ Music Education
- ❍ Conducting
- ❍ Other (Please specify) _____

Q5 What best describes your current position title?
- ❍ Full professor
- ❍ Assistant professor
- ❍ Associate professor
- ❍ Adjunct instructor
- ❍ Artist-in-residence

Q6 How many years have you been teaching voice at the collegiate level?

Q7 Have you ever used any of the following to keep track of students' practice? (Check all that apply)
- ❑ Log
- ❑ Journal
- ❑ Contract
- ❑ Recording
- ❑ Other (Please specify) _____

Q8 Have you ever used any of the following to keep track of a student's progress in lessons? (Check all that apply)
- ❑ Log
- ❑ Journal
- ❑ Contract
- ❑ Recording
- ❑ Other (Please specify) _____

Q9 What percentage of a student's final grade is determined by their jury performance?

Q10 What percentage of a student's final grade is determined by their attendance?

Q11 Are students assigned any other work to be credited towards their final applied lessons grade? (Check all that apply)
- ❑ Listening journals
- ❑ Recital attendance
- ❑ Studio class participation
- ❑ Written reflections (i.e., practice journals, lessons logs)
- ❑ Weekly preparation
- ❑ Other (Please specify) _____

Q12 In a typical lesson, to what extent do you engage in the following strategies related to modeling?

	Never	Sometimes	Often	Frequently	Almost always
Listen to model recordings during lesson time	O	O	O	O	O
Assign model recordings for the student to use as a aural/visual guide during practice	O	O	O	O	O
Model using your own singing voice	O	O	O	O	O

Q13 In a typical lesson, to what extent do you engage in the following strategies related to structured practice?

	Never	Sometimes	Often	Frequently	Almost always
Provide a student with a practice plan (a list of practice goals for their individual practice sessions with strategies for reaching each goal.)	○	○	○	○	○
Create a practice plan with your student	○	○	○	○	○
Ask the student to describe a typical practice session in detail	○	○	○	○	○
Discuss strategies for practice	○	○	○	○	○
Provide the student with specific practice strategies for learning a particular piece	○	○	○	○	○

Q14 To what extent do you engage in the following strategies related to supervised practice?

	Never	Sometimes	Often	Frequently	Almost always
Supervise the student practicing outside of lessons	○	○	○	○	○
Supervise the student practicing during lessons	○	○	○	○	○
Observe the student's recordings of their practice session	○	○	○	○	○

Q15 In a typical lesson, to what extent do you engage in the following strategies related to the amount of time spent practicing?

	Never	Sometimes	Often	Frequently	Almost always
Ask the student about the amount of time they spent practicing	○	○	○	○	○
Suggest to the student a length of time to spend practicing	○	○	○	○	○
Require a set amount of time for the student to practice	○	○	○	○	○
Require the student to report minutes practicing on a form or chart to be turned in to you	○	○	○	○	○

Q16 In a typical lesson, to what extent do you engage in the following strategies related to mental practice?

	Never	Sometimes	Often	Frequently	Almost always
Discuss the benefits of mental practice with your student	○	○	○	○	○
Guide a student through mental practice during their lesson	○	○	○	○	○
Provide a student with guidelines for mentally practicing a specific piece or part of a piece	○	○	○	○	○

Q17 In a typical lesson, how often do you use the following strategies?

	Never	Sometimes	Often	Frequently	Almost always
Gradually increase tempo to improve accuracy	○	○	○	○	○
Repetition to improve accuracy	○	○	○	○	○
Instruct student to analyze or mark the music	○	○	○	○	○
Encourage mental practice	○	○	○	○	○
Listen to models for guidance	○	○	○	○	○
Supervise a student practicing during the lesson	○	○	○	○	○
Encourage the student to practice with a set of goals	○	○	○	○	○
Provide the student with strategies to meet their practice goals	○	○	○	○	○
Focus on the more difficult sections of the music	○	○	○	○	○
Review written practice	○	○	○	○	○

records with the student's input					
Set long-term practice goals with the student	○	○	○	○	○
Ask the student to reflect on a specific technical achievement or failure	○	○	○	○	○

Q18 To what extent do you value the following:

	Not at all	Very little	Somewhat	A lot
Offering the student a variety of practice strategies	○	○	○	○
Knowing how the student spends their practice time	○	○	○	○
Understanding the student's feelings about singing goals	○	○	○	○
Gradually increasing tempo as a means to improve accuracy	○	○	○	○
Using repetition as a means to improve accuracy	○	○	○	○
Analyzing or marking music	○	○	○	○
Setting long-term practice goals	○	○	○	○
Setting short-term practice goals	○	○	○	○
Distributing practice time over several, short sessions instead of one, long session	○	○	○	○
Focusing on the most difficult section of a	○	○	○	○

piece				
Mental practice	○	○	○	○
Supervising student practice	○	○	○	○
Recording practice time	○	○	○	○
Keeping written practice records	○	○	○	○
Use of model recordings for guidance	○	○	○	○

Q19 Do you consider yourself to be a performer who practices regularly?
○ Yes
○ No

Q20 WIth regards to YOUR practice, how often do you engage in the following strategies?

	Never	Sometimes	Often	Frequently	Almost always
Gradually increase tempo as a means to improve accuracy	○	○	○	○	○
Repetition as a means to improve accuracy	○	○	○	○	○
Analyze or mark music	○	○	○	○	○
Set long-term practice goals	○	○	○	○	○
Set short-term practice goals	○	○	○	○	○
Distribute practice time to several, short sessions instead of one, long session	○	○	○	○	○
Focus on the most difficult section of a piece	○	○	○	○	○
Mental practice	○	○	○	○	○
Aurally or visually record practice time	○	○	○	○	○
Keep written practice	○	○	○	○	○

records					
Use model recordings for guidance	❍	❍	❍	❍	❍

Q21 Please provide any other information that represents your view of teaching practice strategies in the voice studio.

Q22 If you feel comfortable sharing your syllabus, assignments, practice log templates, or other supporting documents from your voice studio, please submit electronic copies to baughmansurvey@gmail.com. Please remove any identifying information before uploading. Be assured that confidentiality will be upheld by removing any potentially identifying information in any presentation of the findings. Documents may be sent via attachment to: Baughmansurvey@gmail.com.

Q24 Thank you for your help with this project! Your time and responses are much appreciated. If you would like to receive a summary of the results once the study is complete, email your request to baughmansurvey@gmail.com.

MU **Campus Institutional Review Board**
University of Missouri-Columbia

485 McReynolds Hall
Columbia, MO 65211-1150
PHONE: (573) 882-9585
FAX: (573) 884-0663

November 19, 2013

Principal Investigator: Baughman, Melissa M
Department: School of Music

Your Application to project entitled *An examination of methods used to teach practice strategies in the voice studio.* was reviewed and approved by the MU Campus Institutional Review Board according to terms and conditions described below:

IRB Project Number	1209908
Initial Application Approval Date	November 19, 2013
IRB Expiration Date	November 19, 2014
Level of Review	Exempt
Project Status	Active - Open to Enrollment
Regulation	45 CFR 46.101b(2)
Risk Level	Minimal Risk

The principal investigator (PI) is responsible for all aspects and conduct of this study. The PI must comply with the following conditions of the approval:

1. No subjects may be involved in any study procedure prior to the IRB approval date or after the expiration date.
2. All unanticipated problems, serious adverse events, and deviations must be reported to the IRB within 5 days.
3. All modifications must be IRB approved by submitting the Exempt Amendment prior to implementation unless they are intended to reduce risk.
4. All recruitment materials and methods must be approved by the IRB prior to being used.
5. The Annual Exempt Form must be submitted to the IRB for review and approval at least 30 days prior to the project expiration date.
6. Maintain all research records for a period of seven years from the project completion date.
7. Utilize the IRB stamped document informing subjects of the research and other approved research documents located within the document storage section of eIRB.

If you have any questions, please contact the Campus IRB at 573-882-9585 or umcresearchcirb@missouri.edu.

Thank you,

Charles Borduin, PhD
Campus IRB Chair

Informed Consent

The purpose of this research study is to acquire data concerning the instruction of effective practice strategies in voice studios across National Association of Schools of Music (NASM) accredited institutions in the central region of the National Association for Teachers of Singing (NATS). You were contacted because of you have been identified as a voice instructor at your institution. The results of this study may provide educators with ideas for incorporating strategies of teaching effective practice to their students in order to advance the field of voice studio instruction.

Please complete the short questionnaire that follows. This should take approximately 15 minutes to complete. Your participation in this research is completely voluntary. While I hope you will complete the whole survey, you will be free to decline to answer any items, as you choose. You may remove yourself from the research at any point without penalty.

Your responses to the survey questions will be completely confidential – there will be no way for me to connect survey responses with respondents. Near the end of the questionnaire, you will be given the option to upload any supporting documents, such as syllabi and assignments, which you feel enhance the data collected from the survey. You are encouraged to remove any identifiable information before uploading, but if that is not convenient, please be assured that no identifying information will be used in any manner in the presentation of findings from these documents. This information will be downloaded only to the researcher's computer, which is password protected.

If you have any questions about your rights as a research participant, you may contact the University of Missouri Institutional Review Board (IRB) at XXX-XXX-XXXX, or my doctoral advisor, Dr. Wendy Sims, XXX-XXX-XXXX. Feel free to contact me if you have any questions about this research.

Thank you very much,

Melissa Baughman at the University of Missouri, Columbia, MO 65211; XXXXXX@mail.missouri.edu.

By clicking to enter the survey, I am giving my informed consent to participate in this research project.

Click Here to Enter Survey

APPENDIX D

28 January 2014

Dear Professor «Last»,

I am a doctoral student in music education at the University of Missouri, conducting a dissertation study investigating strategies for teaching effective practice used by voice instructors at National Association of Schools of Music (NASM) accredited institutions within the central region of the National Association for Teachers of Singing (NATS). I am writing to request your help in completing a research survey. If you are not a voice instructor at your institution, please forward this message to the appropriate instructor. If you do not wish to receive reminder messages, feel free to reply with the instructor to be contacted in your place and I will remove you from my mailing list and contact that person directly.

Your participation in the research is strictly voluntary. The Informed Consent Form will be provided as the first page of the survey.

Near the end of the survey, you will be given the option to submit any supporting documents that you feel enhance the data collected from the questionnaire, such as course syllabi and assignments. You may remove all identifying information before uploading them, but if they do contain identifiable information, I assure you that both you and your institution will remain anonymous in the presentation of any findings.

If you have any questions, or if your institution would like a copy of the MU IRB approval letter, you may contact me at XXXXX@mail.missouri.edu. Questions about your rights as a research participant may be addressed to the University of Missouri IRB at XXX-XXX-XXXX.

The survey will take approximately 15 minutes to complete.
It may be accessed at: https://missouri.qualtrics.com/SE/?SID=SV_25ZxKLIo04JlgSF
The survey link will be active from January 28 through February 28.

The purpose of this study is to provide voice instructors with information for determining the efficacy of their own instruction, and to serve as a basis for future comparisons of teachers' perceptions of their instruction to the reality of the voice studio environment. If you would like a summary of the results once the study is completed, at the end of the survey you will find a separate e-mail address where you can send a request. Thank you for your help with this project!

Sincerely,
Melissa Baughman

24 February 2014

Dear Professor {Last},

Please accept this reminder regarding my research study on effective practice instruction in the voice studio. Below is my previous message that includes a description of the research project and a link to the online survey, which will remain active a little while longer.

If you have already responded to the questionnaire, I thank you for your time! Your participation is greatly appreciated.

Sincerely,
Melissa Baughman

Question 21. Please provide any other information that represents your view of teaching practice strategies in the voice studio.

Response Rate: 13

- I feel that self-motivation is key to a student's success. When the student graduates and goes out into the world, no one will hold their hand or set goals for them. To that end, giving them the tools to develop self-motivation, discipline, practice strategies, etc., is very important. In the end, the motivation to get the work done must come from within the student.

- Observing student practice during lesson time (which I do periodically) is always enlightening. The biggest challenges I've noted are: 1) students not being strategic about choosing & executing vocalises--they do a couple of easy, familiar ones, and once they consider the voice "warmed up," they go on to songs, without thinking of vocalises as a way to build their technique systematically (despite my reminders!); 2) singing with "practice room" voice (or these days, "practicing" in their residence-hall room, which is even worse!) & thereby getting accustomed to under-supporting; 3) not pausing to think about where they are in their preparation of a particular song before practicing it--simply "singing through it" without thinking about what's needed to take it to the next level.

- Personal observation of what the student has practiced during the voice lesson.

- I have high expectations for my students but focus on quality rather than quantity of practice time. If goals are being met and satisfactory progress is being made, then the amount of time being spent in the practice room is not very relevant. If goals are not being met, I will delve into the reasons that this might be occurring and address them systemically. My students tend to over-achieve, and I think this is the case because I do everything I can to inspire and motivate them. Making them keep track of practice time is not inspirational. Giving them great tools to use so that they improve quickly is much more effective.

- Your questions are often insightful, even instructive. My entire teaching career I have emphasized the important of practice, and tied the greater portion of student's grades to their practice record, but your questions helped me to think about ways I could increase that value for students. Thank you.   I didn't always know the difference in your rubric between Often and Frequently.

- stay "on" the voice, which means coordinate breath with vibration right from the source, connecting all the dots for legato (begins as more of a slide, but then becomes legato), vowel modification according to Coffin. Free the voice before trying to manipulate for softer singing. Train belt voice for better mix in middle

voice, train the whistle register (according to Coffin) regularly to expand range and have more mix in head voice. Balance pressure on each note to approx. what you would need on [ng]

- I give my students regular exercises and explain what the exercise does. I have noticed that those who actually do the exercises on their own tend to make more progress than those who do not. I realize that many students do not practice on a consistent basis, though I give them exercises and a printed help to learning their music. I find that learning music is the biggest obstacle. They just do not want to follow the necessary steps it takes to learn their music well. As they get older and more responsible, their habits change and they start to be more responsible with their practicing.

- The students spend much more time with themselves than I do. I work to help students understand their learning style and help them create strategies that will make them MORE independent thinkers as they progress through the degree. I don't want them to become dependent, I want them to have tools of reflection and knowledge of their instrument and how I build our lesson so they can replicate lesson results outside of my studio.

- I also require research of songs being learned for lessons in a vocal repertoire form as well as IPA written out for the repertoire and two performances in recital hour. In a college where there are many ensembles that students participate in i find it best to work the semester around these events and try to get them focused on learning when they are not so terrible busy. To cover all the areas you have covered in your questions is truly not possible within a very busy semester's schedule of concerts and recitals and competitions. Unfortunately one has to be flexible and deal with the culture at the college one teaches and make many adjustments.

- I believe in teaching for transfer and intrinsic motivation. Students need to make singing a priority for themselves, not something I foist upon them. They should understand that there are high expectations that I require them to meet, and if they need help, I will help them, but I don't go to that strategy first. They need to come up with their own approaches first. When they are unsuccessful I let them know and when they are successful, I also praise them for it.

- I strive for intrinsic motivation for the student. I encourage students to listen to outstanding performers in order to develop a concept of tone and musical interpretation. We all agree that students are works in progress. Thus, the goals we set are realistic so as to not discourage the student, yet ambitious enough to maintain energetic, positive direction for the development of the vocal instrument and performance skills.

- For several years, I have found it helpful to record my notes on each lesson, including assignments and strategies, in the student's required notebook. At the

top of each lesson the student presents me with the notes from the previous lesson, which serves as an excellent reminder of the tone and content of the most recent lesson. To date, no student has failed to retain these notes -- none have been lost. Additionally, I have noted a far greater level of accountability that when those notes were retained in my own studio. One of my instrumental colleagues sends these notes via email, which has a stronger archival value. I prefer the written method, primarily because it allows the insertion of crude illustrations, and the like.   Thank you for including me in your survey. Best wishes.

- In lessons, I recommend my students model their practice time after the session itself. I believe that singers, in order to survive, must develop their discipline around practice on their own. I encourage and support, but insist they form this individually.

VITA

Melissa Baughman attended Bowling Green State University in Bowling Green, Ohio, earning a Bachelor of Music Education degree in 2003 and a Master of Education degree in 2007. After six years teaching vocal music in rural Ohio, she received a Master of Music degree in vocal performance from the University of Missouri in 2011, followed by a Doctor of Philosophy in Learning, Teaching and Curriculum, Music Education in 2014 from MU. Melissa taught courses in the voice and choral areas while attending graduate school. She has also served as an adjunct instructor of music at Middle Tennessee State University in Murfreesboro, TN, and at Central Methodist University in Fayette, MO. As an active performer and music educator, Dr. Baughman plans to continue her research on effective practice instruction, music teacher preparation, and professional development for the beginning teacher.