

A Description of Individual Practice Sessions of Four Ninth-Grade String Students

by

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ABSTRACT

The purpose of this study was to examine four ninth grade students' and teacher-researcher descriptions of student practice sessions. Research questions for this study were (a) How do students describe their home practice sessions in a journal, in response to a videotape, and in an interview?; (b) How does the teacher-researcher describe the students' home practice sessions?; and (c) What is the qualitative comparison between the teacher and students' descriptions? Data included participant interviews, video recorded practice sessions, journal entries of the participants' perceptions of what they did while individual practicing, and participant/researcher observations/field notes of the practice sessions and procedures taken. Findings are presented as profiles of each of the participants and suggest that these four participants can articulate and demonstrate practice strategies, find enjoyment in playing their respective instrument, and understand the importance of practice in their musical education. Findings also suggested that the participants' practice strategies were apparent in their practice sessions; however, the lack of organization and variety of practice strategies used jeopardized their progress of musical achievement.

CHAPTER ONE

Background and Introduction

The beginning of the school year is an exciting time in my high school orchestra classroom. Instruments are taken out of the cases, new music is waiting in the folders, and excitement fills the air. As the bows cross the strings, beautiful music is produced. Many students enjoy the first rehearsal of the school year; just the sound of the ensemble playing brings a smile to their faces. When the students leave the classroom, enthusiasm is heard throughout the hallways. Discussion about the musical selections and number of performances that will take place sparks interest from other members of the school. The year is off to a great start!

As the year progresses, the word “practice” comes up frequently in my orchestra classes. Specific passages and solos are assigned in preparation for large ensemble and solo and ensemble performances. Chair placement tests and final playing exams are also performed throughout the year. I assume that practice is being done in preparation for these events; however, just how practice is taking place is a mystery to me. The feeling of frustration starts to set in for students who are not practicing. Realizing they cannot keep up with their peers, what excitement they had at the beginning of the school year slowly fades away. The instruments are no longer going home, and the thought of giving up becomes evident. I then ask myself, “Why is this happening”?

In my classroom, many hours are spent teaching students to play musically, to have secure technique, and to develop reliable intonation and a well-produced sound. Yet often, I pay little attention to the one aspect of musicianship that allows a student to incorporate these skills

into their playing: practice strategies. “Teachers have a crucial role to play not only in assisting students in acquiring musical expertise but also in developing knowledge of appropriate practicing and learning strategies and supporting students in becoming autonomous independent learners” (Parncutt and McPherson, 2002, p. 160). I do want my students to learn effective practice strategies; however, more than often, the topic is not presented in length or is completely avoided in my classroom.

Throughout the years, I have used different strategies in the classroom to encourage students to practice outside of class. When I first started teaching, the infamous practice record seemed to be the preferred choice. I would require my students to write down the specific music practiced, list the minutes spent on each piece, and require a parent signature for proof of practicing; but, I soon learned that many of the students just filled in the information without actually practicing the assignment. I had also given in-class playing tests to see if students were truly practicing at home; but realized, the use of specific strategies such as setting individual goals in a certain practice session or providing detailed examples on how to fix rhythm problems was not being seen during the actual test.

In past years, many journal and magazine articles (Hudson, 1977; Kenny, 1998; Pedrick, 1998; Peterson, 2001; Byo, 2004; Kostka, 2004; Rawlins, 2004; Sariti, 2004; Green, 2006; Johnson, 2009; Eckert, 2011; Videira, 2013) have been written on the topic of practice. *Music Educators Journal*, *American String Teacher Journal*, and *The Instrumentalist* all contain many articles that discuss the topic of practice and offer a variety of strategies to help make practice effective and successful. One strategy suggested for teachers is to “help the child establish a routine” (Peterson, 2001, p. 47). After a routine is established, Young (1994) encourages teachers to help the student set a goal to make practice beneficial. “Once a student has set a clear

goal, the purpose of daily practice becomes evident” (Young, 1994, p. 79). After reading many articles related to practice, I needed to figure out how to teach my students how to practice and show them effective strategies that would aide in their individual practicing.

After watching my students struggle for so long, I started to explain certain practice strategies during their lesson times¹. With no set curriculum in place, I was going about each lesson showing specific strategies that would only work in certain measures, not realizing the strategies weren’t being carried over into other pieces of music. I still heard inconsistent practicing at school; the same errors over and over again. Duke, Simmons, and Cash (2009) state there is importance in “developing in young musicians, effective approaches to correcting errors - procedures that preclude errors’ persistence” (p. 319). But what effective approaches did they already know that they weren’t using?

While many research articles have been written on the effects of practice (Puopolo, 1971; Rosenthal et al, 1988; Barry, 1992; Hamann et al, 1998; Pitts, Davidson and McPherson, 2000; Hewitt, 2001; Rohwer and Polk, 2006), practice and motivation (Davidson, Slobada, and Howe, 1996; Zdzinski, 1996; Hamann et al, 1998; Hamann and Frost, 2000; Renwick and McPherson, 2002), and self-regulated practice (Puopolo, 1971; Barry and McArthur, 1994; Hamann and Frost, 2000; McPherson, 2005; Rohwer and Polk, 2006; Duke, Simmons and Cash, 2009; Miksza, 2012), very few have been written on the perceptions of how students describe their own individual practice (Perry, 2006; Mollick, 2008; Oare, 2012). McPherson and Zimmerman (2002) suggest that, “by investigating not only improvements in playing skill but also in students’ acquisition of cyclical self-regulatory processes, music teachers will have a much better sense of whether students can practice effectively on their own and whether they are being self-

¹ Along with large ensemble rehearsals, each student receives one twenty-minute individual lesson each week.

motivated to continue their musical development” (p. 344). I believe more qualitative string research is needed on the topic of individual practicing, researching how instrumentalists practice and verbalizing their perceptions on practice. I still often ask myself: How do my students practice at home? Do they know any other strategies besides what I’m teaching them in lessons? What do they need from me to be successful in practicing their music? Would a ‘tool box’ of strategies make practicing more effective?

Personal Background

In fifth-grade, I was introduced to the orchestra instruments and feel in love with the violin. My parents had stated that if I was going to play the violin, I would still need to practice the piano. I agreed, and in the fall of my sixth-grade year received my violin. I was so excited to be playing my new found love and still remember the day I opened the case for the first time.

Shortly after sixth-grade orchestra started, my teacher encouraged me to take private violin lessons because I progressed faster than my classmates. My mom called our local violin teacher, and I started private lessons a week later. After my first lesson, I thought playing the violin was easy, just like the piano. After my first year of violin lessons, lessons started to become harder. I didn’t pass the pieces each week and there were many weeks I would be upset because I couldn’t memorize the piece that was assigned. Needless to say, I hadn’t done a great amount of practicing because I thought the violin was easy. But I continued to play and really practiced when an event was coming up.

By the time I was a sophomore, I had changed private violin teachers three times. Each teacher had their own ideas of what I should practice and why; yet, none of them ever explained how to go about practicing. During my junior year, I was advised to take lessons at the Lawrence Arts Academy for the remainder of my high school career. After starting lessons at

the Arts Academy, my new teacher had informed me about the auditions for the Wisconsin State Honors Orchestra. I said I would like to do it. She informed me that a great amount of ‘deliberate practicing’ would need to be done. I didn’t know what ‘deliberate practicing’ was, but agreed to practice a lot. After going through the requirements of the audition, she handed me a form that was a practice journal. Her expectations were that from week to week I would fill out exactly what I practiced and a ‘number of minutes practiced’ category for each item practiced. It was at this point that I realized I couldn’t lie about the practicing I hadn’t done because she would figure out that it wasn’t true. It was during these lessons that I started to acquire a few practice strategies, which made practicing not as burdensome as it had been the previous years before.

After acceptance to the Wisconsin State Honors Orchestra, I purchased a practice log and recorded everything I practiced from that day forward. It was exciting to see the practice from week to week and exactly how much time was spent to accomplish some of the pieces. Looking back at this log, I now realize that no specific practice strategies were listed; only what I practiced and for how long I spent on the material.

In college, I started to acquire more practice strategies from my two violin teachers and two piano teachers. It wasn’t until my last violin teacher, that I really gained knowledge of all the strategies that one could incorporate into practice. During those lessons, specific strategies were explained, and I was asked to model them back to her. My lessons were video-taped; therefore, if I had any questions, I could go back to the tape to watch the lesson and try again. For me, this was what I had been looking for since the sixth-grade, but didn’t know these strategies existed.

In 2004, I started my first job as a middle school orchestra teacher in Wisconsin. My classroom was set for the first day. As my very own orchestra started playing the music, it was absolutely amazing to hear the sounds. Right notes, wrong notes, a squeak here and not enough rosin there was music to my ears. I ensured the students that with practice the music would get much easier. As the weeks went on, certain passages were not improving. I kept stating that students needed more practice and sent them on their way. Practice records and in-class playing tests were assigned, but nothing seemed to help.

With my own frustration, I became engulfed with literature on the topic of practicing. Reading many articles on teaching practice and different strategies that could be incorporated into practicing, I realized that I needed to show my students exactly what to do during individual practice and how to do it. During lessons, I started showing different practice strategies (repetition, marking reminders in the music, slowing down the tempo, singing the part) to use at home and how to carry those strategies over into other pieces of music my students were working on. I also had my students explain to me what strategies would work for certain mistakes I demonstrated. Oare (2012) states “in order for teachers to improve the way in which they teach their students to practice, it seems apparent that they must first understand the ways in which their students think during practice” (p. 64).

At the high school level, I started assigning specific passages to practice and gave three specific practice strategies to use during their individual practice outside of class. I also assigned a practice journal and asked the students to list what pieces they practiced, list the strategies they used, and to record a reaction to their time practicing. By incorporating these ideas into my teaching, improvements could be heard immediately in individual lessons and in orchestra rehearsals. I also assigned a specific practice strategy to each orchestra member and after careful

research; they demonstrated their strategy for the class. After the individual demonstration, I asked the class to find other places in their music where that strategy could be used.

After a month of teaching and modeling (Puopolo, 1971; Rosenthal et al, 1988; Hewitt, 2001) practice strategies and having my students involved in their learning of practice strategies, many improvements were being heard in the rehearsals and lessons and enthusiasm for practicing was developing. My students were starting to understand that it was their use of strategies during individual practice that helped them progress in lessons and in the ensemble. They even encouraged their friends to use specific strategies in their own practice. In order for this progress to happen, Pitts, Davidson, and McPherson (2000) state that it is “the responsibility that children must take for their own musical learning if they are to be successful” (p. 64-65).

Even though many of my students have an understanding of how to practice, I still ‘fight a battle’ with those who believe practice is not important and those who don’t practice with a strategy in mind. Unfortunately those students fall behind and eventually realize that effective practice is needed to progress in my orchestras.

At the end of each school year, I have parents send ‘Thank-You’ cards and emails in regards to their student’s past year(s). Many of those include, “Thank you for showing my student how to practice. We enjoy listening at home”, “Thank you for inspiring my student to continue in music”, and “Since my student has practiced and progressed so much during the past two years, we are buying her/him an instrument”. These are wonderful messages to receive; however, were these students really practicing or just playing through the music at home?

Purpose and Research Questions

The purpose of this study was to examine four ninth-grade students’ and teacher-researcher descriptions of student practice sessions. Research questions for this study were (a)

How do students describe their home practice sessions in a journal, in response to a videotape, and in an interview?; (b) How does the teacher-researcher describe the students' home practice sessions?; and (c) What is the qualitative comparison between the teacher and students' descriptions?

Definitions

In reference to this study, five terms needed a refined definition: practice, practice session, practice strategies, parental involvement, and teacher-researcher.

Practice: According to Webster's Dictionary, practice is defined as "to perform or work at repeatedly so as to become proficient" (p. 155). "In the music profession, it is generally accepted that practice is critical to the development of musical skills" (Hamann, et al, 1998, p. 59). "Deliberate practice" is defined by Lehmann and Ericsson (1997) as "practice activities involving specific goals and strategies" (p. 44). Since deliberate practice is needed when learning a musical instrument, understanding when and how to use specific practice strategies aide in student progress. "There is a certain art to effective practicing, and there are fundamental principles to be understood and applied" (Green, 2006, p. 19).

Practice Session: "Music students must practice to achieve musical growth and progress" (Barry and McArthur, 1994, p. 53). For the purpose of this study, practice session is defined as the time spent practicing, individually, outside of the school classroom. For this study, these practice sessions took place in the orchestra office; however, no direct guidance was given from the teacher-researcher. Barry and McArthur (1994) have affirmed "different practice conditions can influence performance accuracy" (p. 45).

Practice Strategies: Practice strategies refer to the strategies or approaches used by the students to accomplish the practice task; strategies that students need to know for purposeful and self-

determined practice. Music instruction should not only teach the student how to produce sounds from notation, but also “highlight the importance of helping students to develop a repertoire of task-appropriate strategies that will enable them to think musically when performing challenging tasks on their instrument” (McPherson, 2005, p. 5). Green (2006) believes that “A good practice method must, therefore, accomplish two things: it must add an efficient variety to the repetitions in order to capture your interest, and it must force the mind to concentrate” (p. 5).

Parental Involvement: During the high school years of music study, I believe parental involvement is still needed a great deal. Having parents directly involved with student’s learning or practicing, high school musicians gain more confidence and receive more encouragement that they need to succeed. A great amount of research suggests that parental involvement is related to student success and instrumental music outcomes at any age. “Parental involvement is related to musical learning outcomes in all domains and all grade levels can benefit from increased parental involvement in music” (Zdzinski, 1996, p. 45). For this study, parental involvement includes: “home structure, assistance with student practice, and shared musical experiences within the family” (Zdzinski, 1996, p. 35).

Teacher-Researcher: Through teacher research, I was able to obtain a better view of my students’ thought-process while practicing, if the strategies I have taught are being used, and what I needed to immediately change in my teaching for effective practice to occur with my students. “The purpose of teacher research is that it can contribute demonstrably to improving teaching or instruction. Through their own research, teachers may become aware of things they do in their teaching that might result in students learning less than they otherwise could. With this awareness, they can make informed changes to try and enhance learning outcomes” (Lankshear and Knobel, 2010, p. 5). With teacher research, I was able to learn what my students

needed from me to become more successful on their musical instrument, hoping to encourage practice as enjoyable, instead of a task.

Conclusion

Understanding what string students do during individual practice, I believe is missing from many high school string teachers' classrooms. In my own classroom, my high school instrumentalists have been told to go home and practice; however, I was not aware of how they practiced or if they only went 'through the motions'. While professional journal articles have informed music teachers that practice is a technique that needs to be taught to the student musician, studying just what my students did when they practiced and how they incorporated strategies outside of school was needed. By doing teacher-research, new light was shed on what my ninth-grade students were in fact doing while they individually practiced. With this information, I was able to immediately change my teaching methods to help my students become more successful on their musical instrument, hoping to encourage practice as enjoyable, instead of a task.

The purpose of this qualitative study was to examine four ninth-grade students' and teacher-researcher descriptions of student practice sessions. Chapter Two provides a review of the research literature on practicing in instrumental music. Chapter Three describes the method for this study.

CHAPTER TWO

Review of Related Literature

The literature that is relevant to practice and ninth-grade string students is reported here in the following research categories: General Studies of Practicing, Studies of Specific Techniques, Parent Involvement in Practice, and Qualitative Models.

General Studies of Practicing

Barry (1992) investigated 55 brass and woodwind students in grades seven-ten to determine the effects of field dependence/independence and gender upon technical accuracy and musicality of student instrument performance under both structured and free practice conditions. All participants were given the Group Embedded Figures Test and on the basis of FD/I (Field Dependence/Independence), assigned to one of two matching groups – either a “free practice” group or a “structured practice” group. Two practice rooms were prepared for the experiment with a music stand, chair, music dictionary, metronome, pencil and a timer. The “free practice” room also contained a cassette recorder, which was used to record the participants practice. To start the practice session, a room monitor was present in the “free practice” room, instructing participants that they had ten-minutes to practice the required etude in any way they saw fit. The room monitor pointed out the music dictionary and metronome, set the timer, started the recorder, and left the room. In the “structured practice” room, a room monitor stayed in the room for the duration of the practice session. The participants were given the same instructions as the “free practice” room; however, the room monitor directed the participant through the

entire practice session as outlined in written instructions. At the end of the study, a recorded posttest performance was required from each participant.

Results from the study indicated consistent differences between practice procedures used by the “structured” and “free practice” groups. A number of effective practice strategies were demonstrated by the “structured practice” subjects: the use of a metronome, silent practice techniques, tapping rhythm of etude before practicing, identification and slow rehearsal of trouble spots, marking music, and supervised practice. Specific techniques were not visible in any of the “free practice” sessions. “Results from this study suggest that practice procedures used by the “structured practice” group were more conducive to improvement of performance accuracy and musicality than were the practice procedures utilized by the “free practice group”” (Barry, 1992, p. 121).

Barry and McArthur (1994) investigated how piano teachers ($N = 94$) instruct students how to practice. They designed the *Music Practice Instruction Inventory* (MPII) which was administered to find out the extent to which studio music teachers teach certain practice strategies. The MPII consisted of two sections. Section one requested information about the age level of students taught and the type of studio setting. Section two consisted of 26 statements about teaching students how to practice. The statements were replied to by the participants using a response scale of 5=always to 1=never.

Responses to section one reported that a majority of the teachers taught pre-college students (55.3%), while 41.5% taught at least part-time in a college or university setting. Responses to the second part of the MPII revealed varying attitudes about teaching practice strategies in the music studio. It was agreed upon that most teachers spend time discussing the importance of practice, how to practice, and the use of specific practice techniques. Two

common strategies teachers used were having students begin a new piece slowly and gradually increase the tempo and teaching students to analyze a new piece before playing it. Responses to other statements were more varied. Teachers reported frequent use of asking students to set specific goals for each practice session and requiring students to practice with a metronome. “Most teachers seemed to agree with the literature concerning the value of goal-oriented practice with 70% stating that they “always” or “almost always” ask their students to set specific practice goals” (p. 51). However, requesting students to keep a written record of practice objectives, requiring students to make audio tapes of their practice session, and enlisting active parental involvement in students’ practice were strategies reported as being least used if used at all. “While 41% of teachers “always” or “almost always” talk with parents about their student’s practice habits, only 32% urge active parental involvement” (p. 51).

Hamann, et al, (1998) investigated factors that contributed to practice routines of university students. Seven hundred eleven undergraduate and graduate university students, 44 being string players, were given a Practice Questionnaire. The questionnaire asked questions that pertained to practice habits and procedures. Using multiple component analysis, six factors were found to contribute to practice routines of the university students: Internal Satisfaction, Practice and Conflicts, Practice Organization, Physical/Mental Limitations, Practice Stamina, and External Influences. Results indicated that the subjects “sometimes” or “often” organize their practice sessions, felt guilt or anxiety when they could not practice, and confirmed the importance of “quality time” being used for practice.

Hamann and Frost (2000) investigated practice habits and attitudes of string music students not in private lessons and in private lessons. Five hundred twelve students participated in grades six-twelve. Participants were administered a 27 question Practice Questionnaire, which

included questions pertaining to practice habits and attitudes. Data was analyzed using the Chi-Square procedures. Results from the data show private lesson students: practiced longer, frequently had a plan or goal to achieve during their practice, divided their daily practice session into more than one session, and had a regular time set aside for practice. Private lesson students also felt more anxiety, depression, guilt, or irritation when they were not able to practice compared to non private lesson students. While private lesson students did enjoy the challenge of practicing, practice was used as a motivator to gain approval from their teacher and peers and to gain better grades or to advance in orchestra. “Their drive for practicing is such that they will practice even if it interferes with their homework, social, or family activities” (p. 71). Hamann and Frost (2000) concluded that further research on this topic needs to be conducted in other parts of the country to see if the results would be similar to those found in this study.

McPherson (2005) studied the effect of mental and physical practicing strategies on the overall musical development of beginning band students ($N = 157$) ages seven to nine years old. “The aim of the study was to clarify the extent to which the children’s learning was sequenced and orderly, and to investigate why some struggled in comparison to others who made rapid progress” (p. 25). The study was a three year longitudinal study. The participants were given pretests and posttests in five areas which included: performing rehearsed music, sight-reading, playing from memory, playing by ear, and improvising. The researcher interviewed the participant and mother before instruction began and then at the end of each of the three years.

Based on previous literature reviews, McPherson (2005) formulated four strategies that were identified as being important in developing children’s ability to perform rehearsed music: 1) Organizational strategies, 2) Order of practice, 3) Practicing to improve, and 4) Self-correction strategies. Interviews were conducted with the participant’s mothers to calculate how much

practicing at home had actually been done. The first part of the analysis shows that the participants were all gradually improving; however, further into the study, some participants started to struggle because of the lack of practice strategies they knew. Because of the struggle, some participants ceased instruction during the course of the study. McPherson (2005) concluded “improvements in instruction which help children struggling with their learning, can be attained by placing more emphasis in music on teaching a) what are appropriate musical strategies, b) how musical strategies can be used, c) where and in what situations certain types of musical strategies are best employed, and d) why each type of musical strategy aids one’s performance” (p. 32).

Miksza (2012) developed and tested the construct validity and reliability of a self-report measure of self-regulated practice behaviors in band with participants in grades five-eight. A questionnaire was designed to gather information on motive, method, behavior, time management, and social influences. Participants ($N = 302$) were given a questionnaire, which used a five-point Likert scale, with answers ranging from strongly disagree to strongly agree. Items on the questionnaire were also designed for participants to report their average number of minutes spent practicing per day with how many practice sessions were accomplished per day. Participants were also asked to estimate how many minutes were spent on formal or informal practicing, “defined as practicing with a specific music or technical goal in mind or not” (p. 327).

Miksza (2012) concluded that those participants who reported greater degrees of practice efficiency also reported more self-regulated learning tendencies, tended to practice for longer amounts of time and considered their practicing to be more formal. It was also evident that participants who spent more time practicing per day had particular music or technical goals in mind. Miksza (2012) suggests that “the results of this study have practical implications for

music education. The questionnaire may be useful for teachers who wish to identify students who are in need of instruction in how to practice” (p. 334), and identify particular weaknesses in students’ current practice approaches. Also suggested is that music teachers could better plan their large group rehearsals to include “students to experience self-regulated activity and make the goal-directed application of strategic practice behaviors explicit” (p. 334), which can help promote successful practice outside of the classroom.

Music practice has been a topic of interest for many teachers and researchers for a number of years. Much research has been conducted using the practice questionnaire (Barry and McArthur, 1994; Hamann, et al., 1998; Hamann and Frost, 2000; Miksza, 2012), asking general questions about practicing; however, very little knowledge has been reported to what steps students are taking when they practice. As seen in Barry’s (1992) study, when students are given unstructured practice time and do not have the tools to practice effectively, very little progress is attained. Therefore, I ask myself, what strategies can these students accurately understand and explain on a questionnaire? I, and I assume most music teachers, do acknowledge the importance of practice, but how often do I say ‘go and practice’, without giving any structured guidance?

Studies of Specific Practice Techniques

Puopolo (1971) explored what effect a guided-taped practice would have on fifth-grade beginning male trumpet players ($N = 52$). These students had various I.Q. levels, socio-economic backgrounds, and musical aptitudes. Each lesson was recorded for the student to take home and practice with. For each lesson, the teacher recorded: a brief reminder of problems to be encountered, a model performance for the student to listen to, an isolated segment of music to be practiced, reminders of specific problems, and a recording for reinforcement that the student

could listen to or play along with. After data analysis, results showed that the participants thought the tape went to slow, but preferred the recorded lesson to practice with versus the traditional way of practicing. They also felt that they were profiting from the recorded tape. Puopolo (1971) believes with this type of individual practice, “more class time can be devoted to rehearsing and less to correcting individual problems caused by inefficient practice” (p. 348). With more effective practice, it is suggested that “greater performance achievement by students may result in their reaching higher standards as consumers of music” (p. 349).

Rosenthal, Wilson, Evans, and Greenwalt (1988) examined five effects of practice conditions on graduate students in the band area. The conditions included: modeling, singing, silent analysis, free practice, and control. Sixty college music students were assigned a condition and given three minutes to practice their piece using that specific condition. Students in the modeling condition were given the etude and a recording of the piece to listen to during the three minutes. Students in the singing condition were asked to not use their instruments for practice, but rather to sing through their etude as practice. The silent analysis group was asked to study the music silently, requiring students to not use instruments. The free practice group could practice the etude however they wanted, using any skills or strategies needed to perform the etude. In the control group, students practiced an unrelated composition. The purpose of the control group was to compare the effectiveness of practice techniques with the effectiveness of sight-reading. After three minutes, all students performed the etude and were recorded for analysis.

Results from the study confirmed results from previous research on modeling. Listening to the model without practicing on the instrument was the most effective strategy used, while silent analysis also had a relatively positive outcome on students’ rhythmic ability. No

significant effect was found on learning the etude by singing it alone, free practice, and the use of a control group. Rosenthal, Wilson, Evans, and Greenwalt (1988) suggest “the results of this study may have some practical implications for students and teachers. Providing a model of the music to be learned seems to be effective in helping students master musical compositions and thus seems to be a technique that music teachers can use to good advantage during a rehearsal or lesson” (p. 256).

Sports and music are very similar in that it takes many hours of practice to attain high levels of performance. With sports, the coach is there for practice, instructing the players on how to improve technique with immediate feedback. For musicians, practicing is usually done by one’s self, with no coach instructing what practice strategies to use and no immediate model to be of assistance. In a literature review, Lehmann and Ericsson (1997) discuss research on expert performance and deliberate practice. One implication they suggest is that by providing more supervised practice, children will be able to stay-on-task and accomplish their goals they have set previous to practice. Because no immediate practice model (teacher or guided practice tape) is available, parents can also help by making occasional suggestions for improvement which will help student progress. Lehmann and Ericsson (1997) agree that students should be involved in the process of goal setting. While some teachers provide a goal for their ensemble, Lehmann and Ericsson (1997) believe students should be more involved in setting their own goals; therefore, enabling students to monitor and internalize their own progress.

Hewitt (2001) researched the effects of modeling, self-evaluation, and self-listening on junior high band students. Participants ($N = 82$) were randomly assigned to a treatment group, in which participants were to practice a specific etude with an “ideal model” (a professional musician recorded onto a tape), a self-listening tape (the student’s performance recorded at

school and taken home) or with a tape of a professional ensemble with contents unrelated to the performance etude (for control purposes). Participants were to listen to their recording each time they practiced at home.

Performance was measured using the “Woodwind Brass Solo Evaluation Form”, with practice attitude being measured with a Likert-type scale. All participants were asked questions regarding their feelings, beliefs, and values about the practicing “treatment” they were given. Analysis found that students who listened to an “ideal model” increased their performance scores more than those who didn’t. He also found that the study did not find significant differences between the attitudes of those who practiced with the model or those who used the self-listening tapes. Hewitt (2001) suggests “teachers should develop strategies to incorporate into their rehearsal/classes that will assist in developing the individual growth of student musicians as well as high-quality group performance” (p. 319).

Rohwer and Polk (2006) were interested in determining the relationship between the number of strategies students could articulate and their performance improvement scores, identify trends in students’ five-minute practice behaviors, and compare students’ achievement based on their practice procedures. Their study consisted of 65 eighth-grade band students from five middle schools in Texas and Arkansas. Each student participated in an individual practice session with the primary researcher. Participants were asked to verbally describe practice techniques that they had used when practicing exercises. The example of practicing with a metronome to improve rhythmic stability was used as a prompt. Participants were then asked to sight-read a 24-measure exercise. After sight-reading the exercise, participants were given five minutes to practice to try to improve their initial performance. At the end of five minutes, participants were asked to perform the exercise again.

All participant sessions were recorded for data analysis. Results showed that 18 practice strategies were verbalized by the participants that they commonly used in their regular practice. From the participants, Rohwer and Polk identified two types of practicers: 33 were classified as “holistic” and 32 were classified as “analytic”. Holistic practicers played the exercise straight through repeatedly, after their first performance. Analytic practicers broke down the exercise, either by stopping at a difficult section and applying remedial techniques or specifically pinpointing a difficult section for practice. Rohwer and Polk (2006) then broke down the holistic and analytic categories even further. They defined “noncorrective holistic” as participants ($n = 16$) who played through the exercise from beginning to end without stopping for errors. “Corrective holistic” participants ($n = 17$) played the exercise from beginning to end, but stopped and restarted when an error made it difficult to continue. When the errors weren’t distinct enough to cause the participant to stop, they would continue on, playing the exercise multiple times.

Within the category of analytic performers ($n = 32$), there was a “reactive” subgroup of 13 participants, whose practice behaviors showed a trend of starting the exercise at the beginning and stopping to intentionally repeat 2-8 measure sections as difficulties arose. In the last minute of practice, five of the participants jumped to various sections for spot-check improvements. Throughout the five-minute practice, one participant used the technique of playing slowly and then increasing the tempo. All other practicers used the method of practicing small sections as their major practice technique. “Proactive” practicers were also among the analytic practice group. In this group, 19 participants showed practice behaviors that included jumping to challenging sections at the beginning of their practice time, silent practice, changing rhythms, playing slowing and increasing the tempo, lip slur practice, and the change of articulation.

Rohwer and Polk (2006) drew many conclusions from this study. “Participants may have practiced in a different way than they normally would at home; hence, the quality of practice might be different in a less-structured and less-supervised environment” (p. 357). The number of practice strategies that participants could verbalize is in alignment with previous studies on practice. Participants verbalized a small number of strategies with repetition being the only strategy they could describe. “If, however, participants do not have a wide variety of strategies available to them, music teachers may want to consider this basic step of learning as a component in private lesson or group ensemble curriculum planning” (p. 358). Rohwer and Polk (2006) also suggest “when stopping for an error during a lesson or rehearsal, an educator could first have the students consider whether they heard an error and can identify it, and then discuss ways to remediate the error. While this procedure may be more time-consuming than the teacher simply fixing the problem, students may benefit from exposure to a variety of procedures that could enable them to approach practice more systematically and successfully” (p. 360).

Duke, Simmons, and Cash (2009) observed 17 graduate and under-graduate piano majors at a university setting. These students had been playing their instrument for many years and had learned practice strategies that could be incorporated without guidance. Students were given a three-measure keyboard passage and asked to practice and perform it over a 24-hour period. The first day, participants were given the passage, a pencil, and a metronome with a specific metronome setting (target tempo). They were instructed to first warm-up for two minutes, and then practice the passage for as long as they wished. On day two, participants were again asked to warm-up for two minutes, but to not play any part of the passage they learned the day before. Participants were then instructed to perform the passage 15 times in succession, separated by

brief pauses determined by the participants. All practice and test sessions were videotaped and recorded by MIDI data.

For analysis, the authors watched the videotapes and analyzed the MIDI data, in an effort to characterize the participants' use of practice strategies. The authors found that, "the strategies employed during practice were more determinative of their retention test performances than was how much or how long they practice" (p. 318). When errors occurred, the top-ranked pianists used different strategies such as playing shorter passages, writing in fingering, and changing the performance speed to perfect their playing. Students ranked below the three top-ranked pianists incorporated some strategies; however, many played the piece at tempo and slowed down when they would come to a spot that errors had occurred in the past. Results indicated that the lower-ranked pianists did not incorporate as many practice strategies as the top-ranked pianists did. The authors concluded "these results point to the importance of developing in young musicians effective approaches to correcting errors – procedures that preclude errors' persistence" (p. 319).

In music, many individual practice strategies have been created and researched to help foster effective practice. Many times, music students have been told to go and practice by repeating a passage a number of times, regardless of error. A significant part of effective practice is to have a specific strategy in mind, knowing when and how to use it, so that progress can be made (Rohwer and Polk, 2006; Duke, et al., 2009). One strategy that has worked through the years is an "ideal model" on a self-guided tape (Puopolo, 1971; Rosenthal, et al., 1988; Hewitt, 2001). With an "ideal model" students can hear what their end practice or performance should sound like. Having a 'tool-box' of practice strategies such as starting with challenging sections at the beginning of practice time, using silent practice, changing rhythms throughout specific passages, playing slowing and increasing the tempo, and changing articulation to help

learn will not only help achieve musical growth and progress, but will also help structure students practice sessions to be more successful.

Parent Involvement in Practice

Davidson, Slobada, and Howe (1995) conducted a study with 257 children between the ages of eight-eighteen who had received instruction on at least one band instrument. The children were divided into five groups. Group one consisted of 119 musicians, who were pupils at a specialist school, which required a competitive audition to get into the school. Many of the children in this group continue on to be professional soloists or orchestral players. Group two consisted of 30 children who had failed to gain entrance into the specialist school, but had shown enough skill to be called for an audition. These children aimed to make music their career. Group three consisted of 23 young musicians who had interest in the school, but had not filled out any paperwork for an audition. Children in this group saw music as a potential career. Groups four and five were students at a state secondary school, who had never considered a specialist school. These children all learned musical instruments; however, none of them wished to pursue a career in music. The children in group five had given up on music lessons sometime within the first year of learning.

All participants and one of their parents were interviewed by one of the authors. It is important to note that the study primarily focused on the responses from the parents. Parents were asked a number of specific questions about their involvement, which included: parental involvement in lessons, parental role in initiating practice, parental involvement in supervising practice, and parents' own involvement in music.

The authors found that the children in group one were supported more by their parents, before the age of 11, than any other group. Children in groups four and five did not receive any

parental support. The parents in group one were more involved with music than in any other group, and the parents in Group five were the least involved in music. This study shows that there are different relationships with the persistent music learners and those who quit learning and their parents. According to Davidson, Sloboda, and Howe (1995), “the results reported here support that family involvement is vital to child progress. It is important, therefore, that parents understand that it is their commitment to assist their child that is more important than a high level of musical competence” (p. 44).

Zdzinski (1996) examined the importance of parental involvement in learning a musical instrument. Four hundred six students in five band programs in rural New York and Pennsylvania took part in the study. Students were in grades four-twelve. The purpose was to find out to what extent parental involvement correlated with attitude towards music, music achievement, and performance achievement. The researcher worked with the band teachers in the school districts and agreed upon achievement and performance tests that would be administered. After being given directions, teachers taped each student performing a piece of music and the researcher scored the recordings using both objective and subjective tests. In addition to the tests performed to measure attitude, achievement, and performance, students completed a Parental Involvement Measure (PID), designed by Zdzinski (1996), which examined the activities parents were involved with and the frequency with which parents were engaged in those activities. Results indicated that parental involvement is related to success in the instrumental music. “Grade-level differences in parental involvement relationships were found among the various outcome measures” (p. 43). Zdzinski (1996) found that “performance and cognitive musical outcomes were significantly related to parental involvement only at the

elementary level, while they were not related at either the junior high or senior high levels” (p. 43).

Pitts, Davidson, and McPherson (2000) studied young brass and woodwind players ($N = 158$) in eight different primary schools during the first three years of learning. The selected children were drawn from families who agreed to participate after being contacted at the schools’ band information meeting. Nine children took part in the study. Case studies were selected in order to explore the characteristics and behavior of children in three categories: children who had maintained interest and enthusiasm for their instrument after the first 20 months of learning, children whose motivation decreased but who had continued to have lessons beyond the first 20 months, and children who stopped having instrumental lessons altogether.

Parents, teachers, and children were interviewed to monitor the amount of practicing that was taking place and the way in which their attitudes to learning and practicing changed. Structured interviews were administered by telephone to the parents, usually the mother, while the children were interviewed in person. The mother was asked to comment on the child’s approach to practice after one month, six months, and one year of learning. The children were interviewed before starting the instruction and then ten and twenty months into instruction.

The results presented significant themes drawn from well established research literature. The authors looked at motivation, quantity of practice, quality of practice, parental involvement, enjoyment, and satisfaction. They found that motivation and behavior of the children varied over the first two years of learning. Three children, who maintained interest and enthusiasm for their instrument after the first 20 months of learning, showed a level of commitment due to a strong personal interest they had to learning an instrument. Even if parents suggested they give up, the children refused and kept trying. Their quantity of practice fluctuated over the 20 months of

study due to other activities that they were involved in; however, all three children were able to articulate practice strategies that were designed to correct mistakes. Each child had their own way of implementing strategies for success. “Self-awareness and self-evaluation are critical features of these children’s practice”....”they nevertheless show a high level of understanding of the purpose and importance of practice” (p. 57). All three children showed a level of parental involvement that was supportive, without being interfering. “The children can ask for help if they need it, but are otherwise left to work independently” (p. 58). Each of the children also showed high levels of enjoyment and satisfaction in their practice.

Six children were classified as children whose motivation decreased and children who stopped having instrumental lessons lacked a long-term commitment and sense of personal identification with their instrument. Children in these categories did not start their instrumental learning with high expectations, and gave up after some frustration. Along with a lack of personal enjoyment and satisfaction, parental involvement also was not seen. The authors concluded “it is clear, however, that teachers and parents have an important role to play in fostering a learning environment that is sensitive to the needs of the individual child, offering realistic praise and encouragement, together with structured and sustainable advice” (p. 66).

As in education, parent involvement is crucial in learning a musical instrument (Davidson, et al., 1995; Zdzinski, 1996; Pitts, et al., 2000). Having active parent involvement, a positive learning environment can be created to help student(s) organize their time and set specific goals, provide realistic feedback on what has been heard, offer support and encouragement, and help foster learning-rich environments in and outside of the home. How much parental involvement is seen in my own students’ homes and to what degree of

involvement is taking place? Are parents truly invested in helping their child learn a musical instrument?

There are many limitations that arise when looking at how much parental involvement is seen in the home. With parents work schedules, students' extra-curricular schedules, and divorced families, parents are sometimes not readily available to assist their child during practice. A lack of musical knowledge for parents also sets a limitation as to the advice and guidance that can be given in the home setting. If music teachers could inform parents about successful parent strategies that could be used during practice, teachers, students, and parents could work together for maximum potential of the student (Zdzinski, 1996). Parents are their child's first teacher; therefore, taking on new challenges with a musical instrument does need active involvement from the parent for the benefit of the child.

Qualitative Models

In qualitative research, researchers aim to gather an in-depth understanding of a phenomenon, investigating the why and how of decision making. Researcher seeks to gain a complete picture of a phenomenon, using a smaller group of participants versus a large group. Renwick and McPherson (2002) examined student-selected repertoire and its effect on practicing behavior in band. In this longitudinal case study, 157 primary school children were involved with ongoing interviews, interviews with their mothers, their classroom teachers, their music teachers, and a collection of several measures of musical skill; however, the data discussed in the study uses only that from the participant, Clarissa.

Clarissa was nine-and-a-half years old when she was first interviewed to start the study. Interviews were then conducted before clarinet instruction began each year and at the end of each year. Clarissa videotaped her home practice sessions four times during the year. Her

mother was interviewed before instruction begin and at regular intervals over the three years. Classroom teachers and her instrumental teacher were also interviewed at the end of each year and asked to comment on her progress. During year one, Clarissa's practice sessions were regularly held before she left for school. She considered the most important thing to do when practicing was to play her favorite pieces and she preferred to play the 'easy' pieces rather than the 'hard' ones. "I don't like learning hard pieces because I find it annoying" (p. 177).

By year three, Clarissa's attitude towards learning 'hard' pieces had changed. She enjoyed the challenge; however, still found many of the pieces more boring than fun. During year three of instruction, Clarissa's teacher introduced her to 'jazzy' playing. Her teacher notated the piece for her, modeled it, and Clarissa went home to practice it. She enjoyed playing this piece because she had interest in it. "The results of this case study suggest that with strong enough motivation, even quite young learners can engage in the types of self-regulatory behavior that will enhance their musical achievement" (p. 185). Renwick and McPherson (2002) also found that Clarissa used more practice strategies when practicing the music she was interested in. Strategies that were apparent in her practice included: humming, silent fingering, silent analysis, the use of different tempos, and repetition of larger sections. In conclusion, Renwick and McPherson (2002) speculate "that a focus on what students find interesting and enjoyable to perform might help to clarify the underlying motivational processes that make practice less of a chore and more of something that young learners will find personally stimulating, challenging, and rewarding" (p. 186).

Perry (2006), in an action research study, examined how eighth grade students practiced, the effect of student and adult perceptions of the reason for practice, and whether a pedagogical emphasis on effort attributions, individual goals, and effective learning strategies influence

students' practice habits and motivational levels. Student participants ($N = 2$) and their parents ($N = 2$) were from a small town in southeast Michigan. The student participants were in their fourth year of music study in the school district the author taught in. All participants were interviewed twice during the study, and the student participants were required to video tape a home practice session. At the end of the video recorded practice session, the student participants were to answer specific questions related to their practice session.

After analysis, Perry (2006) concluded that her students were able to discuss successful practice strategies, but did not incorporate them into their own individual practicing. "These students knew how to practice, and described situations when they had used practice strategies, but failed to do so on the video" (p. 72). Instead, they practiced music they enjoyed or found fun, where mistakes were overlooked and not corrected during the practice session. Adult interaction was evident in both homes; however, it varied between the two participants. In one home, family members suggested pieces the student should play or practice; in the other home, adult interaction came from the student's flute teacher as to how to practice and in what order to practice the required material. Perry (2006), being disappointed with the results, states "Based upon the results of this study, I've come to realize that I need to take a more active role in teaching effective practicing within my large ensemble class. Simply giving instruction through a take-home assignment is not sufficient. I need to model the skills I want my students to learn, a process that includes explicit identification of practice strategies used by the sections of the full band as well as the reasons behind the strategy use" (p. 76).

Mollick (2008) examined what beginning string students do when they practice at home and how those practice activities compared to what was being taught at school. Participants included four parents and four students from a school district in Southern California. The

participants were students of the researcher's, who had just started string instruction and had been playing for only a few months before the study began. During the course of the study, student participants were interviewed twice and asked to video-tape four individual practice sessions at home. Parents were interviewed twice; once at the beginning of the study and once at the end. Data also included teacher observations made in the classroom, from review of the taped practice sessions, and from the interviews.

Mollick (2008) found that beginning string students are motivated to play the instrument they chose; however, do not incorporate practice strategies taught at school into their own individual practice. In each case, repetition was a common strategy used; yet participants tended to ignore their mistakes and became frustrated when it did not sound like the teacher model they remembered from class. Mollick (2008) states "there remains a large gap between what is taught at school and what happens at home. Viewing of the video-tapes revealed that these students seem to forget the 'small details' of what was taught in the class" (p. 104).

Parent interaction was found to be high among the participants. In each case, all four parents played a large role in reminding their child to practice. For one participant, a reminder to practice on occasion was needed. Other participants needed direct parent participation which came from being actively involved in the practice session, offering advice on pitch correction, posture, bow-hold, or simply to ask the child to play the piece again.

Findings suggest that beginning string students have limited skills or strategies when it comes to practicing independently at home. Parents also have limited skills, offering only advice that the school music teacher can give. Although children enjoy playing their instruments, music teachers need to incorporate teaching practice 'tools' into their curriculum. If teachers start at the beginning level, to incorporate successful practice strategies, students might better enjoy

practicing and not find it difficult or give up when things get too hard. With correct knowledge and excitement for practicing, “students tend to practice songs they “like” or consider to be “fun” (p.108).

Oare (2012) studied the decision-making processes of five seventh-ninth-grade band students while engaged in individual practice. The author based his research on (1) in what ways do students set and use goals during practice, (2) what practice strategies are used during practice of novice instrumentalists, (3) what ways do these students assess their own performance, and (4) in what ways for student perception of self-efficacy effect decisions made within their practice. Students were videotaped while practicing and interviewed after the practice session was over. Each student was videotaped for a 20 minute time period (individual practice session) during the school day. After the videotaped session, the researcher asked the student questions about what they had practiced, why they had practiced a specific section of music, to list any strategies they may have used, and questions pertaining to the overall videotaped practice session.

Oare (2012) found four common themes emerged between the students: motivation, goals, strategies, and assessment. Although each student had played their instrument for a different amount of years, each student was truly motivated to play. However, in practice, much of the music they chose to practice was music that they were most interested in or were already able to play. The students were able to differentiate what music needed work; however, “they did not have a specific idea of what aspects of the music needed work” (p.65). When students did practice, difficulty arose causing frustration, which led to putting the piece aside and moving on to something different. It was also observed that when difficulty was evident, students would

tend to find easier passages to practice and decrease in attention span, losing focus and motivation on practicing in general.

Oare (2012) also observed that it was difficult for students to set specific goals on what they should accomplish in the individual practice session. “They were, by and large, unable to describe with specificity the aims that they intended to accomplish or to plan their practice time productively” (p.67). Different practice strategies, a practice tool-box, had been taught to the students prior to the study; however, very few strategies were evident on the videotape. While each student attempted to use a strategy, none of the students recorded their playing and listened to it to help in self-assessment of what needed to be fixed. “Though each student had a repertoire of practice strategies at their disposal, they did not clearly understand how or when to use each strategy appropriately” (p.68). Assessment abilities by the students still needed developing. The students had a general idea when their practicing was of an acceptable quality, yet each student was unable to recognize mistakes made and how to correct them when they watched the video after. Once students’ mistakes were pointed out, it was difficult for them to identify the underlying problem, making it difficult for improvements.

Although the general practice log seems relevant in the classroom, emphasis should be placed on recording goals, specific strategies used, and guidance from the music teacher as how to develop successful practice. Oare (2012) states “it seems to follow that helping instrumental music students develop self-regulation would result in improved ensembles and more efficient rehearsals. Methods for teaching practice skills to middle school and high school students must be developed through continued research and best practice in order to develop independent musicians” (p.69).

Having rich-descriptive knowledge of the reality of how students practice, I believe, is critical to the music teacher. Being able to access the strategies used during practice and the way students think, can help myself become a better teacher in the area of teaching individual practice. With the help of video recorded data, it is seen that students do tend to stay busy during practice, but do not always implement the strategies they have been taught in the classroom (Perry, 2006; Mollick, 2008; Duke, Simmons, and Cash, 2009). Data confirms that students can verbally discuss successful strategies, but have difficulty incorporating them into their own practice or don't know when to use them appropriately (Perry, 2006; Rohwer and Polk, 2006; Mollick, 2008; Oare, 2012). It is not uncommon that when difficulty arises in practice, many students turn to music they enjoy playing or music they already know and find easy to play, needing very little practice. To further productive practice, teachers need to provide a 'tool-box' of strategies, showing the how and where to use them, so that a more successful environment can be created during practice instead of creating a 'chore' type-setting (Oare, 2012).

Conclusion

This literature review reveals many studies involving practice strategies: however, only two contain research involving string practicing. The literature reviewed did contain many successful strategies that can be tried in the string setting, but have only been tested in the band setting. With a lack of research for string practicing, only one of the reviews contained research performed in the middle school and high school setting, but was not limited to only the high school setting. Many of the studies reviewed were conducted by individuals not in the day-to-day classroom or high school environment; therefore, the data I collected was different in my day-to-day environment using my own students. With teacher-research conducted in my own

classroom, I was able to gather further knowledge that can help my students and other string teachers who face the same problems with understanding how to teach practicing.

CHAPTER THREE

Methodology

The purpose of this study was to examine four ninth-grade students and teacher-researcher descriptions of student practice sessions. Research questions for this study were (a) How do students describe their home practice sessions in a journal, in response to a videotape, and in an interview?; (b) How does the teacher-researcher describe the students' home practice sessions?; and (c) What is the qualitative comparison between the teacher and students' descriptions?

Design

A basic qualitative study design was used in this study, which Merriam (1998) defines as “researchers who conduct these studies....simply seek to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved” (p. 11). This design helped me as a teacher see and gather more understanding as to what four of my ninth-grade students were currently doing while they practiced; therefore, a change in my teaching took place at an earlier stage of their high school career for their benefit.

Framework

This study was conducted within the framework of “teacher research”. Lankshear and Knobel (2010) believe that teacher research “is seen as an important means by which teachers can develop their capacity for making the kinds of sound autonomous professional judgments and decisions appropriate to their status as professionals” (p. 5). Practicing had always been an area I questioned since I started in the teaching profession. Lankshear and Knobel (2010) state

that one of the purposes of teacher research “is that it can contribute demonstrably to improving teaching or instruction” (p. 5). Through this framework, I was able to become more aware of what I was teaching to my students; knowing, in advance, that the end result could be my students learning less than I expected. With this knowledge, I was able to make immediate changes in my day to day lesson plans for the benefit of my students.

Description of Research Site

The site for this study was at Woods Community High School² in a small city located in Northeast Wisconsin. Woods Community High School is the only high school in the Woods School District. With a population of 855 students, Woods Community High School currently has 80 students in the orchestra program. I chose this site because I am the orchestra director in the school and would be able to conduct my research with the students I see on a weekly basis. It would also give me the opportunity to monitor their progress after the study was completed.

Students in the Woods School District begin orchestra instruction in the sixth-grade. Many of the students rent their instrument from a local music store before purchasing one at the high school level. If a student cannot afford a rental instrument, the school district supplies an instrument; one that has been purchased over the last 35 years of the orchestra’s existence. Out of the 80 students I currently teach, about 45 of them own their instrument; in addition, about ten of those students take private music lessons within a 50-mile radius from the school.

Woods Community High School is on a ‘block schedule’. Orchestra classes meet in the Orchestra Room on the ‘odd’ days (every other day), for 88 minute periods. All orchestra students receive an individual 20 minute lesson every other week and can come in after school for further help. It is not unusual for a student to come in once or twice a week for additional

² For confidentiality purposes, all names have been given pseudonyms.

playing time before or after school. The orchestras perform approximately 12 times per school year, which requires a great amount of individual practice to learn the music quickly.

Woods Community High School is located in a city that has a population of approximately 8,300 people (Shawano Chamber of Commerce, 2013). A majority of the city's population is considered working-class citizens, with employment in local factories, family owned businesses, and farming industries (Sachse, 2011). Most of the people have lived here for generations; therefore, it is not uncommon that students, parents, and grandparents have all gone to the same schools in the district.

Selection of Participants

Participants for this study were four ninth-grade students from the 2012-2013 Concert Orchestra, which consisted of ninth and tenth-graders. Because I was interested in examining only ninth-grade student practice sessions, I used purposeful criterion-based sampling. Merriam (1998) defines purposeful sampling as "the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (p. 61). The following criteria were used to select the participants. Participants must:

- have at least two years of orchestra experience in the school district; therefore, is at an intermediate level of playing with material to practice and past the early excitement of playing a new instrument.
- attend in-school lessons on a regular basis, shows interest in learning and can be monitored by the teacher for assessment
- not own their own instrument, to avoid motivation from parents or outside source to practice
- not take private lessons outside of school, to avoid motivation from an outside source

- not have a sibling that plays an instrument, to avoid any help from an outside source on how to practice
- not be in an after-school sport, have adequate time to practice

I believe my reasoning for the criteria warrants explanation. I wanted to gather data from participants who had at least two years of orchestra experience in the school district. Students with this experience would be at more of an intermediate playing ability; therefore, they would have music that required actual individual practicing and were also past the early excitement of playing a new instrument. I also wanted participants who attended in-school lessons on a regular basis because regular practice would be taking place to further their playing ability from week to week. I was also interested in participants that did not own their own instrument, did not take private lessons outside of school, and did not have a sibling who played a musical instrument. With these three criteria, I wanted to avoid motivation factors from outside sources such as parents saying their student had to practice because they bought them an instrument, avoid outside motivation where the students had to practice for their private lessons, and to avoid any help from a sibling as how to practice. My last criterion was for the participant to not be in an after-school sport because I wanted participants that had adequate time to practice, avoiding interferences and time constraints from after-school activities.

Description of Participants

Carrie, violin

Carrie is a violin player, who started playing violin in the school orchestra program in sixth-grade. She is from a family who is very well known in the community and has older siblings who are in college. Carrie enjoys playing her violin, but rarely takes her instrument home to practice. She shows up to lessons each week, being unprepared and claims she has a

hard time finding time to practice at home. When she does practice, she does not know how long she practices for and stops when she becomes bored. In orchestra, Carrie tries very hard to master the parts during the rehearsal. Before class, she quickly looks through the music and practices specific measures that are difficult because she wants to be able to play them accurately with the ensemble. She also comes down to the orchestra room during her study hall and practices with her friends. Carrie does admit that she enjoys practicing when she can find the time and that it also gives her motivation and confidence.

Julie, violin

Julie is a violin player, who started playing the violin in sixth-grade, but did not join the school orchestra program until eighth grade. During sixth and seventh-grade, she attended a parochial school where there was no orchestra program available. Julie lives with her parents, who are heavily involved in their church, and with her younger siblings, who are not involved in music yet because of their age. Julie enjoys playing her violin, but not alone in front of people. When the school year started, she had a difficult time coming to lessons and playing in front of me. For the duration of the year, she was in the second violin section and is confident when playing in the group. Julie has improved greatly on her technique and ability, but lacks individual confidence when playing her violin. When she practices, she does not practice around anyone and spends as much time as needed to learn the material.

Richard, bass

Richard is a bass player, who started playing bass in seventh-grade, one year later than most students begin. He is an only child, who lives between two families since his parents are divorced. Richard spends time practicing his school bass at his mom's house, but does not take it to his dad's house because it is too big to transport. Richard attends lessons on a weekly basis

and comes to lessons prepared. He does stay after school on occasion to practice in a practice room; however, only for about fifteen minutes. In lessons and in the classroom setting, Richard tries to understand new concepts being taught and makes every effort to incorporate this knowledge into his playing. Richard is not afraid to ask questions if he does not understand something and is more than willing to help others in his bass section. Richard is not afraid to take on new challenges and enjoys all that the orchestra class has to offer.

Sage, cello

Sage is a cello player, who started playing cello in the school orchestra program in sixth-grade. While Sage does not own her cello, her family rents her cello through the school orchestra program. Sage and her younger sister live with their parents, who are very supportive of her musical education. Sage enjoys playing her cello and comes to lessons on a weekly basis. Because she enjoys playing her cello, Sage comes to lessons having the material prepared and is always eager to learn more. Not afraid to take home advanced solo literature that she does not know yet, Sage makes musical goals for herself and goes above and beyond to attain those goals. Overall, Sage is a determined student, who is always prepared and ready to play.

Procedure

After receiving Institutional Review Board approval, data collection began in February by asking four students to participate in the study. The formal Recruiting Letter and Student/Parent Assent Form, which was handed to the students, is included as Appendix A and Appendix B. The first step of my study was to interview the four participants by conducting an “open-ended interview”, which Lankshear and Knobel (2010) define as having “no pre-set, yes-no answers and are used deliberately to encourage respondents to give their opinions on something, describe their experiences, provide insights into how they view the world around

them and so on” (p. 206). The questions I asked are included as Appendix C. Responses were kept in a log book, containing field notes, used for the duration of the study.

During the month of March, the next step in my study was to have my four participants’ record one practice session for at least 30 minutes. This practice session was recorded in the orchestra office with only the student involved, and no guidance from the teacher-researcher was given. I explained, ‘you will need to record yourself practicing for at least 30 minutes. When you are finished, please turn the video camera off, and pack up your belongings’. After the session was recorded, each participant filled out a Journal form, consisting of questions pertaining to that day’s practice session. These questions are included as Appendix D.

Within a week of recording the first practice session and journal entry, I reviewed the tape at home to get an understanding of what was done in the participants practice session. With my field notes and further questions, the participant and I reviewed the recording together. I asked open ended questions and used the “think-aloud” technique, which Lankshear and Knobel (2010) define as a technique “used to generate spoken data by engaging speakers in completing a task, solving a problem or gathering information and asking them to *talk through* the thinking and decision-making processes they are consciously bringing to bear on the task, process, or problem. The method involves the study participant talking the researcher through a task” (p. 215). With the participant guiding me through their actual process of practicing, I was able to gain better insight as to what they understood thus far about practicing. This informed me of how I needed to model practice strategies for my students and what I immediately needed to change in my own teaching.

During April, I asked my participants to record another 30 minute practice session, fill out the Journal Form, and watch the second recording with the think-aloud technique. It was my

hope that within two video recordings, two journal entries, and two “think-alouds”, I would be able to gain a better understanding of what my students have already learned and what they needed from me to be able to effectively practice on their own. Throughout this procedure, my field notes already gave me insight to help start the process of making me a better teacher. When these procedures were completed, the last step was to interview the participants one last time to inquire what they had learned from the study, and to hear if their perceptions on practicing had changed since the beginning of the study.

Types of Data

The types of data collected in this study were participant interviews, video-recorded practice sessions, participant journal entries, and researcher observational notes. Participant data was collected by conducting two interviews (a beginning and an ending interview) with open-ended questions to learn about my participants. I used two video-recorded practice sessions, which were viewed by myself first and then by the participants and myself together. This allowed for further explanation of how they practiced and their thought process during that specific practice session. Two journal entries were collected immediately after the participants’ practice. This was a reflection on how they perceived that individual specific practice session. The interview questions (Appendix C, Appendix F) and journal entry form (Appendix D) are included.

During the study, I gathered data for myself using field notes that were kept in a log book. In those field notes, I was able to collect answers from the participant interviews, make observational notes about what I had seen on the video-recorded practice sessions, and held observational notes on what the participant and I discussed during the viewing of the video-recorded practice sessions. I also kept the participant journals in my log book for future analysis.

Time Line

The timeline for this study was as follows:

November/December 2012

I discussed the study and proposal with my thesis chair. During this time, I also developed my interview questions, obtained permission from Wood's Community High School and made revisions to my proposal.

January 2013

During January, I completed my proposal and sent, by email, to my thesis committee for further review. The last week of January, I defended my thesis proposal and then submitted all requirements to the Institutional Review Board (IRB) for review.

February/March/April 2013

After IRB approved my study, I recruited my four participants and began data collection. During these three months, I completed a beginning and ending interview, collected two video-taped practice sessions from my participants, collected two Journal entries after each practice session, and collected data from the viewing of two student/teacher-researcher practice sessions. I transcribed the interviews, eight participant practice sessions, eight journal entries and eight student/teacher-researcher practice session viewings. All observational notes and transcriptions were kept in a log book for future analysis. Data collection ended in April.

May/June/July 2013

I coded all transcripts and completed data analysis. During these three months, I wrote Chapters Four, Five, Six, Seven, Eight and Nine.

August 2013

A first-draft of my thesis was completed in August and was sent to my thesis chair for review. After making corrections, I then sent my completed thesis to my thesis committee for further review and in preparation for my final thesis defense in September.

September 2013

I made revisions to my thesis per my thesis committee. I then defended my final thesis and completed the master of music education degree.

Validity

Validity for this study was based on four processes: a) data triangulation; b) member checks; c) long-term observation; and d) teacher competency. Data triangulation (Hamann et al, 1998; Hamann and Frost, 2000; Pitts, Davidson and McPherson, 2000; Hewitt, 2001; Oare, 2012) was used between the interviews, recorded practice sessions, journal entries, and researcher notes. Member checks (Perry, 2006; Mollick, 2008; Oare, 2012) were used to clarify participant perceptions and to accurately account for the data they presented. Long-term observation (Perry, 2006; Mollick, 2008) was also used since I continued working with these participants in the classroom for the remainder of the school year. As an orchestra teacher who has nine years of experience in this school district, my own competency was also used as a source of validity.

Analysis

With data collected during the months of March and April 2013, and transcriptions done; I decided to step away from the study until the middle of June 2013 to finish the school year. During this time, I was able to think about the overall study, which allowed me an opportunity to come back to the study with a different perspective

I chose to focus on one student at a time, which allowed me to focus on one student and the data that was collected for each individual student. Using this data, I found it useful to

provide a personal background for each student, based off the first interview that was conducted. Member checks were conducted by emailing the profiles to each of the students to verify accuracy. No changes were requested by the student or parents.

As I read through the transcripts, I recorded what I perceived to be an emergence of evidence from each of the students. After analyzing and making field notes on each student, I created a cross-case analysis to help make comparisons between teacher and students descriptions and to address my third research question, ‘What is the qualitative comparison between the teacher and students’ descriptions?’ This cross-case analysis can be found in Chapter Eight. For the purpose of the study, I did transcribe each recorded practice session in its entirety. I felt that it was needed in order for me to gain more understanding of how a thirty minute time period was filled by each student. It should be noted “participants may have practiced in a different way than they normally would at home; hence, the quality of practice might be different in a less-structured and less-supervised environment” (Rohwer and Polk, 2006, p. 357). Each complete transcript is found in the following chapters on the individual student. Focusing on all the data collected, I was able to make detailed observations of what the students were doing during their individual practice.

Organization of Findings

Based on the analysis, the findings are organized into separate chapters on each participant, beginning with a participant profile. The description of practice sessions are based on what the participants said during interviews and video observations with the researcher, as well as my own interpretation of what they did during their recorded practice sessions. Chapter Four describes Carrie and presents her profile, a description of her practice and a conclusion. Chapter Five is organized the same way for Julie. Chapter Six presents Richard, and Chapter

Seven presents Sage. In Chapter Eight, I discuss similarities and present a Cross Case Analysis, connecting the themes back to past research. Chapter Nine is a summary and conclusion with suggestions for teaching practice and future research.

CHAPTER FOUR

Carrie, violin

Background

Carrie is a violin player at Woods Community High School. She started playing violin in the orchestra program in sixth-grade. Before playing violin, Carrie played the piano for two years, taking private lessons from a local teacher, but did not practice enough to continue the lessons. When asked why she picked the violin to play, she states, “It was something I always wanted to do, and I was not good at making sounds on the band instruments during the recruiting week. No one really influenced me to play the violin; I just liked the sound” (Interview 1, p. 1).

Carrie is from a family who is very well known in the community being that her parents are both professionals in the health field. She has two older brothers, who are both out of high school and do not have any influence on her playing the violin. At one time, her mother played the clarinet, but Carrie was unsure if her father had played any instrument. Carrie explains that her mother (parents) has no involvement in her practicing at home and does not give advice on how she should practice. While her father works during the daytime, Carrie’s mother often works from 2:00-10:00pm; therefore, is not home when or if Carrie practices.

School activities that Carrie enjoys are, “Orchestra, Life Science, and Tennis. I guess Algebra’s o.k. too” (Interview 1, p. 3). Carrie is in the top 10% of her class and completes her homework on a daily basis. When asked if she practices on a daily basis, Carrie states, “No, not usually...sometimes it’s hard to find time with tennis and homework” (Interview 1, p 3). While

Carrie is busy with school activities, she does have many friends and admits that most of her friends are in one of the school's musical ensembles, but they do not practice together and have never played their instruments together while 'hanging out'.

Carrie does enjoy playing her violin in the orchestra class, but rarely takes her instrument home to practice. She states that there is no real set time for her to practice at home, just when she wants to. When asked how many days she practices in a week or if it's only when she needed something for orchestra (i.e. playing tests, concerts or Solo and Ensemble), she explains, "It depends if I like the music or I have to be in the mood to practice. Some weeks, if I'm in the mood, I practice every day, and some weeks I'm like, I'm not practicing" (Interview 1, p. 1). Carrie does take advantage of her study hall time and goes to the orchestra room to practice during the school day; however, it is every other day due to block scheduling at her school. When practicing at school, she usually practices with three other girls and they do get involved in other things such as talking or playing on the piano and not actually practicing.

What does Carrie do when she practices?

A typical practice session for Carrie starts by her playing the violin parts she knows because they are fun and are used as a warm-up. She then practices the harder parts in her music that she doesn't know. When practicing, Carrie does practice the orchestra music from school or finds music that she prints off the internet.

JS: Where do you usually practice at home?

Carrie: In my room.

JS: Do you ever practice in the living room?

Carrie: No.

JS: How many minutes do you practice each time you practice? Is there a set amount?

Carrie: I don't look at the clock. Maybe like twenty minutes.

JS: So you don't really know how long you practice?

Carrie: No.

JS: How do you know when it's time to stop practicing?

Carrie: When I get bored (Interview 1, pp. 1-2).

I ask Carrie what strategies she uses when practicing:

Carrie: I take like a measure and then just play that measure like slower or take out the slurs.

JS: So you use repetition?

Carrie: Yes (Interview 1, p. 2).

According to her description, Carrie does have knowledge of a few practice strategies that have been helpful to her in the past and believes those strategies still work for her thus far in the ninth-grade orchestra. I ask where she learned those strategies or if she came up with them on her own.

Carrie: In class. That's what we normally do in rehearsal.

JS: In sixth-grade do you think?

Carrie: I don't remember (laugh)!

JS: What about in seventh or eighth grade?

Carrie: Yeah, I think so.

JS: Do you think those strategies became more evident this year, since the beginning of the year, more so than in middle school?

Carrie: Yeah. Last year we really didn't have to know them. Now we have to practice for the whole group (Interview 1, p. 2).

Carrie does believe it is important to practice her violin and does acknowledge that the entire orchestra benefits from her practicing. When asked why, she explains, "because otherwise you can't play it and you're gonna sound bad and the group will sound bad".

JS: You have to know the music to stay together with the group, right?

Carrie: Yeah (Interview 1, p. 2).

Carrie also has seen an increase in her practice time in the ninth-grade orchestra. She states that she enjoys playing more this year and that the music is getting harder; therefore, she needs to practice more.

JS: Thinking back to last school year, has the way you practiced changed since then?

Carrie: Yes (laugh)! I practice a lot more.

JS: How?

Carrie: I didn't practice a lot. I practice a lot more this year! I like playing violin more too this year.

JS: Why do you practice more this year?

Carrie: Cause it's harder.... you need to know the part this year (Interview 1, pp. 1-2).

The following is a recorded thirty minute practice session from March 4th. It was recorded in the high school orchestra office, with no guidance being given. Carrie was told she could practice any music she wished during this first practice session. All music that Carrie

decided to practice was recently handed out, and she had not seen or practiced it before this was recorded.

Table 1: Carrie's Practice Session 1 on March 4

Time	Teacher – Researcher Notes
00:01	Tunes violin with tuner.
00:12	Plays “Seitz Concerto #5 – 1 st movement”. Starts in section 3. Plays Section 4. Starts, stops, starts again, stops, looks at it, starts again. Many pitch and rhythm mistakes were made. Frustrated.
01:59	Skips to Section 1. Starts, stops, laughs, starts again, readjusts violin. Plays all of Section 1 and continues on to Section 2. Pitch and rhythm mistakes were made. Frustrated.
03:23	Plays Section 3.
04:17	Starts Section 4. Pitch and rhythm mistakes were made. Stops midway through section and switches music.
05:44	Begins playing “Country Dance”. Starts fast, stops and starts slower. Pitch mistakes were made.
06:42	Stops, looks at notes, readjusts violin. Tries again from the beginning.
07:03	Looks at clock. Begins again and plays through whole piece with different tempos. Pitch and rhythm mistakes were made through entire piece.
09:57	Starts again and slows down tempo. Fixes opening pitches.
10:10	Writes in music.
10:25	Starts again much slower.
13:44	Plays opening measures slower, repeats five times. Starts piece over at slower pace.
14:36	Marks in music. Starts from beginning with a faster tempo.
16:33	Works on fixing bowing. Tries a couple of times (repetition). Slows down even more, stops, looks at it, and tries again.
17:10	Works on notes on E string. Slows down, and continues on.
18:22	Writes in music.
18:36	Starts again from middle of piece.
18:50	Office phone rings, stops playing, acknowledges phone, but continues practicing.
19:20	Stops, looks at clock.
19:45	Starts new piece “Rigadoon, Trio and Variation”. Starts at a fast tempo.
21:07	Starts Variation, stops, starts again, stops, starts again at slower tempo then speeds up. Pitch and Rhythm mistakes were made. Did not correct. Frustrated.
22:25	Switches music back to “Country Dance”. Starts fast, makes pitch mistakes, stops, starts again slower.
23:37	Write in music. Then starts and plays entire piece.
26:20	Works (much slower) on bowing from beginning. Then speeds up.
27:12	Stops, looks at music. Continues in middle section.
28:45	Stops, looks at clock.

28:55	Play “Country Dance” again, starting from the beginning. Faster tempo throughout piece. Bowing, pitch, rhythm mistakes made throughout piece.
30:02	Last eight measures, bowing and pitches mistakes. Stops and works on slowly. Plays ending at faster tempo.
31:58	Turns off video recorder

Carrie’s first practice session suggests that she spends a majority of the time looking at the music, struggles to get through the parts she is practicing, and gets frustrated when the music is not becoming easier after a few minutes of practicing. Carrie seems to be “going through the motions” during her practice session, playing and working on one piece after another. While she stops a great amount, she does show practice strategies (writing in the music, taking tempos slower/faster, repetition) being taken into account. Two times during the recording, it appears that she is frustrated with what she is practicing and quickly changes the music to practice something completely different. This may be because she does not have a sense of what the piece is supposed to sound like because we have not rehearsed it in lessons or in orchestra.

During this first recorded practice session, observation shows that Carrie does know a few practice strategies to use. She is seen writing in her music, slowing down and speeding up tempos, and the use of repetition on specific passages. During the middle of this practice session, Carrie focuses in on specific measures that need to be slowed down and corrected for bowing problems and continues working on those measures until they are corrected. It is also evident that Carrie is able to immediately identify bowing errors and works on those mistakes until they are somewhat corrected.

Immediately following the first recorded practice session, Carrie was asked to fill out the Practice Journal form. From her responses, she was able to list specific practice strategies she used and expressed enjoyment in practicing the Country Dance, which she spent the most time on. Carrie enjoyed Country Dance the most because it was “fun” which follows up to her

response from the Interview 1 question when asked to describe her practice at home. “At first I start with the parts I know ‘cause that’s fun” (Interview 1, p. 1). Because she had spent the most time practicing this piece and because there weren’t many ‘hard’ parts, Carrie believed this piece of music was fun; therefore, enjoyed spending the most time practicing it.

Table 2: Carrie’s Practice Journal #1 on March 7

<p>List what you practiced today. Include specific measure numbers.</p> <ol style="list-style-type: none"> 1. Country Dance – whole song 2. Rigaudon, Trio and Variation – first page only 3. Seitz Concerto #5, 1st movement – (mm.68-end)
<p>What strategies did you use to work out problem spots in the music during this practice session?</p> <p>Going back and replaying it slower, practicing a specific measure, wrote in music by circling some signs and mentally made note of something.</p>
<p>Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.</p> <p>Country Dance....it was the song that was the most fun to play and would be a piece I would like to learn so I practiced it the most.</p>
<p>Name one exercise of song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.</p> <p>Country Dance (mm.19 & 80)....I kept replaying it. I also marked in my part so I knew when it was coming.</p>
<p>Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.</p> <p>I need to work on the D naturals in Country Dance. I thought the practice session went pretty well. The bowing in Country Dance (m. 35) was confusing though.</p>

One month after the first recorded practice session, Carrie and I watched the video together for me to ask follow up questions. When asked what she was primarily focused on during that practice session, she explains, “learning the notes, rhythms, and bowing because I was playing it for the first time ever” (Video Observation 1, p. 1).

JS: Describe to me what you have practiced during this session.

Carrie: I practiced Rigaudon, Trio and Variation, the Seitz Concerto, and Country Dance. I really liked Country Dance.

JS: What strategies do you see yourself using?

Carrie: Using a tuner, slowing down and speeding up tempos, repetition, writing in the part, focusing on one skill to fix, taking out the bowing to learn notes and rhythms and then put bowing back in.

JS: Did those strategies work for you to help you improve?

Carrie: Yes.

JS: Why do you think you chose those strategies?

Carrie: Because they help me learn the part and they're really the only ones I really know to do (Video Observation 1, p. 1).

Carrie was able to dictate many practice strategies she saw herself using on the video. In a discussion about what strategies work the best for her, she agreed that writing in the music and adjusting the tempo really helped her.

JS: Do you remember what you wrote in your music here?

Carrie: I think I was writing to look out for one part....or that something was coming up that I needed to remember to play. It helps to have that written in my music.

JS: So writing in the music really helps?

Carrie: Yes, it helps me remember what I have to remember.

JS: So slowing the tempo down really works for you?

Carrie: Yes, then I can get the notes (Video Observation 1, p. 1).

The second recorded practice session was recorded on April 4th, one month after the first session. During the month in between, Carrie performed in one school concert, an orchestra clinic, and in Solo and Ensemble. While there was a great deal of practicing going on during the month, schedules could not a-line for us to do the second recording. During the second practice session, Carrie was told she could practice any music she wished. She chose to practice a large portion of the orchestra music we were currently working on and Country Dance, which would be her piece for the final playing exam in May. This second practice session was again recorded in the high school orchestra office, with no guidance being given. The following is Carrie's second thirty minute practice session.

Table 3: Carrie's Practice Session #2 on April 4

Time	Teacher – Researcher Notes
00:01	Tunes violin with tuner.
00:46	Starts playing River of Dreams
01:35	Makes pitch mistakes, stops, tries again, stops, tries again and succeeds.
03:28	Switches music to Mountain Chase.
03:36	Practices opening measure three times for correct notes and bowing.
04:36	Slows down tempo for note accuracy, then speeds up tempo, continues to practice entire piece, stopping and starting, repeating measures, adjusting tempo.
07:40	Mountain Chase - repetition, really working on trying to get bowing and notes.
09:46	Writes in music.
10:41	Guitar playing style, figures out notes in third position, writes third position fingering in music, practices slowing with bow.
11:43	Changes music to Nobody Knows the Trouble I've Seen.
13:06	Works on measures slowly, working on adding vibrato, repeats measures for accuracy in third position.
14:33	Repeats measures for notes.
15:18	Works on notes in fourth position.
15:34	Changes music to Dance of Bacchus. Practices first few measures for pitch accuracy.
16:25	Changes music to Slavonic Dance in g minor.
18:00	Trouble with bowing. Slows down tempo and repeats measure for accuracy.
18:35	Speeds up tempo and adds correct bowing.
20:25	Still trying to figure out bowing and notes in third position. Has been working on this for a few minutes, but not giving up.
21:50	Changes music to Dance Diabolique. Practice measures in third position.

24:51	Changes music to Country Dance. Reviews piece from beginning using a faster tempo.
26:10	Works on third position measure with chords. Mistakes with ½ step fingering.
27:40	Works through last eight measures at slower tempo. Then plays at faster tempo, accurately.
29:33	Turns off video recorder.

During this second practice session, Carrie spent most of her time playing and working on correcting specific problems in the music. Through video observation, it is seen that Carrie spent a great amount of time trying to get the fingering and pitches correct when playing in third position and worked on correcting bowing issues that arose. Feeling more confident in front of the video camera, I observed that Carrie was not just “going through the motions” of practicing, but was really engaged and focused on what she was doing. While Carrie did play through numerous pieces, she spent time on each piece to fix problem areas. For the last eight minutes of her practice, she went back and reviewed Country Dance, having a much easier time playing the piece than was seen on her first recorded practice session. During this second practice session, Carrie seemed to be more focused on getting the parts right; therefore, spent more time on intricate things.

Immediately following the second recorded practice session, Carrie was asked to fill out the Journal Form. Again, she lists the same strategies as she did on the first Practice Journal; however, the strategy of playing pizzicato to learn the notes was not listed this time. Through this Practice Journal, it was observed that she enjoyed Danse Diabolique because she liked how the part went; however, she did not focus her entire practice session on just this piece.

Table 4: Carrie’s Practice Journal #2 on April 4

List what you practiced today. Include specific measure numbers.	
1.	Slavonic Dance (mm. 49-56)
2.	River of Dreams
3.	Danse Diabolique

4. Nobody Knows the Troubles I've Seen
5. Mountain Chase
6. Country Dance
What strategies did you use to work out problem spots in the music during this practice session?
I slowed down the tempo, took out the slurs, and replayed those measures over and over again.
Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.
I think I can play the beginning of Danse Diabolique well. I like what the part sounds like so I'm more likely to practice it.
Name one exercise of song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.
River of Dreams (mm. 34-48)...I played slower and would work on a specific measure over again until I could play it....then move onto the next measures.
Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.
The rhythms in Mountain Chase are hard especially where it switches between 8 th and 16 th notes.

The second video observation between Carrie and myself was on April 5th; one day after the second recorded practice session took place. Carrie explained to me that she had practiced, “a lot of orchestra music and Country Dance again” (Video Observation 2, p. 1). When asked what she primarily focused on during this practice session, she states, “I was focused on specific parts like the notes in certain songs, the rhythms, and shifting into third position. I just wanted to get it right since we weren't in class, and I wanted it to sound better” (Video Observation 2, p. 1).

JS: What strategies do you see yourself using?

Carrie: Still using a tuner, repetition, repeating measures over and over and then putting together with the rest of the piece, writing in the fingering as a reminder, not getting frustrated because I couldn't get something....I just kept trying until I could play it (Video Observation 2, p. 1).

Carrie believes that the two most effective strategies that help her while practicing are the use of repetition and writing in the music. Both are strategies she has used in the past and have been successful for her.

JS: So do you think that by repeating specific measures over and over that you improved at that part?

Carrie: Yes, I wanted to get the part right; therefore, I kept playing it over and over so I would get it.

JS: Does writing in the fingering work for you also?

Carrie: Yes, because I don't know the fingerings very well in third position so when I write it in, I can play it and it's a reminder to me that it's coming up.

JS: Why do you think you chose those strategies?

Carrie: They've always worked for me in the past and because I don't know any other strategies to use at this point. That's just what I always do (Video Observation 2, p. 1).

Conclusion

Carrie, a ninth-grade violin player, does understand the importance of practicing and shows the use of a few strategies in her practice sessions. Motivated by the overall ensemble, she acknowledges the music she does not know and makes an attempt to fix those areas to help better her ensemble. While not a great amount of time or strategies are used to fix problems areas, Carrie seems to have a basic knowledge of practice strategies that can be used. Strategies she finds that are most effective for her are: repetition, writing in the music, and slowing/speeding up the tempos. Carrie's practice time is spent mostly on orchestra music,

possibly because she has heard how the parts are to be played. When working on solo literature that we have not yet discussed, Carrie becomes easily frustrated and struggles to practice. Strategies we have discussed in the orchestra class are not apparent in her practice sessions; however, Carrie does have a small 'tool-box' of strategies that work for her.

CHAPTER FIVE

Julie, violin

Background

Julie is a violin player at Woods Community High School. During the time of recruiting in fifth-grade, Julie was a student in the public school system. She started playing violin through the orchestra program in sixth-grade; however, when sixth-grade started, she attended a parochial school in the area, which did not offer an orchestra class. She was enrolled in private violin lessons and was not enrolled in an orchestra class. She returned to public school in eighth grade being allowed into the Advanced Eighth Grade Orchestra since she had taken private lessons over the past two years and had advanced further than her classmates.

The only instrument experience Julie had prior to starting the violin was in fourth grade playing the recorder. When asked why she decided to play the violin, she explains, “Well I had heard someone....a friend of my parents told me really good things about the orchestra at the middle school. They were like ‘yeah, you should do orchestra, not band’ and then a lot of my friends were doing orchestra, which probably shouldn’t have influenced my choice” (Interview 1, p. 1). I ask, “So why did you choose this instrument”? She explains, “My friends played and I always liked the sound of violin. It was a popular instrument you could play in a lot of different places and things. You could play a lot of different music with it. I liked that” (Interview 1, p. 1).

Julie is also from a family who is very well known in the community. Her father is a pastor at a community church, and her mother is heavily involved in the church's activities. Julie has younger siblings, who are not yet involved in music due to the school district not having a program geared for their age level. Not being sure if her parents were involved in music, she admits that her parents are involved in her practicing. "My parents would get on my case when it was a grade. This year I just have to tell them that I don't have any new music so there's really not a whole lot to practice. I'm doing it on my own, but last year they did a lot because it was a grade (Interview 1, p. 2).

Julie enjoys activities in school where she is allowed to work at her own pace. When asked, "What activities do you like in school", she replies, "Study Hall (laugh)...this year it's fun because we [friends] come down here and practice and play on the piano! I like more of the classes where there's this much work that needs to get done and this is the time frame you have to get it done. That's how I felt Study Hall went because I worked at my own pace. I knew what I needed to get done during that class period" (Interview 1, p. 1). Julie is also in the top 10% of her class and completes her homework on a daily basis. When asked if she practices on a daily basis, Julie states, "No, in all honesty" (Interview 1, p. 1). When asked how many times a week she practices or if she only practices when something really important is coming up, Julie replies, "It's not like I practice a lot consistently. It's like when I know that we have a concert coming up and there's a part that I can't do, then I'll definitely practice it...yeah, I tend to practice more when there's more pressure on the line, but if it's just regular, I do sometimes, but not regularly" (Interview 1, p. 1).

Outside of school activities, Julie enjoys taking part in her youth group at her church, spending time with friends, volleyball and ice skating. Julie explains that with her friends, "we

just kind of 'hang out'. We watch movies and gossip....probably because we're teenage girls! Also a lot of crazy stuff and we're always laughing" (Interview 1, p. 2).

Julie does enjoy playing her violin in the orchestra class, and takes her instrument home to practice. She states that there is no real set time for her to practice at home, but tries to practice before dinner time. When asked how many minutes she practices each time or if there a set number of minutes she practices, she explains, "Last year, I had to do the practice logs, which were fifteen minutes every night so that became a habit and I'd just set my timer for fifteen minutes each time. This year, it's been around fifteen minutes....sometimes I just go for however long I feel like it or however long I feel like I need to, but it has been around fifteen minutes I'd say" (Interview 1, p. 2). Julie does take advantage of her study hall time when her school work is completed and goes to the orchestra room to practice during the school day; however, it is every other day due to block scheduling at her school. When practicing at school, she usually practices with three other girls [Carrie]. While they do get involved in playing the piano and talking, Julie tries to continue to practice and reminds them that she needs to practice her music.

What does Julie do when she practices?

A typical practice session for Julie starts by her going up to her third floor of her house to practice because she believes it has the best acoustics. She then practices the orchestra music or any music she has. "Usually I practice songs that have parts in them that I can't play, but then I'll play the whole song so I can work the part into the whole song. I have Suzuki books that I'll do and if I feel more confident playing a piece, I'll probably like play that to make sure that I still got it and then I play harder stuff" (Interview 1, p. 2). While she doesn't mind practicing the harder things, she does find it challenging and sometimes frustrating.

JS: So when you find it frustrating, do you just quit then?

Julie: Sometimes I just have to take a break, cool off, and then come back to it....maybe play something else or just stop playing altogether. Sometimes I'll just keep going and take it at a slower pace and just keep going.

JS: So you don't mind practicing the harder stuff?

Julie: Actually, that's what I probably practice most of the time since I'm probably being graded on it (Interview 1, p. 2).

I ask Julie what strategies she uses when practicing and where she might have learned those strategies.

Julie: If it's a chronic thing where I just keep messing up, then I'll repeat it a bunch of times, sometimes I'll take it slower and then gradually increase the speed, but I'll repeat it a bunch of times. I'll play measures before it, leading up to it, and work it into the songs and a lot of times, if there's rhythm that I don't understand, I'll literally stare at it for a while and I'll pluck it instead of using the bow. Sometimes I write in rhythms or fingering to help me get it down.

JS: Where did you learn those strategies? Did you learn them at school or did you come up with them on your own?

Julie: Probably in lessons with my private teacher. He would say 'keep repeating this measure' and a lot of it was on my own. I just felt it was something I needed to do (Interview 1, p. 3).

Looking back at last school year, Julie does believe it is important to practice her violin. When asked, “Why do you think it’s important to practice”, she replies, “Because you need to be able to hear yourself play on your own so you get a better sound quality because you can be lost in the other sounds of the orchestra. You need to be able to push yourself harder on your own, without having anyone else to do it for you, like the teacher and because practices always makes you better. I think you have to be more responsible this year to do it on your own because last year, it was a grade and you had to do it. This year, you just have to do it whenever you think you need to because you might have to play it on your own in orchestra. You need to be prepared” (Interview 1, p. 3).

Julie also believes her individual practice has changed since last year. “I have probably more techniques and I’m picking up things faster this year. A lot of times last year, I would just skip things over and then they would come together and this year, I think I’m going more on my own because the music’s been harder” (Interview 1, p. 3).

The following is a recorded thirty minute practice session from March 4th. It was recorded in the high school orchestra office, with no guidance being given. Julie was told she could practice any music she wished during this first practice session. Julie chose to practice music that was recently handed out, which she had not seen or practiced before this was recorded.

Table 5: Julie’s Practice Session #1 on March 4

Time	Teacher – Researcher Notes
00:01	Turns on video recorder
00:28	Tunes violin with tuner
01:10	Looks through music.
02:05	“Seitz Concerto #5 – 1 st movement” – Plucks (guitar style) Section 3 of piece. Stops, looks at music, re-adjusts shoulder rest, continues plucking.

03:33	Plays Section 4. Pitch and rhythm mistakes made.
04:15	Stops. Writes in music.
04:45	Starts playing again.
05:07	Stops playing. Fingers music with no bow and no pizzicato.
05:59	Starts playing Section 4 with bow.
06:14	Stops. Looks at music and continues playing to end of piece.
06:44	Switches music to "Rigadoon, Trio, & Variation". Starts at beginning. Pitch mistakes were made.
07:10	Stops. Looks at key signature. Makes note out loud what sharps are in the key signature.
07:13	Starts playing from beginning again.
08:24	Starts playing "Trio" section. Stops. Makes note out loud of new key signature.
08:29	Writes in music. Starts playing again.
08:36	Writes in music. Starts playing from beginning of "Trio" section.
09:23	Writes in music. Starts playing from beginning of "Trio" section again.
10:30	Attempts double stops. Plays slowly four times.
11:13	Starts from beginning of "Rigadoon" with a faster tempo.
11:49	Starts "Trio" section. Stops, notes key signature, and starts again.
12:30	Stops playing and looks outside office window.
12:49	Taps foot and starts "Variation" using varying tempos. Rhythm mistakes made.
13:47	Starts "Variation" again using an even faster tempo. Rhythm mistakes made.
14:53	Stops playing. Looks at music.
15:15	Taps foot and begins "Variation" again. At fast tempo.
15:45	Becomes frustrated with the notes. Stops, starts again, faster.
15:53	Stops, looks at notes, starts again.
16:19	Writes in music and begins to play.
16:52	Stops and checks to see that the video recorder is still recording.
16:58	Begins to play "Variation" again. Less mistakes this time. Plays through all of "Variation".
17:53	Starts "Variation" over again, with less mistakes.
18:46	Plays "Variation" again, at much faster tempo. Rhythm and bowing mistakes.
19:40	Switches music to "Country Dance". Reads through entire piece with minimal mistakes.
21:23	Stops, looks at clock. Starts playing "Country Dance" again, from the beginning.
22:35	Stops playing, looks at music.
22:42	Starts playing, from beginning, at slower tempo.
22:46	Works on correcting the bowing.
22:54	Speeds up opening section (mm. 1-36) with correct bowing. Goes on to next section of music. Pitch mistakes were made due to key change.
23:18	Stops, looks at music, and starts beginning of piece with much faster tempo. Continues playing entire piece with carrying tempos and rhythm/pitch problems. Stops to fix minor errors such as bowing, but continues to play entire piece.

26:18	Moves music to see it better. Starts playing last eight measures of “Country Dance”
27:27	Stops and moves music around on stand.
27:53	Starts playing “Variation” at much faster tempo. Pitch and Rhythm mistakes made. Slows down tempo and tries again.
28:42	Stops. Looks at clock. Then continues playing.
29:02	Stops. Starts “Variation” again.
29:36	Bows for video recorder. Takes music off of stand.
30:20	Turns off video recorder.

Julie’s first practice session suggests that she spends time analyzing the music, writes in the part as a reminder, and does work at the parts she cannot play. Julie appears to be focused on what she is practicing and continues to practice when she makes mistakes. During this practice session, Julie uses practice strategies such as: pizzicato, writing reminders in the music, fingering music with no bow, repetition, adjusting tempos, and tapping the beat with her foot. While she does become frustrated (15:45), Julie continues to work on the part that is giving her trouble. Considering Julie has had no instruction on these pieces, she does spend a great amount of time trying to figure out how each piece is to be played, bringing on new challenges for her.

During Julie’s first recorded practice session, observation shows that she does know how to incorporate many strategies into her practice. She is seen writing in her music, slowing down and speeding up tempos, pizzicato, fingering music with no bow, tapping the beat with her foot, and the use of repetition on specific passages. Throughout her practice, Julie seems focused on problem areas that do arise and spends time on each of the pieces she is practicing. When problems do arise, Julie is seen analyzing the problem and spends time working on only that specific area. Many times, Julie is seen writing reminders in her music, which helps her play those areas correctly. It is also evident that Julie is able to immediately identify bowing errors and does not continue playing until those mistakes are corrected.

Following the first recorded practice session, Julie was asked to fill out the Practice Journal form. From her responses, she was able to list specific practice strategies she used;

however, she used more strategies than she could list. Julie expressed enjoyment in practicing the Rigadon, Trio, & Variation because she really enjoyed playing it; therefore she practiced it longer than the other pieces. Having an understanding of what needs to be corrected from this practice session, Julie does admit, “I need to work on the Seitz Concerto because the rhythms are harder in that song, but usually playing them with the rest of the class helps me. My pitches improved I think. Bowing in Country Dance needs improvement” (Journal 1, p. 1).

Table 6: Julie’s Practice Journal #1 on March 4

<p>List what you practiced today. Include specific measure numbers.</p> <ol style="list-style-type: none"> 1. Seitz Concerto #5, 1st movement – measures 84-93 2. Rigaudon, Trio, and Variation – whole song, mostly 36-56 3. Country Dance – whole song
<p>What strategies did you use to work out problem spots in the music during this practice session?</p> <p>Repeating the measures I had problems with, and then adding measures I already knew to work it into the song. In the beginning, I just read some of the rhythms and figured them out on my violin by plucking them.</p>
<p>Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.</p> <p>Probably Rigaudon, Trio, and Variation.....especially measures 36-56 because I really enjoyed playing that part so I practiced it a lot.</p>
<p>Name one exercise or song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.</p> <p>Rigaudon, Trio and Variation....starting at measure 21. It is an easy part, but I had to get all the accidentals right or I would forget sometimes.</p>
<p>Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.</p> <p>I need to work on the Seitz Concerto because the rhythms are harder in that song, but usually playing them with the rest of the class helps me. My pitches improved I think. Bowing in Country Dance (mm. 35-54) needs improvement.</p>

On April 2nd, Julie and I watched the first recorded practice session for me to ask follow up questions. When asked what she was primarily focused on during that practice session, she

explains, “The notes and the tempo....because the melody wasn’t right there. There were a lot of notes and it was a challenge, but I knew I’d be able to play it. I like playing fast so I wanted to play it at a faster tempo. I worried about the sound also....and the notes and getting it right”

(Video Observation 1, p. 1).

JS: Describe to me what you have practiced during this session.

Julie: I practiced the Seitz Concerto, Country Dance, and Rigaudon, Trio and Variation. I really liked the Variation and Country Dance because of all the notes. I knew I’d be able to get those parts because I really liked those so I wanted to feel like I accomplished something.

JS: What strategies do you see yourself using?

Julie: Using a tuner, tapping my foot, plucking the strings for right rhythms and notes, writing in the sharps and flats or circling notes or things I needed to remember, repetition, and slowing the tempo down.

JS: Did those strategies work for you to help you improve?

Julie: Yes, pretty much (Video Observation 1, p. 1)

Julie was able to easily dictate many practice strategies she saw herself using on the video. She agreed that plucking, writing in the music, repetition, and tapping the beat really helped her practice the music. When asked why plucking the notes and repetition helped, she explains, “Sometimes I just pluck to try to get the rhythms right. On my own, it’s a lot harder to get the rhythms to come together, but when we’re playing in class....I can listen to all the other instruments around and it’s a lot easier to make it fit together and make it come together. There

were some parts I really played over and over again. I just wanted to get it right” (Video Observation 1, p. 1).

JS: Do you think writing it in helped you improve?

Julie: Yes, it usually does....not right off the bat, but it helps. In class, I usually don't have to write everything in because you can hear that it's wrong. When I'm alone, I have to write it in because I can't hear it because no one else is there.

JS: So why do you write in your music?

Julie: For me, it's like a cheat sheet and the answers are right there. And I can just copy them....which probably doesn't make since. But it just tells me what to do (Video Observation 1, p. 1).

Julie does show mixed feelings towards tapping the beat for help. When asked if it helps, she states, “Sometimes yes and sometime it just messes me up. Sometimes it helps to slow down, but I'm really an impatient person so slowing down doesn't really help” (Video Observation 1, p. 1).

The second recorded practice session was recorded on April 2nd, one month after the first session. During the month in between, Julie performed in one school concert and an orchestra clinic, but did not participate in Solo and Ensemble. During the second practice session, Julie was informed she could practice any music she wished. She chose to practice a large portion of the orchestra music we were currently working on. This second practice session was again recorded in the high school orchestra office, with no guidance being given. The following is Julie's second thirty minute practice session.

Table 7: Julie's Practice Session #2 on April 2

Time	Teacher - Researcher Notes
00:01	Turns on video recorder.
00:11	Tunes violin with tuner.
01:48	Begins playing “Nobody Knows the Trouble I’ve Seen”. Plays through entire piece with pitch and bowing mistakes.
03:01	Works on one measure for notes and bowing.
03:42	Taps foot to establish beat, starts at measure 14.
04:17	Stops and write in music.
04:28	Tries one measure again, three times in a row. Plays correctly third try.
04:42	Changes music to “Danse Diabolique”. Taps foot for beat and starts playing.
05:48	Stops, looks at music, tries opening melody again. Fixes bowing and continues on.
07:27	Changes music to “River of Dreams”.
09:39	Stops, frustrated, starts again from beginning.
09:56	Writes in music, practices measure just written in, succeeds.
11:07	Looks at clock, continues practicing piece, but pizzicato.
11:42	Plays with bow, but is unclear of rhythm. Stops.
12:20	Changes music to “Jump, Jive an’ Wail”. Starts at beginning at plays through once.
14:00	Changes music to “Slavonic Dance”.
15:37	Writes in music. Circles key signature, then starts at beginning.
15:42	Stops and taps beat. Starts playing from beginning.
16:16	Practices measure with double stops, three times, looks at notes, tries measure again.
16:40	Adds notes before double stop measures and continues on through double stops with correct pitch and rhythms.
17:58	Works on g minor section of piece for accuracy with 4 th fingers (Eb’s).
18:29	Frustrated. Switches to different section in music, one that she can play.
18:53	Frustrated. Stops playing, writes in music, tries again.
19:58	Stops, looks at music, starts again. Works on slur section at a fast tempo.
20:45	Stops, looks at clock. Switches music to “Russian Gypsy Song” and starts at beginning of piece.
23:05	Changes music to “English Fugue”. Looks at music.
23:35	Shakes out hands, looks at camera, laughs.
23:52	Starts playing “English Fugue”. Plays entire piece without stopping, accurately.
27:25	Changes music back to “Nobody Knows the trouble I’ve Seen”. Better intonation and bowing has been corrected.
29:15	Turns off video recorder

During this second practice session, it was observed that Julie became frustrated more often (09:39, 18:29, and 18:53). While she does work on correcting specific problems in the music, she seems to be playing through the pieces one by one, correcting minimal errors. Julie

seems to be “going through the motions” of practicing, not being fully engaged or focused on what she was doing. It could be that she was tired or did not feel well when this was recorded. During this practice session, Julie does list tapping foot, wrote in music, pizzicato, repetition, and slowing down the tempo as strategies she used.

Following the second recorded practice session, Julie was asked to fill out the Practice Journal 2. Strategies she lists are: tapping, repeating measures, picking to get the fingering right, and writing things in, many of the same that were listed on the Practice Journal 1. When asked to name one piece during this practice session that she could play the best, and to explain what makes it stand out from the others, she says, “Nobody Knows the Trouble I’ve Seen (mm. 1-14)....it’s easy and a piece I’ve heard before and I like the tune” (Video Observation 2, p. 1).

Table 8: Julie’s Practice Journal #2 on April 2

List what you practiced today. Include specific measure numbers.
<ol style="list-style-type: none"> 1. English Fugue – whole piece 2. River of Dreams – (mm. 1-66) 3. Russian Gypsy Song – (mm. 1-47) 4. Slavonic Dance – (mm. 1-16, 41-64) 5. Jump, Jive an’ Wail – whole song 6. Nobody Know the Trouble I’ve Seen – (mm. 1-14, 44-54) 7. Dance Diabolique – (mm. 1-39)
What strategies did you use to work out problem spots in the music during this practice session?
Tapping, repeating measures, picking to get the fingering right, writing things in.
Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.
Nobody Knows the Trouble I’ve Seen (mm. 1-14)....it’s easy and a piece I’ve heard before and I like the tune.
Name one exercise of song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.
Slavonic Dance....playing two notes at one time....I just had to practice it over and over again.
Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.

I improved on playing on two strings at a time and on my posture!

The second video observation between Julie and myself was on April 9th. Julie explained to me that she had practiced, “a lot of orchestra music” (Video Observation 2, p. 1). When asked what she primarily focused on during this practice session, she states, “I was focused on getting the right pitches and rhythm. I was working on perfecting pieces I already knew and getting better at them” (Video Observation 2, p. 1).

JS: What strategies do you see yourself using?

Julie: Tapping foot, circled things and wrote in my music, stopped playing arco and just picked the notes to figure them out, repeated measures, and slowed the tempo down.

JS: Did those strategies work for you to help you improve?

Julie: Yes.

JS: Why do you think you chose those strategies?

Julie: They have always helped me in the past and they are strategies that I am familiar with doing (Video Observation 2, p. 1)

Conclusion

Julie, a ninth-grade violin player, does incorporate many strategies into her practice sessions. During practice, she quickly finds mistakes in her playing and makes numerous attempts to fix those areas, continuing on after they are corrected. While spending time to fix those problems areas, Julie seems to have effective practice strategies that can be used. Strategies she finds that are most effective for her are: repetition, writing in the music, tapping the beat, and slowing/speeding up the tempos. Julie’s practice time is spent mostly on orchestra music; however, she is not afraid to practice pieces she has not heard or had instruction on. Julie finds new pieces challenging and prefers to practice the harder areas in her music. When

working on solo literature that has not been discussed yet, Julie incorporates slowing down the tempos and writing in the music as reminders to herself. Strategies we have discussed in the orchestra class are somewhat apparent in her practice sessions; however, Julie has learned many successful strategies from her past private teacher that have helped her learn her music and gain confidence in her playing.

CHAPTER SIX

Richard, bass

Background

Richard is a bass player at Woods Community High School. He started playing bass in the orchestra program in seventh-grade; one year later then most students begin. Richard had no previous instruction on any instrument, except for the instruments he played during his required music class time in elementary school. Having no previous knowledge of how to play an instrument, he chose the bass because “it looked like an instrument I would play because I can’t see myself playing violin or viola. I felt like the bass was calling me” (Interview 1, p. 1).

Richard is an only child and lives between two families because his parents are divorced. While spending time at both parents’ homes, Richard only practices his bass at his mom and step-dad’s house because that is where he keeps his school bass. When asked how his parents are involved in his practice, Richard explains, “I’m an only child and I really don’t let anyone else bother me when I practice. They don’t tell me to practice because I just do it when I do it. My mom has said to practice, but doesn’t force me. She just suggests it, but it’s not too much. She’ll just bring it up on occasion, but she suggests it. She doesn’t make me” (Interview 1, p. 2).

Richard enjoys orchestra, science, and history in school. He is not involved in many after school activities and enjoys listening to music outside of school. “That’s probably my favorite thing to do. I listen to music like the Beatles....during the 1960’s. That’s when a lot of people had talent....now it’s just monotone” (Interview 1, p. 2). Richard believes it’s important to

practice because “if you’re not a natural at playing it, you’re never gonna get it without practicing it. Then you’re just going to fail and get nowhere with it. Up here [high school level], you actually have to practice because you have to know the part, and it’s harder music” (Interview 1, p. 2). Richard admits that he does not practice every day and that he does not have a specific time of day that he sets aside to practice. For Richard, practice happens when he feels like it.

Richard does enjoy the orchestra class at the high school level. Many of his close friends are in his orchestra class; however, they do not play their instruments together outside of school. Richard does have a study hall, and on occasion, goes to the orchestra room to practice his bass alone.

What does Richard do when he practices?

A typical practice session for Richard starts by him playing each string on his bass to see if he needs to tune his bass or if he needs to bring a tuner home. After he tunes, he plays the orchestra and solo music he is currently working on, playing the piece(s) in its entirety. Richard then goes back through each piece and practices the parts that he believes need work.

JS: Where do you usually practice at home?

Richard: In my bedroom at my mom’s. There’s no way I’m taking my bass to my dad’s!

JS: How many minutes do you usually practice for?

Richard: There’s no set amount. It usually varies with how much I need to work on.

JS: How do you know when it’s time to stop practicing?

Richard: Either I feel like I know the part or I just get sick of it and then I know I'm done (Interview 1, p. 1).

I ask Richard what strategies he uses when practicing:

Richard: Repetition....I write stuff in, usually I'll start off with playing it like we do in class and then if I don't know it, I'll slow it down. I take out the bowing and play just the notes. If I can't get it with the bowing, I'll pluck it and then put the bowing in (Interview 1, p. 2).

While Richard does have a few practice strategies he is able to use, I asked him where he may have learned those strategies. Richard explains, "I feel like I picked them up here, with you, in school really. We do this in orchestra every day" (Interview 1, p. 2). I then ask if Richard feel his practice has changed since the previous year. "I feel like last year I didn't even practice....like maybe once or twice, but it wasn't a lot. Well, I went in during lunch, so I guess I did practice about the same. But when I went in during lunch, it was only for a little bit because I'd get distracted and then I'd be done. So yeah, I guess it's changed since last year (Interview 1, p. 2).

The following is a recorded thirty minute practice session from March 7th. It was recorded in the high school orchestra office, with no guidance being given. Richard was told he could practice any music he wished during this first practice session. He decided to practice his solo for Solo and Ensemble and the orchestra music we were currently working on.

Table 9: Richard's Practice Session #1 on March 7

Time	Teacher – Researcher Notes
00:11	Tunes bass with tuner.
01:01	Begins practicing "Introduction and Dance" from beginning of piece. Works on only "Introduction" section.
01:42	Stops, corrects fingering, tries measure again and continues playing piece.
04:32	Stops, corrects same fingering again. Plays that measure four times, and then

	continues to play entire section.
05:12	Starts over from beginning.
06:04	Looks at measure again with fingering trouble. Plays four times slowly, then plays measure at tempo and plays remainder of section.
06:57	Works on "Dance" section. Plays entire section, with rhythm and pitch mistakes.
07:44	Works on sixteenth notes passages slowly.
08:02	Starts from beginning of "Dance" section and plays entire sections
10:19	Changes music to "English Fugue". Starts at fast tempo.
11:01	Stop. Fixes pitches in sixteenth notes. Continues playing piece.
12:27	Plays eighth note section like thirty-second notes. Not sure of rhythm.
13:04	Looks for pencil on stand. Writes in music.
13:56	Starts playing from beginning of piece at fast tempo.
15:20	Uses tuner to fix pitches in shifting section.
17:20	Starts "English Fugue" from beginning again.
18:16	Works slowly on eighth note section for intonation.
18:45	Changes music to "Folk Tune". Plucks notes in measures 1-8.
20:20	Works with bow on part 2. Fixes pitches slowly, then starts from beginning of piece and continues to part 3.
22:43	Works slowly on bowing/slurs and sound production in part 3 where basses have the melody.
23:50	Works with tuner to check intonation on shifting parts.
24:42	Changes music to "Fiddle Dance". Starts at beginning with tempo from class.
27:00	Works slowly on sixteenth notes for pitches. Mistakes made, but continues playing.
29:24	Changes music to "Deep River" Plays through once at fast tempo.
31:57	Changes music to "Jump, Jive, an' Wail". Plays through fast with pitch mistakes.
34:14	Problems with plucking steady tempo. Continues playing all.
35:04	Changes music to "Sinfonia in D Major". Plays at fast tempo. Work on spiccato bowing. Plays through entire piece.
40:40	Turns off video recorder

Richard's first practice session suggests that he spends a majority of the time involved in practicing and playing his instrument; however, overlooks pitch and rhythm errors. It could be that he does not know he is making them. Richard seems to be actively engaged in his practice session, writing in the music and using a tuner to help correct intonation of specific pitches. During this practice session, he is seen playing and working on one piece, fixing mistakes and then progresses to the next piece. Richard is seen using practice strategies that we have

discussed in class: adjusting the tempo, writing in the music, using a tuner, repetition, working on specific measures, and focusing on specific skills. At no time during the recording does Richard seem to get frustrated and makes every attempt to practice the parts he does not yet know.

During this first recorded practice session, observation shows that Richard does understand and know how to use the practice strategies he already has learned. He is seen writing in his music, slowing down and speeding up tempos, using repetition on specific passages, working on one specific measure, and focusing on one specific skill we have previously discussed. Richard seems dedicated to fixing mistakes before he proceeds on to new parts as seen at 22:43.

Immediately following the first recorded practice session, Richard was asked to fill out the Practice Journal form. From his responses, he was able to list a few specific practice strategies he used; however, not everyone he used was listed. Richard did work on improving his attention during this practice session. “I improved on not getting distracted when I practiced” (Journal 1, p. 1). Richard did focus a great amount of time working on fixing pitches and rhythm, but makes note that he needs to continue to fix these areas in his music. “I need more attention on keeping the beat and playing the right notes and pitches” (Journal 1, p. 1).

Table 10: Richard’s Practice Journal #1 on March 7

List what you practiced today. Include specific measure numbers.

1. Introduction and Dance – whole song
2. English Fugue – whole song (especially mm. 38-41 and 83-91)
3. Deep River – whole song
4. Fiddle Dance – whole song
5. Folk Tune – whole song (especially part 15 to the end)

What strategies did you use to work out problem spots in the music during this practice session?
I wrote in the fingerings, found an A on the D string, and played parts that I wasn't sure about over and over.
Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.
Deep River...it's not that hard to play and Introduction and Dance...I practice it the most.
Name one exercise of song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.
Fiddle Dance...I just couldn't get the notes right.
Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.
I improved on not getting distracted when I practiced. I need more attention on keeping the beat and playing the right notes and pitches.

On April 2, 2013, Richard and I watched the first recorded practice session together for me to ask follow up questions. When asked what he was primarily focused on during that practice session, he explains, "I had to figure out where the notes and how the notes...rhythms all fit into the beat. I also wanted to play the parts better and know my part" (Video Observation 1, p. 1). I then asked him to tell me what he practiced during that practice session.

Richard: I practiced Introduction and Dance a lot because I needed it for Solo and Ensemble. Then I practiced English Fugue, a few other orchestra pieces, which we needed for the clinic and Solo and Ensemble.

JS: What strategies do you see yourself using?

Richard: Using a tuner, repetition, slower and faster tempos, fix measure by measure, and writing in the sharps or flats or I write stuff in that I need to remember.

JS: Do you write in the music often?

Richard: No, I usually don't have to, but that day I just kept playing the wrong notes...or I was circling something to remind me to play it right.

JS: So why do you write in your music?

Richard: Just as a reminder, but not often (Video Observation 1, p. 1).

Richard was able to easily dictate the practice strategies he saw himself using. While writing in the music helps him during practice, he also did agree that repetition was helpful, but stated that with constant repetition, "sometimes I just get frustrated because it doesn't sound right" (Video Observation 1, p. 1). I asked Richard why he chose those strategies. "It's really the only ones I know. I don't have a wide variety of different strategies to use so I just use the ones I know and they're worked for me in the past" (Video Observation 1, p. 1). While he might now know different practice strategies, he did feel that the strategies he used helped him improve during this practice session. "I did start to sound better" (Video Observation 1, p. 1).

The second recorded practice session was recorded on April 2nd, one month after the first session. During the month in between, Richard performed in one school concert, played four pieces for the orchestra clinic, and played a solo and two pieces in the large group event at Solo and Ensemble. Because of Richard's schedule, we waited until he was free to record the second practice session. During the second practice session, Richard was again informed he could practice any music he wished. He chose to practice a large portion of the orchestra music we were currently working on and a few pieces he received in his previous lesson. This second practice session was again recorded in the high school orchestra office, with no guidance being given. The following is Richard's second thirty minute practice session.

Table 11: Richard's Practice Session #2 on April 2

Time	Teacher – Researcher Notes
00:11	Tunes bass with tuner.

01:00	Begins playing “Danse Diabolique”. Stops and starts again from the beginning. Plays entire piece with rhythm and pitch mistakes.
03:21	Changes music to “Slavonic Dance”. Plays through entire piece.
05:45	Changes music to “River of Dreams”. Starts from beginning, stops, looks at music to figure out counting and rhythm (clapping, tapping), taps foot to establish beat, begins playing from beginning.
07:20	Changes music to “Mountain Chase”. Starts from beginning of piece.
08:13	Looks at music to figure out counting (done verbally), begins playing from beginning.
08:58	Changes music to “March of Bacchus”. Starts at a fast tempo, slows down as he keeps going. Struggles through entire piece with pitches.
12:39	Changes music to “Perpetual Motion”. Plays through all, attempts Variation B, but gives up.
14:46	Changes music to “Long, Long Ago”. Starts fast, works through piece with pitch and rhythm mistakes.
16:27	Changes music to “Rigadoon”. Struggles through, but plays entire piece. Works slowly and is able to play piece at a faster tempo. Mistakes still made.
18:47	Changes music to “Twinkle, Twinkle Little Star in C Major”. Play through fast.
19:08	Changes music to “Allegro”. Plays through fast with rhythm mistakes.
20:57	Changes music to “Bass Technique Book – Etude #1”. Plays through first fifteen measures. Struggles to figure out rhythm.
22:36	Changes music to “Jump, Jive an’ Wail”. Starts at beginning, plucks most of piece, then plays entire piece using the bow.
25:25	Looks at clock.
25:30	Changes music to “River of Dreams”. Figures out rhythm by counting out loud and taps foot. Counts specific measures throughout piece.
32:00	Turns off video recorder

During this second practice session, it was observed that in the first half of his practice, Richard worked on fixing mistakes by really focusing in on what was wrong. He is seen clapping rhythms, tapping his foot while clapping, and numerous attempts to play specific measures accurately. In the second half of the video, Richard is seen merely ‘playing through the music’, and goes from piece to piece with many mistakes being left uncorrected. While Richard does attempt new music on his own, music he was previously given in his lesson, he does not spend much time trying to play it correctly. He is seen going through the music to just “play it”. It could be that he truly has no idea of what the music is to sound like or that the music

may be too difficult for him; therefore, he does not want to spend the time figuring out how to play it.

Following the second recorded practice session Richard filled out the Practice Journal 2. He only lists writing in the music and playing parts over and over as the strategies he used. He does admit in the journal that “I don’t feel I improved on anything. I do need to count more and learn how the rhythms fall into the beat” (Journal 2, p. 1). When asked to list one piece from the practice session that he thinks he can play the best and to explain why, Richard explains, “Slavonic Dance....it’s a very easy song to play. The whole song is pretty much all quarter notes for the bass section” (Journal 2, p. 1). This could be because Richard did not spend enough time on any of the pieces to really perfect any of them; therefore, he chose the easiest piece as what he knew the best.

Table 12: Richard’s Practice Journal #2 on April 2

List what you practiced today. Include specific measure numbers.
<ol style="list-style-type: none"> 1. Long, Long Ago from Suzuki Book 1 – whole song 2. Rigadoon from Suzuki Book 1 – whole song 3. Twinkle, Twinkle Little Star in C Major from Suzuki Book 1 – whole song 4. #1 from Thirty Etudes for Bass – (mm.1-10) 5. Mountain Chase – whole song 6. River of Dreams – Beginning section only 7. Danse Diabolique – whole song 8. Slavonic Dance – whole song 9. March of Bacchus – whole song 10. Jump, Jive an’ Wail – whole song
What strategies did you use to work out problem spots in the music during this practice session?
I wrote in the fingerings, and played parts that I wasn’t sure about over and over.
Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.
Slavonic Dance....it’s a very easy song to play. The whole song is pretty much all quarter notes for the bass section.
Name one exercise of song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.

River of Dreams.....I forgot the beat and rhythms. I didn't do anything because I couldn't play it accurately.

Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.

I don't feel I improved on anything. I do need to count more and learn how the rhythms fall into the beat.

The second video observation between Richard and myself was on April 8th. Richard explains that he had practiced a lot of orchestra music and some things out of Suzuki Bass Book 1. When asked what he was primarily focused on during that practice session, he states, "I was focused on learning the music since it was the first time I was playing it. Also, learning the notes and rhythms and where the rhythms lined up with the beats in each measure" (Video Observation 2, p. 1).

JS: What strategies do you see yourself using?

Richard: Tapping foot, playing slowly, and figuring out where the beats and rhythms lined up. Tapping my foot was something new today and it really seemed to help me.

JS: Did those strategies work for you to help you improve?

Richard: Yes

JS: Why do you think you chose those strategies?

Richard: It was just a random thought that I should maybe tap my foot for the beat (Video Observation 2, p. 1).

Conclusion

Richard, a ninth-grade bass player, does incorporate many strategies into his practice sessions. During practice, he quickly gets to work on fixing mistakes throughout his music. Using repetition, he is seen making numerous attempts to fix those areas. Richard seems to

already know many practice strategies that can be used. Strategies he finds that are most effective for him are: repetition, writing in the music, tapping the beat, and slowing/speeding up the tempos. Richard does spend time practicing solo literature and orchestra music and is not afraid to practice specific passages for longer periods of time. Richard admits to having trouble with rhythms and placing the rhythms into beats; therefore, he does spend a great amount of time practicing this in his music. Strategies we have discussed in the orchestra class are apparent in his practice sessions, and Richard believes he is overall a better player because those strategies have helped him in his individual practice.

CHAPTER SEVEN

Sage, cello

Background

Sage is a cello player at Woods Community High School. She started playing cello in the orchestra program in sixth-grade. Playing only the instruments in her required general music classes in elementary school, Sage had not played any instrument before starting the cello. Since starting cello, she has also played a little guitar, but has not had private lessons on either instrument. When asked why she picked to play the cello, Sage explains, “I think a lot of it was that a lot of people played violin and the higher strings and I kind of wanted to be in a smaller group, maybe like, for more attention during lessons or during class. And I think it has a prettier sound” (Interview 1, p. 1).

Sage lives with her parents and a younger sister, whom she babysits for after school during the school year. While after school activities do come up for her and her sister, Sage tries to practice on a daily basis, usually after 5:30 p.m. when she is done babysitting her sister. “Now that we’re getting closer to Solo and Ensemble, I’m practicing once or twice a day” (Interview 1, p. 1). When asked if her parents or sister have any involvement in her practicing, she explains that they do not force her to practice or require her to practice as a chore. “I usually practice on my own. Even if I didn’t practice, I don’t think my parents would tell me to do it. I just practice on my own” (Interview 1, p. 1).

Sage enjoys classes in school that are hands-on. “I like tech-ed stuff...hands-on things. I’m in Small Gas Engines. I’m going to that competition coming up” (Interview 1, p. 1). Sage enjoys playing her cello, archery, and shooting sporting-clays. While having many friends in school, Sage finds the time to practice alone and believes it is important to practice. “I think it’s really important because when you’re involved in a concert, it affects your whole group and everyone else that you play with. It’s not fair to everyone if they’re going to practice and try to do their best and you don’t” (Interview 1, p. 1).

Sage has a school cello at home. While she enjoys practicing and working on orchestra music from class, Sage likes to practice solo repertoire she has received in school lessons and music from a Disney book. When asked if she enjoys practicing the harder parts in her music, she states, “I prefer that because it actually feels like I’m accomplishing something. I do tend to focus more on solos because our orchestra music tends to not have the melody in the cello part and they’re [solos] harder” (Interview 1, p. 1). Having a full credit load, Sage does not have a study hall this year in school; therefore, cannot practice during school hours in the orchestra room. Occasionally, she stays after school to practice before walking to the elementary school to pick up her sister.

What does Sage do when she practices?

A typical practice session for Sage starts by her playing scales. She looks at what key each of her pieces are in and then starts with that specific scale before she starts practicing a piece. After her scale, Sage looks through the piece to see what parts are ‘notey’ and if there are any key changes or measures that are going to be hard for her. She then plays through the entire piece, making note of what was hard or what was played wrong. Then she goes back and

practices those specific places and places that weren't hard, finally, putting the whole piece together.

JS: Where do you usually practice at home?

Sage: In my room, upstairs, away from everyone else.

JS: How many minutes do you usually practice for?

Sage: I don't really set an amount, but it usually ends up being like an hour or an hour and a half.

JS: How do you know when it's time to stop practicing?

Sage: Well, if I started practicing and if I have a goal that I want to be able to go through this at this tempo or if I can do what I wanted to be able to do (Interview 1, p. 1).

I ask Sage what strategies she uses when practicing:

Sage: I take stuff at a slower speed and then I'll get it faster and faster. Then when it's up to the regular tempo, I'll play through the song or section to see if I can do it. I take out the bowing and learn the notes also. And I write stuff in. You saw my solo (laugh)...(Interview 1, p. 2).

Sage does know a few practice strategies that have seemed helpful to her in the past. I asked her where she may have learned those strategies. Sage explains, "Well, you taught us a lot of the stuff like taking out the bowing, playing it slower, and going over and over things and then I have a lot of friends that are musicians who will say stuff like repetition and other things. So I learned a lot from them. And then online, if I'm having trouble with a piece, I'll look up tips and stuff" (Interview 1, p. 2). I then ask if Sage feels like her practicing has changed since the previous year. "I think it has a lot because not that I have a deeper understanding of the music

like chord structure and everything. I can like....well I wouldn't have practiced scales and stuff last year, but now I understand intonation more and why stuff is the way it is" (Interview 1, p. 2).

The following is a recorded thirty minute practice session from March 7th. It was recorded in the high school orchestra office, with no guidance being given. Sage was told she could practice any music she wished during this first practice session. She decided to practice her solo and duet for Solo and Ensemble and three scales.

Table 13: Sage's Practice Session #1 on March 7

Time	Teacher – Researcher Notes
00:06	Tunes cello with tuner.
01:33	Plays "C Major Scale".
01:47	Starts playing "Offenbach Duet #3 – 1 st movement" from beginning.
03:40	Stops to make corrections. Practices slowly, then speeds up and continues.
04:39	Writes in music. Tries measure again. Successful this time.
05:22	Stops. Looks at music and then starts playing again.
05:58	Skips ahead to second section in 1 st movement.
06:14	Stops. Writes in music. Tries measure multiple times. Fixes rhythm and pitch mistakes.
06:33	Stops playing music. Starts playing "C Major Scale" again.
06:52	Starts playing "Offenbach Duet" again.
07:54	Works on bowing/slurs in 1 st movement. Plays four measures five times before moving on.
08:23	Continues playing 1 st movement at different tempos, each time starting from beginning of piece.
10:56	Goes back to review bowing/slur section.
12:19	Stops. Picks D string. Looks around.
12:42	Fixes bow hold. Switches music around. Fixes bow hold again.
12:57	Starts playing "Danse Rustique".
13:14	Stops and looks at music.
13:35	Writes in music.
13:53	Starts playing from beginning of piece at a slow tempo.
16:06	Works on middle section slowly for pitch accuracy.
16:10	Write in music.
16:49	Struggles in music, but continues playing with mistakes.
17:38	Starts middle section over again, at slower tempo, paying attention to bowing detail.
18:04	Continues playing, but looks at clock.
18:23	Stops. Starts last two lines of piece. Plays through to the end.
19:48	Plays one finger scales and works on vibrato.

20:50	Plays middle section of “Danse Rustique” again, at a slow tempo. Stops, tries again.
21:22	Plays again from beginning of piece. Stops and fixes bowing.
21:34	Plays only first four measures of middle section. Slow tempo, works on bowing mistakes.
22:18	Starts piece at beginning at music faster tempo. Plays wrong notes and continues playing.
22:36	Starts again with slower tempo.
23:53	Works on shifting measures at slow tempo.
24:15	Writes in music and tries shifting again.
24:48	Turns off video recorder.

Sage’s first practice session suggests that she spends time involved in practicing and adjusting tempos to help with accuracy; however, she spends a great amount of time looking at the music, switching between playing the music and random scales and overlooks pitch and rhythm errors. Sage seems to be somewhat engaged in her practice session, but a lack of focus can be seen. Sage is seen writing in the music, adjusting tempos, fixing specific problems such as bowing, and the use of repetition. During this practice session, which seems very sporadic, she is seen playing and working on one specific area (bowing), continually repeating the measures for accuracy. Sage is seen using practice strategies that we have discussed in class: adjusting the tempo, writing in the music, using a tuner, repetition, working on specific measures, and focusing on specific skills. While Sage does not seem to show signs of getting frustrated during this practice session, it is observed that other things may be on her mind and practicing may be a challenge at this time.

During this first recorded practice session, observation shows that Sage does understand and know how to use the practice strategies she already has learned. She is seen writing in her music, slowing down and speeding up tempos, using repetition on specific passages, working on one specific measure, and focusing on one specific skill (bow hold) we have previously discussed in lessons.

Immediately following the first recorded practice session, Sage was asked to fill out the Practice Journal form. From her responses, she was able to list a few specific practice strategies she used. Sage named Danse Rustique as a piece she got better at during this practice session because “I took it note by note and put it back together in pieces until I could put it all together and play it at the right tempo” (Journal 1, p. 1). Sage believes that the strategies of taking small sections slowly, taking out the grace notes and bowing, and adjusting tempos helped in her learning her music during this practice session. She states, “I got better at the ‘notey’ parts and on my intonation. I still need to work on bowing and fluency and dynamics” (Journal 1, p. 1).

Table 14: Sage’s Practice Journal #1 on March 7

List what you practiced today. Include specific measure numbers.
<ol style="list-style-type: none"> 1. Danse Rustique – beginning and middle section 2. Offenbach Duet #3 – 1st movement 3. Scales: C Major, A Major, g minor
What strategies did you use to work out problem spots in the music during this practice session?
Took small sections slowly, took out the grace notes and bowing, went progressively faster and then added bowing back in.
Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.
My Offenbach duet is the easiest for me to play because it’s just an easier piece, but the solo (Danse Rustique) sounds cooler because it’s really fancy.
Name one exercise or song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.
Danse Rustique...I took it note by note and put it back together in pieces until I could put it all together and play it at the right tempo.
Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.
I got better at the ‘notey’ parts and on my intonation. I still need to work on bowing and fluency and dynamics.

On April 4, 2013, Sage and I watched the first recorded practice session together for me to ask follow up questions. When asked what she was primarily focused on during that practice

session, she explains, “I think it was intonation, bowing, and the notes and rhythms since I needed it for Solo and Ensemble” (Video Observation 1, p. 1). I then asked her to tell me what she practiced during that practice session.

Sage: I practiced Danse Rustique and the Offenbach Duet with Adrian for Solo and Ensemble, and some scales.

JS: What strategies do you see yourself using?

Sage: Using a tuner, repetition, slower and faster tempos, fix measure by measure, and writing in the sharps or flats and bowing, note-by-note on vibrato, and watching myself in the mirror.

JS: Do you remember what you wrote in your music here?

Sage: I think it was the bowing so I could figure out and remember what to do. I don't really remember, but I think it was the bowing because I was having difficulty.

JS: So slowing the tempo down really works for you also?

Sage: Yes.

JS: Does the strategy of repetition work for you as well?

Sage: Yes, I wanted to learn it really well and at the tempo it was supposed to go (Video Observation 1, p. 1).

Sage was able to easily dictate the practice strategies she saw himself using. While writing in the music and repetition help greatly, she explains that she chose those strategies because “in your mind you know that this designated area is going to need work so writing in the music....you can really zone in and focus on the music and you know it's coming up” (Video Observation 1, p. 1).

The second recorded practice session was recorded on April 4th, one month after the first session. During the month in between, Sage performed in one school concert, played three pieces for the orchestra clinic, and played a solo, duet, and two pieces in the large group event at Solo and Ensemble. Needing a break from orchestra and practicing, Sage chose to wait until the beginning of April to record the second practice session. During the second practice session, Sage was again informed she could practice any music she wished. She chose to practice a large portion of the orchestra music we were currently working on due to not having a lesson prior to this recording. This second practice session was again recorded in the high school orchestra office, with no guidance being given. The following is Sage's second thirty minute practice session.

Table 15: Sage's Practice Session #2 on April 4

Time	Teacher – Researcher Notes
00:01	Tunes cello with tuner.
00:12	Starts playing “Mountain Chase” at a slow tempo. Stops to figure out rhythms. Taps foot to keep the beat while figuring out rhythms. Claps rhythms.
02:12	Writes in music. Plays opening four measures to get rhythm and bowing right.
04:21	Changes music to “Nobody Knows the Trouble I’ve Seen”. Starts at performance tempo. Stops to work on rhythms slower. Works on adding vibrato to opening fourteen measures. Works through entire piece at slow tempo, double checking a few measures for intonation and rhythm.
08:54	Changes music to “Danse Diabolique”. Plays through mm. 1-24 at tempo. Taps foot to keep beat while playing.
10:03	Changes music to “Slavonic Dance”. Plays through entire G Major section. Corrects pitch issues and bowing issues.
12:56	Changes music to “Russian Gypsy Song”. Starts at beginning, works on getting a bigger sound from the opening chords. Play mm. 1-10 twice.
14:30	Changes music to “Jump, Jive an’ Wail”. Plays through entire piece at tempo.
16:04	Write in music. Practices mm. 41-52 four times slowly, then at tempo. Continues to end of piece.
17:54	Changes music back to “Nobody Knows the Trouble I’ve Seen”. Starts at m. 14.
18:48	Writes in music. Continues playing to the end.
19:14	Works on specific measures that are problems for her with rhythm and intonation.

22:22	Changes music back to “Mountain Chase”. Works on playing double stops and last sixteen measures of music, taps foot to keep the beat.
26:15	Turns off video recorder.

During this second practice session, Sage was really focused the entire time, really honing in on fixing rhythms and intonation. She is seen clapping the rhythms and tapping the beat with her foot to make sure it was right before adding it with the bow. Sage is also seen working on smaller sections of each piece, fixing errors that she had played wrong either on the video or previously in class. While Sage only practices for 26:15, she is actively engaged in making sound decisions on what needs to be practiced during this time.

Following the second recorded practice session Sage filled out the Practice Journal 2. She lists slowing down, going through the music note by note, and tapping her foot as the only strategies used. While other practice strategies were observed on the video, Sage did not list them in her Journal. This could be because she did not remember doing them or was in a rush to finish the journal entry.

Table 16: Sage’s Practice Journal #2 on April 4

List what you practiced today. Include specific measure numbers.
<ol style="list-style-type: none"> 1. Mountain Chase – (mm. 21-37, 84-end) 2. Nobody Knows the Trouble I’ve Seen – (mm. 22-36, 52-end) 3. River of Dreams – (mm. 51-end) 4. Jump, Jive an’ Wail – (mm. 41-end) 5. Russian Gypsy Song – (mm. 1-9, 52-end) 6. Danse Diabolique – whole song
What strategies did you use to work out problem spots in the music during this practice session?
Slowing down and going through each part note by note.
Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the other.
Danse Diabolique....I have good tone and bow control that gives it a good sound.
Name one exercise of song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.

Nobody Knows the Trouble I've Seen (m. 25)...I wrote in the notes and slowed it way down.

Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.

I made good progress with shifting issues, but still need to make them more fluent now that I know the notes.

The second video observation between Sage and myself was on April 8th. Sage explains, “I practiced a lot of orchestra music and that’s about it. Tapping my foot, I sometimes do to help me figure out the rhythms” (Video Observation 2, p. 1). When asked what she was primarily focused on during that practice session, she states, “my primary focus during this practice session was on the intonation in all the pieces and fixing the rhythms I was not able to play accurately” (Video Observation 2, p. 1). After discussing all the strategies we saw together on the video, I asked her if she thought the strategies she chose helped her improve. Sage believes, “Yes, because when I go through note by note, I actually know what I should listen for” (Video Observation 2, p. 1).

Conclusion

Sage, a ninth-grade cello player, does incorporate many strategies into her practice sessions. From the observations, Sage tends to work on pieces and then sporadically plays scales or quickly works on other technical skills. She is able to find mistakes easily and works on correcting those skills, usually by playing at slower tempos. The use of repetition is seen throughout her practice sessions; however, on occasion the use of repetition is not beneficial for her. Sage does know practice strategies that can be used and finds the most effective are: slowing down the tempo, tapping the beat, and writing reminders in the music. While she does enjoy practicing the school orchestra music, she would rather practice solo repertoire or review

past literature. Strategies we have discussed in the orchestra class are apparent in her practice sessions; however, are used only for a short period of time.

CHAPTER EIGHT

Cross Case Analysis

In the following discussion, I present a Cross Case Analysis and connect the emergent themes back to past research. I describe similarities between the four students who participated in the study using the research question c) what is the qualitative comparison between the teacher and students description' as a guide. Common themes that emerged are listed as: Articulation of Practice Strategies, Demonstration of Practice Strategies, Enjoyment of Practice, Perceptions on Practice, Importance of Practice and Advise, Parental Involvement and Teacher as Participant.

Articulation of Practice Strategies

At the beginning of this study, I was unaware of how many practice strategies the participants were going to be able to articulate or if they knew the meaning of 'practice strategy'. Throughout the first interview and remainder of the study, I was reassured that they did know what a 'practice strategy' was and could easily articulate them without being given a prompt. Participants were able to quickly vocalize strategies they had previously learned and strategies they found to be effective in their individual practice. From what was articulated, these findings are in alignment with Rohwer and Polk (2006) in that students do have the basic knowledge of what practice strategies are. Like Rohwer and Polk's (2006) study, "the small number of strategies the participants could describe was itself a notable finding" (p. 357). After looking back on their instruction from previous years, I realized that the participants may not have a wide variety of strategies to use; however, could articulate strategies they understood and could describe in depth. Not having a wide variety of strategies to use, "music teachers may want to

consider this basic step of learning as a component in private lesson or group ensemble curriculum planning” (Rohwer and Polk, 2006, p. 358).

The following chart highlights the strategies articulated and by which participant during the first interview.

Table 17: Articulated Strategies from Participant

Practice Strategy	Articulated by Participant
Using a tuner	Carrie, Julie, Richard, Sage
Tapping foot	Julie, Richard, Sage
Plucking Strings for rhythms/pitches	Julie, Richard, Sage
Writing in music	Carrie, Julie, Richard, Sage
Adjusting tempos for accuracy	Carrie, Julie, Richard, Sage
Repetition	Carrie, Julie, Richard
Fixing mistakes measure-by-measure	Carrie, Julie, Richard, Sage
Silent analysis	Carrie, Julie, Richard
Focusing on one skill only	Carrie, Sage, Richard, Sage

Demonstration of Practice Strategies

Knowing when to use practice strategies and how to use them is important in instrumental practice. Before the study began, I knew that the participants had a few ‘tools’ in their ‘tool-box’, strategies they could turn to during practice. In viewing the video observations, I saw many of the strategies we had discussed in class being used. The skills, concepts and suggestions about practicing I had taught were being demonstrated during the video recorded sessions, which supported the material I was teaching on practicing. After reviewing the video observations with the participants, even the participants saw themselves using many of the articulated practice strategies they had listed, which they believed, made their practice session successful. Being able to demonstrate practice strategies during individual practice is in alignment with previous findings (Rosenthal et al, 1988; Barry, 1992; Barry and McArthur, 1994; Hamann et al, 1998; Hamann and Frost, 2000; Hewitt, 2001; Renwick and McPherson,

2002; McPherson, 2005; Perry, 2006; Mollick, 2008; Duke, Simmons, and Cash, 2009; Miksza, 2010; and Oare, 2012). From the video observation viewings, the strategies the participants pointed out are located on the following chart. The column ‘TR Observation’ are the strategies the teacher-researcher saw alone during the analysis of the video recordings that students demonstrated.

Table 18: Strategies seen by Teacher-Researcher

Practice Strategy	Student Description	*TR Observation
Using a tuner	Carrie, Julie, Richard, Sage	Carrie, Julie, Richard, Sage
Tapping foot	Julie, Richard, Sage	Julie, Richard
Plucking Strings for rhythms/pitches	Julie	Carrie, Julie, Richard, Sage
Writing in music	Carrie, Julie, Richard, Sage	Carrie, Julie, Richard, Sage
Adjusting tempos for accuracy	Carrie, Julie, Richard, Sage	Carrie, Julie, Richard, Sage
Repetition	Carrie, Julie, Richard	Carrie, Julie, Richard, Sage
Fixing mistakes measure-by-measure	Carrie, Julie, Richard, Sage	Carrie, Julie, Richard, Sage
Silent analysis	Carrie, Julie, Richard	Carrie, Julie, Richard, Sage
Focusing on one skill	Carrie, Sage	Carrie, Julie, Richard, Sage

*TR = Teacher-Researcher

Each participant was able to demonstrate correct usage of the practice strategies they had chosen to use, which helped them succeed in learning their music. The results of this study are consistent with Renwick and McPherson (2002) and suggest that young students can “engage in the types of self-regulatory behavior that will enhance their musical achievement” (pp. 184-185). While they could not point out all the strategies they used during the video observations, they were, however, able to point out a larger number than I had expected.

Going back over the participants’ video recorded transcripts, I recognized many places where mistakes were overlooked and the participants moved on without making any corrections or making note that parts were wrong (Perry, 2006; Mollick, 2008; Oare, 2012). It could be that the participants’ would have been able to incorporate a strategy if they had known something

was incorrect; however, without guidance, they were not aware that they needed to go back for accuracy. Keeping the participants' age and playing ability in mind, past research (Rohwer and Polk, 2006) supports the idea that “the ability to be reflective about errors may be beyond these participants' basic skill level” (p. 358).

During the final interview, I asked each participant to list the strategies they found most effective to use during their individual practice sessions. Each of the strategies were used during the recorded practice sessions; therefore, I knew they could easily demonstrate what they listed.

Table 19: Demonstrated Practice Strategies

Practice Strategy	From Student Description
Adjusting tempos for accuracy	Carrie, Julie, Richard, Sage
Writing in music	Carrie, Julie, Richard, Sage
Tapping foot	Julie, Richard, Sage
Repetition	Carrie, Julie

Enjoyment of Practice

To better one's ability on a musical instrument, individual practice is needed. While practicing can be trying and burdensome for novice musicians like my participants, each participant expressed enjoyment for practicing. This supports past research (Hamann and Frost, 2000; Pitts, Davidson, and McPherson, 2000) that students can find enjoyment in practicing, even though it might be considered work. Carrie admitted that she likes playing her instrument and that with practice, “it gives her motivation and confidence” (Final Interview, p. 2). Richard agrees and believes that with practice, he “sounds better” (Final Interview, p. 2). For Sage, practicing is enjoyable because she can practice what she likes; that is, there is no set repertoire that she is required to practice, no guidance telling her in what order to practice and no one to immediately correct her if she is wrong. “I can do what I want” (Sage, Final Interview, p. 2). Julie explains that she enjoys practicing when she has new music because it is a challenge that

she needs to figure out. According to Pitts, Davidson, and McPherson (2000), the participants' enjoyment is because "they are aware of an improved sound and facility with the instrument since they have been learning, and they report high levels of enjoyment and satisfaction in practicing and performing" (p. 59). Videira (2013) adds, "enjoyment while playing is extremely important, but one should keep in mind the importance of thinking and listening, creating an aural model of the outcome and then comparing the actual playing with the model" (p. 48).

Perceptions of Practice

The goal of this study was to examine four ninth-grade students' perceptions on practice. I wanted to know their perceptions in an effort to change my teaching and promote practice as something they could enjoy and not find as a task. I asked them to share their perceptions on what they found to be the easiest and hardest thing about practicing, the distractions that lead them to not practice, describe changes about their practicing over the past years, and to describe their parents' involvement in their practice. It should be noted that the participants were interviewed separately; however, their answers are similar.

Easiest Thing About Practicing

The four participants believe that the easiest thing about practicing is that they are able to play through material that was once difficult, but now is easy to play. Richard states the easiest thing for him is "being able to play old material without struggling and to be able to hear an accomplishment of how far I've gotten" (Richard, Final Interview, p. 1). Carrie states, "Just being able to play through a song and reviewing old material that used to be a struggle, but not anymore" (Carrie, Final Interview, p. 1). Julie and Sage like the idea of being able to play things from the past (review material), and being able to hear how much better they've gotten over time.

Hardest Thing About Practicing

While time might be a constraint for all four participants, getting started and staying focused for the duration of the practice session, they believe, is the hardest part about practicing. “The hardest thing is to just get started with practicing. Once you get going, then it becomes easier” (Julie, Final Interview, p. 1). “Staying focused and if I don’t know how a piece goes, it’s difficult...or if you keep practicing and you just can’t get it” (Carrie, Final Interview, p. 1). Richard believes that staying focused is the hardest thing for him because “I feel like I get distracted easily” (Richard, Final Interview, p. 1). Sage finds that practicing becomes hard when “I can’t get a feel for the tempo or can’t figure out how a rhythm goes...that’s really frustrating” (Sage, Final Interview, p. 1). While staying focused was an issue during their recorded practice sessions, I found the following problems arose when focus became an issue.

Table 20: Participants Problems During Practice

Problem	From Teacher Description
Looks at clock numerous times	Carrie, Julie, Richard, Sage
Overlooks problems with rhythms/pitch/bowing/etc.	Carrie, Julie, Richard, Sage
Frustration	Carrie, Julie, Sage
Looks outside office window	Julie

Distractions

The major distractions that the participants discussed in their final interview were all technology related. While friends and extra-curricular activities were mentioned, technology led all four participants’ discussions on interfering with practice. Richard believes that his laptop is the biggest distraction for him while practicing because it is always by him. Julie does admit that she keeps her cell phone by her when she practices, “but I usually just ignore it until I’m done” (Julie, Final Interview, p. 1). Carrie believes her cell phone is the biggest distraction and acknowledges other distractions such as “her computer, youth group meetings, television, and

my friends” (Carrie, Final Interview, p. 1). For Sage, her involvement in ten activity clubs after school, babysitting her sister and her cell phone are the main distractions that keep her from practicing on a daily basis.

Changes In Individual Practice Over The Years

Each participant had been in the school orchestra program for two-four years when this study was conducted; therefore, changes in ability from the start of their musical education had taken place. Since I started three of the four participants in sixth-grade, I wanted to learn how their practicing had changed over the years. Carrie explained that her practice had changed and said, “Yes, I practice a lot more” (Carrie, Final Interview, p. 1), but does not go on to say how her practicing has exactly changed. For each of the participants, playing at the high school level has become more difficult and they believe requires more effective practice. Julie states her practicing has changed in that, “I definitely practice a lot more. I focus on different things. Before I was just playing it to play, but now I work on the sound quality and the pitches need to be spot on” (Julie, Final Interview, p. 1). Richard knows his practicing has changed because “in seventh-grade, I didn’t even practice” (Richard, Final Interview, p. 1). Interestingly, Sage did not think her practicing had changed, which leads me to believe she was not looking back over the last three years, but only thought about it since the beginning of the year.

Importance of Practice and Advice

In order to become a better musician, a great amount of individual practice is needed. Professional journals regularly include articles filled with suggestions to help musicians improve on their practicing (Hudson, 1977; Kenny, 1998; Pedrick, 1998; Peterson, 2001; Byo, 2004; Kostka, 2004; Rawlins, 2004; Sariti, 2004; Johnson, 2009; Eckert, 2011; Videira, 2013). Each participant also believes that individual practice must be done in order to progress on their

instrument. When asked if practice was really important, Julie exclaimed, “Oh yeah, definitely” (Julie, Interview 1, p. 2). Carrie and Sage believe it is important to practice because otherwise “you can’t play it” (Carrie, Interview 1, p. 2) and “it affects your whole group and everyone else that can play it” (Sage, Interview 1, p. 2). Richard agrees that it is important to practice because “you’re never gonna get it without practicing and then you’re just going to fail and get nowhere with it” (Richard, Interview 1, p. 2).

Although these four participants have not been playing their respective instrument for many years, they do have advice for the younger students at the middle school beginner level. Sage recommends to practice with the proper techniques that they have learned. “If you have the wrong bow hold, you develop really bad habits” (Sage, Final Interview, p. 2). Carrie, Julie and Richard all have the same advice: ‘just practice’! Because individual practice is important when you are in an ensemble, Carrie recommends practicing so you “don’t let the whole group down because every person matters even if people can’t hear you” (Carrie, Final Interview, p. 2). Julie advises, “Listen to what your instructor tells you to work on” (Julie, Final Interview, p. 2). “If you need help, just ask. You need to be a confident player” states Richard (Richard, Final Interview, p. 2). Their advice for their younger peers is consistent with that of Pitts, Davidson, and McPherson (2000), in that, it is “the responsibility that children must take for their own music learning if they are to be successful” (pp. 64-65).

Parental Involvement

“While the idea of parental involvement in education is not new, much more can be done to enhance educational outcomes through the informed use of parental involvement” (Zdzinski, 1996, p. 45). Research has proven (Davidson, Slobada, and Howe, 1995; Zdzinski, 1996; Pitts, Davidson, and McPherson, 2000, and Mollick, 2008) that parental involvement in music is

essential if a child is to become capable of independent practice and maintain musical development. Looking at parental involvement in this study, data concludes that only two of the participants expressed parental involvement in their home practice; however, not to a level of actual parental involvement in the learning process. Julie and Richard expressed that their parents' 'suggested' they practice, but did not help in any way during their home practice sessions. Julie explained that her parents did 'often suggest' practice during her middle school years because it was graded; however, when practicing came up now in high school, Julie did it without parental reminders. Even though they were not in direct contact with her, Julie was aware that they were still listening, and knew she needed to stay motivated during practice or they would become involved again. Interestingly, when the school year started, Julie had difficulty playing in front of me for lessons. During the first interview, she explained that she did not enjoy playing in front of an audience at home; therefore, could be why she went to practice alone, not wanting her parents around to comment on her mistakes and made every attempt to practice on her own.

Richard stated that his mom would 'suggest' he practice, but never actually helped him practice. From discussions with Richard, he states he enjoys practicing alone because he can really focus on what he needs to learn in the music. He is "not looking for 'side commentary' from his mother because she doesn't know anything about music" (Richard, Interview 1, p. 2). Richard did express issues he has with staying focused and on-task during his practice sessions, but does not think his mom would be of help in keeping him on task. According to Lehmann and Ericsson (1997), "It is probably not the musical ability of the supervising persons that is critical, but their aid in maintaining the child's concentration (on-task behavior) and monitoring as well as their occasional suggestions for improvement" (p. 51).

While Carrie did have musical knowledge in the house being that her mother played clarinet years ago, her mother did not give any guidance or question Carrie when she was practicing. Carrie noted that her mother was either working or that she was not in the room when she practiced; therefore, her mother could be of no guidance to her. For Sage, practicing in her room, alone, was typical for her practice sessions. She was not looking for guidance from her parents, and did not know what type of guidance they would give considering they were not musically inclined. While parental involvement might have helped these participants in their musical learning, it is not uncommon in my school setting. At the high school level, I have heard many of my students' parents say they're not sure if their child practices because of the 'crazy schedule' students have due to work, sports, and extra-curricular activities.

Looking back over the video recorded practice sessions, having positive parental involvement may have kept these participants more focused, motivated and on-task, providing more enjoyment for both participant and parent, and creating a shared musical experience within their family. Davidson, Slobada, and Howe (1995) recognize, "without the positive involvement of the parent in the process, the highest levels of achievement are likely to remain unattainable" (p. 44).

Teacher as Participant

Two important findings in this study emerged from my participation as teacher-researcher in the study. First, before the study began, I was worried that my participants would not be able to provide the information needed for this study. I had not 'prepped' them in any way, and had only explained the study in general terms, with what each participant would be asked to do. I underestimated the participants' ability to articulate and demonstrate practice

strategies; however, the participants were able to both articulate and demonstrate the data I was looking for, and they found enjoyment in helping their teacher do research.

The second finding that emerged from my participation in the study was seeing the lack of organization in the participants practice sessions. After each lesson and orchestra rehearsal, I tell my students what to practice, but quickly realized I do not specifically state how to organize their practice time. It became evident from the video observations that yes, my students do practice, but no, there is no structured way of going about each practice session; they just play. I realized that my students practiced the same way I did years ago; however, they have a few more practice strategies than I did.

Conclusion

Data shows that the participants were able to easily articulate and demonstrate practice strategies as confirmed by past research (Rosenthal et al, 1988; Barry, 1992; Barry and McArthur, 1994; Hamann et al, 1998; Hamann and Frost, 2000; Hewitt, 2001; Renwick and McPherson, 2002; McPherson, 2005; Perry, 2006; Rohwer and Polk, 2006; Mollick, 2008; Duke, Simmons, and Cash, 2009; Miksza, 2012; and Oare, 2012). While errors were often overlooked and focus became an issue, participants were still able to practice using effective strategies to learn their music. When practice became difficult or participants lacked focus, each participant still found personal enjoyment in practicing and did not give up. Participants do believe practicing is important in their own learning, and individual practice must be done to further their ability. While parental involvement in music practicing is important (Davidson, Slobada, and Howe, 1995; Zdzinski, 1996; Pitts, Davidson, and McPherson, 2000, and Mollick, 2008), it was only seen in two of the participants' data. The type of parental involvement described was only a verbal reminder to practice and parents were not engaged in the actual practice session itself.

Participants enjoyed giving their perceptions on practice and believe the easiest thing about practicing is being able to play previous music with no difficulties, and hearing their accomplishments in sound and ability. Getting started in the actual practice session and staying focused for the duration of the practice session was found to be the most difficult for each participant to do. Participants reported their practicing has changed over the years with each participant reporting more time spent practicing and the use of different strategies to learn their music. They did offer advice for younger players and shared that it important to practice no matter what level a player is at.

CHAPTER NINE

Summary and Conclusions

In order to become a better musician, a great amount of individual practice is needed. Instrumental music teachers do teach students how to play musical instruments, but often, few discuss the topic of practicing in depth (Barry and McArthur, 1992; Hamann and Frost, 2000). When practice does occur outside of the classroom, students are their own teachers; however, the quality of their practice can leave many questionable results (Hamann et al, 1998; Miksza, 2012).

While quality of practice is a key ingredient in the development of ability, many researchers have investigated specific areas of practice through the use of different strategies. The use of questionnaires (Barry and McArthur, 1992; Hamann et al, 1998; Hamann and Frost, 2000; Hewitt, 2001), interviews (Davidson, Slobada, Howe, 1995; Pitts, Davidson, and McPherson, 2000; Renwick and McPherson, 2002; McPherson, 2005; Perry, 2006; Rohwer and Polk, 2006; Mollick, 2008; Oare, 2012), pre-test/post-test designs (Puopolo, 1971; Barry, 1992; Zdzinski, 1996; Hewitt, 2001), and analysis of videotaped practice sessions (Rosenthal et al, 1988; Pitts, Davidson and McPherson, 2000; Hewitt, 2001; Renwick and McPherson, 2002; McPherson, 2005; Perry 2006; Rohwer and Polk, 2006; Duke, Simmons and Cash, 2009; Oare, 2012) have given insight to help researchers and teachers understand what students do when they practice.

Within the topic of practice, many researchers have studied the specific areas of modeling, structured/non structured practice, supervision of practice sessions, parental involvement, mental practice, self-assessment, and self-regulation. McPherson and

Zimmermann (2002) describe self-regulation as a form of self-teaching in which students set goals, self-monitor, and self-reflect. Students must also have the ability to plan and execute a given task, which Oare (2012) defines as self-efficacy. While self-efficacy is a key factor in predicting self-regulation success (Oare, 2012), the ability to self-regulate, or self teach, requires individuals to make decisions related to goal-setting (Barry and McArthur, 1994; Hamann et al, 1998; Hamann and Frost, 2000; Miksza, 2012), self-efficacy (Perry, 2006; Mollick, 2008; Oare, 2012), attention (Hamann et al, 1998; Miksza, 2012), strategy use (Hamann and Frost, 2000; Renwick and McPherson, 2002; Rohwer and Polk, 2006; Duke, Simmons and Cash, 2009), and assessment (Barry 1992; Rohwer and Polk, 2006).

Researchers have found that novice musicians may be able to verbally describe practice strategies (Perry, 2006; Rohwer and Polk, 2006); however, practice may become a struggle when the musician does not have the how-to knowledge to incorporate these strategies into their practice (McPherson, 2005; Perry, 2006; Mollick, 2008; Duke, Simmons and Cash, 2009; Oare, 2012). Along with quantity of practice, the quality of time spent deliberately practicing is crucial for success (Lehmann and Ericsson, 1997; Hamann et al, 1998, Miksza, 2012). Researchers have found that careful planning of practice sessions by setting specific goals (Barry and McArthur, 1994, Hamann and Frost, 2000; Duke, Simmons and Cash, 2009; Miksza, 2012), using models (Puopolo, 1971, Rosenthal et al, 1988; Hewitt, 2001), and having parental involvement (Davidson, Slobada, and Howe, 1995; Zdzinski, 1996; Pitts, Davidson, and McPherson, 2000; Mollick, 2008), is linked to success and increased ability on an instrument.

While many studies have been conducted on practice in the band setting (Puopolo, 1971; Rosenthal et al, 1988; Barry, 1992; Davidson, Slobada, and Howe, 1995; Zdzinski, 1996; Pitts, Davidson and McPherson, 2000; Hewitt, 2001; Renwick and McPherson, 2002; McPherson,

2005; Perry, 2006; Rohwer and Polk, 2006; Miksza, 2012; Oare, 2012), few have focused on practice in the string setting (Hamann et al, 1998; Hamann and Frost, 2000; Mollick, 2008) or investigating students' thought processes while practicing (Oare, 2012).

The purpose of this study was to examine four ninth-grade students' and teacher-researcher descriptions of student practice sessions. Research questions for this study were (a) How do students describe their home practice sessions in a journal, in response to a videotape, and in an interview?; (b) How does the teacher-researcher describe the students' home practice sessions?; and (c) What is the qualitative comparison between the teacher and students descriptions?

Method, Procedure and Analysis

Method

A basic qualitative study design conducted with the framework of "teacher research" was used in this study. Participants were four ninth-grade string students from a small city in Northeast Wisconsin. I chose this site because I am the orchestra director at the high school and would be able to conduct my research with the students I see on a weekly basis. It would also give me the opportunity to monitor their progress after the study was completed. Participants were selected as a purposeful criterion-based sample and represented a typical case sample. The criteria included: have at least two years of orchestra experience in the school district, attend in-school lessons on a regular basis, not own their own instrument, not take private lessons outside of school, not have a sibling that plays an instrument, and not be in an after-school sport. The four participants included a violinist who had no other musical training, a violinist who had minimal experience on piano, a bassist with no other musical training, and a cellist who taught herself how to play guitar.

Procedure

To begin the study, an “open-ended interview” was conducted with each participant. I was able to gather information to create a background for each participant and learn about their perceptions on practice. After the interview was complete, each participant then video-recorded a thirty minute practice session in the orchestra office. Each participant recorded what he or she considered to be a normal thirty minute practice routine. No guidance was given from the teacher-researcher or any outside source. When the recording was finished, participants also completed a Journal Entry, which consisted of questions that pertained to that day’s practice session. Within a week of recording the first practice session and journal entry, I reviewed the tape at home to get an understanding of what was done in the participants practice session. After transcripts were complete for the first interview, first video-recorded practice session and first Journal Entry, each participant was asked to member check the data thus far. After this was complete, the participant and I reviewed the recording together so I could ask further questions for clarity. I asked open ended questions and used the “think-aloud” technique, while the participant guided me through their actual process of practicing. With this technique, I was able to gain better insight as to what they understood thus far about practicing. Transcripts from this part of the study were completed and participants’ member checked them for accuracy and clarity.

One month later, each participant was asked to record a second video-taped practice session and completed a second Journal Entry. After transcripts were complete and member checks were done, each participant and I reviewed the video-recorded practice session and clarified what was done during that practice session. While a list of questions were designed for this part of the study, each participant was asked further questions that derived from what was

seen on the video recording by the researcher. After transcripts were completed, each participant member checked them for accuracy and clarity. All transcripts from this study were kept in an observational log book with the researcher. A final interview was then conducted with each participant, to learn more about their perceptions on practice, discuss practice strategies that worked during their practice, and to learn if their perceptions on practicing had changed since the beginning of the study. For validity purposes, long-term observation was also used since I continued working with the participants in the classroom for the remainder of the school year.

Analysis

The types of data collected in this study were participant interviews, video-recorded practice session, participants' journal entries, and researcher observational notes. Data was collected during the months of March and April; however, I stepped away from the study until the middle of June to finish the school year. During this time, I was able to think about the overall study, which allowed me an opportunity to come back to the study with a different perspective.

I chose to focus on one student at a time, which allowed me to focus on one student and the data that was collected for each individual student. Using this data, I found it useful to provide a personal background for each student, based off the first interview that was conducted. Member checks were conducted by emailing the profiles to each of the students to verify accuracy. No changes were requested by the student or parents.

As I read through the transcripts, I recorded what I perceived to be an emergence of evidence from each of the students. After analyzing and making field notes on each student, I created a cross-case analysis. For the purpose of the study, I did transcribe each recorded practice session in its entirety. I felt that it was needed in order for me to gain more

understanding of how a thirty minute time period was filled by each student. It should be noted “participants may have practiced in a different way than they normally would at home; hence, the quality of practice might be different in a less-structured and less-supervised environment” (Rohwer and Polk, 2006, p. 357). Based on the analysis of each participant, findings were organized into separate chapters on each participant and consist of complete transcripts of their recorded practice sessions and journal entries. Focusing on the data collected, I was able to find common themes and make detailed observations of what the students were doing during their individual practice, which gave me insight as to how I needed to change my teaching for future success. Common themes that emerged were: Articulation of Practice Strategies, Demonstration of Practice Strategies, Enjoyment of Practice, Perceptions on Practice, Importance of Practice and Advise, Parental Involvement and Teacher as Participant.

Findings

Articulation of Practice Strategies

At the beginning of this study, I was unaware of how many practice strategies the participants were going to be able to articulate or if they knew the meaning of ‘practice strategy’. Throughout the first interview and remainder of the study, I was reassured that they did know what a ‘practice strategy’ was and could easily articulate them without being given a prompt. Participants were able to quickly vocalize strategies they had previously learned and strategies they found to be effective in their individual practice. From what was articulated, these findings are in alignment with Rohwer and Polk (2006) in that students do have the basic knowledge of what practice strategies are. Like Rohwer and Polk’s (2006) study, “the small number of strategies the participants could describe was itself a notable finding” (p. 357). While the

participants may not have had a wide variety of strategies to use, they could articulate strategies they understood and could describe in depth.

Demonstration of Practice Strategies

Participants were able to accurately demonstrate correct usage of the practice strategies they had verbally discussed. The results of this study are consistent with Renwick and McPherson (2002) and suggest that young students can “engage in the types of self-regulatory behavior that will enhance their musical achievement” (pp. 184-185). After reviewing the video observations with the participants, each participant discussed in detail the practice strategies they demonstrated, which they believed, made their practice session successful. Being able to demonstrate practice strategies during individual practice is in alignment with previous findings (Rosenthal et al, 1988; Barry, 1992; Barry and McArthur, 1994; Hamann et al, 1998; Hamann and Frost, 2000; Hewitt, 2001; Renwick and McPherson, 2002; McPherson, 2005; Perry, 2006; Mollick, 2008; Duke, Simmons, and Cash, 2009; Miksza, 2010; and Oare, 2012).

During analysis, I recognized many places where mistakes were overlooked and participants moved on without making any corrections or making note that parts were wrong (Perry, 2006; Mollick, 2008; Oare, 2012). It could be that the participants’ would have been able to incorporate a strategy if they had known something was incorrect. With the participants’ age and playing ability in mind, past research (Rohwer and Polk, 2006) supports the idea that “the ability to be reflective about errors may be beyond these participants’ basic skill level” (p. 358).

Enjoyment of Practice

While practicing can be trying and burdensome for novice musicians like my participants, each participant expressed enjoyment for practicing. This supports past research (Hamann and Frost, 2000; Pitts, Davidson, and McPherson, 2000) that students can find

enjoyment in practicing, even though it might be considered work. According to Pitts, Davidson, and McPherson (2000), the participants' enjoyment is because "they are aware of an improved sound and facility with the instrument since they have been learning, and they report high levels of enjoyment and satisfaction in practicing and performing" (p. 59). Videira (2013) adds, "enjoyment while playing is extremely important, but one should keep in mind the importance of thinking and listening, creating an aural model of the outcome and then comparing the actual playing with the model" (p. 48).

Perceptions of Practice

The goal of this study was to examine four ninth-grade students' perceptions on practice. I wanted to know their perceptions in an effort to change my teaching and promote practice as something they could enjoy and not find as a task. According to Oare (2012), "in order for teachers to improve the way in which they teacher their students to practice, it seems apparent that they must first understand the ways in which their students thing during practice" (p. 64). I asked them to share their perceptions on what they found to be the easiest and hardest thing about practicing, the distractions that lead them to not practice, describe changes about their practicing over the past years, and to describe their parents' involvement in their practice.

The four participants believed that the easiest thing about practicing is that they are able to play through material that was once difficult, but now is easy to play. Participants found that being able to play the easy material now allowed them to hear their accomplishments and success thus far. While time might be a constraint for all four participants, getting started and staying focused for the duration of the practice session, they found to be the hardest part about practicing, which they felt then lead to ineffective practice (Perry, 2006; Mollick, 2008; Oare, 2012). Major distractions that the participants discussed in their final interview were all

technology related. While friends and extra-curricular activities were mentioned, technology led all four participants' discussions on interfering with practice. Changes in individual practice over the years were seen in the participants' data. Participants stated they practiced more at the high school level and felt that they now focus on different techniques and ideas during practice.

Importance of Practice and Advice

In order to become a better musician, a great amount of individual practice is needed. Each participant also believed that individual practice must be done in order to progress on their instrument. When asked if practice was really important, each participant stated it was really important to practice to further your ability on your instrument. They also agreed that by not practicing, a musician hurts the large ensemble(s) they participate in. Although these four participants have not been playing their respective instrument for many years, they did have advice for the younger students at the middle school beginner level. Advice included practicing with the proper techniques you have been taught, listen to what your instructor tells you to work on, practice to help your ensemble, and to 'just practice'. Their advice for their younger peers is consistent with that of Pitts, Davidson, and McPherson (2000), in that, it is "the responsibility that children must take for their own music learning if they are to be successful" (pp. 64-65).

Parental Involvement

Parental involvement in music is essential if a child is to become capable of independent practice and maintain musical development. Looking at parental involvement in this study, only two of the participants expressed parental involvement in their home practice; however, not to a level of actual parental involvement in the learning process. The two participants stated that their parents 'suggest' practice, but never actually got involved. This supports past research that parental involvement is important for development of musical ability; however, is not seen in

many musical experiences (Davidson, Slobada, and Howe, 1995; Zdzinski, 1996; Pitts, Davidson, and McPherson, 2000, and Mollick, 2008).

Teacher as Participant

Two important findings in this study emerged from my participation as teacher-researcher in the study. First, before the study began, I was worried that my participants would not be able to provide the information needed for this study. I had not ‘prepped’ them in any way, and had only explained the study in general terms, with what each participant would be asked to do. I underestimated the participants’ ability to articulate and demonstrate practice strategies; however, the participants were able to both articulate and demonstrate the data I was looking for, and they found enjoyment in helping their teacher do research.

The second finding that emerged from my participation in the study was seeing the lack of organization in the participants practice sessions. After each lesson and orchestra rehearsal, I tell my students what to practice, but quickly realized I do not specifically state how to organize their practice time. It became evident from the video observations that yes, my students do practice, but no, there is no structured way of going about each practice session; they just play. I realized that my students practiced the same way I did years ago; however, they have a few more practice strategies than I did.

Connections to Teaching Practice

Teaching high school students how to play string instruments has been a very rewarding job since I started nine years ago in the teaching profession. Each year, a new group of novice musicians enter my classroom and excitement fills the air. Numerous times I have stated that practice must happen in order for progress to occur, but what was actually happening during individual practice did not become a realization until this study started. As a teacher-researcher,

I learned first-hand what needs to be changed in my classroom immediately. By conducting this study, I have made many connections to my own teaching of practice, which will be beneficial to my students as a new school year is about to begin.

First, the assumption that ‘productive’ practice is being done can no longer be an assumption. After watching the video-taped practice sessions and discussing with each participant what they did during those practice sessions, the realization came that these participants, and I believe most of my students, waste a great amount of time during individual practice, really not accomplishing anything. Throughout this study, I reflected on what my older students do when they practice, that is, if they really do use strategies to learn their music or if they too just “go-through the motions” of playing their music, not practicing with an end goal in mind.

Before this study began, I never thought about all the intricate details that need to be taught to music students in regards to practicing. I just assumed it was being done. I have helped thousands of students get their instruments out of the case for the first time, spent time showing them how to play correctly, but never taught them how to actually practice, which would have reduced many of the problems they’ve encountered over the years. I just assumed they knew what to do on their own. I realized that I have not spent enough time teaching my students strategies to use during practice, how to practice productively or how to actually practice. What my participants did during the video-taped recordings in this study could be a true reflection of how they practice on their own, but could also be because they ‘had’ to practice because I asked them to participate in a study on practice. Regardless, I no longer can have the assumption that ‘productive’ practice or any practice is being done.

Second, when the ninth-graders show up to my classroom on the first day of school, it is my teaching responsibility to teach, help, guide and nurture their musical ability. I have taught many students how to play violin, viola, cello and bass, but have neglected teaching my students how to actually practice. By conducting this study, it became apparent that I need to spend a great amount of time teaching something I just thought was being done: practice. To start off this school year, I am going to spend the first six weeks of school discussing how to practice with each of my orchestras. We will be able to come up with strategies, a “tool-box” per say, as an ensemble. This “tool-box” will have self-regulation strategies that my students can use to be more ‘productive’ during individual practice, be able to incorporate specific strategies without guidance, while working on self-assessment and critical thinking to know what needs to actually be practiced. I have also thought about spending the following six weeks of the semester, video-taping my freshmen class, approximately 20 students, during a few practice sessions and then watching the tapes and discussing practice strategies during their individual weekly lessons. It may sound like a great amount of work; however, it would be beneficial for those students, the ensemble as a whole, and the program for the years to come.

Third, along with critical thinking, I need to spend more time discussing goal-setting, goals that are realistic, with my students. Through high school, students set academic goals; however, often are unrealistic and cannot be achieved. I believe that small, large, individual and ensemble goals need to be set for the year in my classes; one’s that are realistic in nature, with continued guidance given so those goals can be achieved. During this study, I realized that my participants did not have any goals during their practice sessions, only that they wanted to get better, but did not have an end goal in sight to achieve.

Fourth, besides practicing the orchestra music, which the participants practiced a majority of the time, I need to assign more solo and technical repertoire. While I appreciate that they practiced the orchestra music for their ensemble, no real advanced techniques were required in any of the music. Having played instruments for the past twenty years, even I was bored watching the videos and cannot imagine how they felt practicing this easy repertoire. For my students benefit, my individual lesson curriculum needs to be redesigned to help produce progress, rather than being stagnant while maintaining the playing ability of the middle school level. Progress at the high school is crucial and that is something I need to encourage and teach.

Suggestions for Future Research

Research has only begun to examine the perceptions of what string students have on practice. While much research has been devoted to specific areas of practicing (modeling, structured versus non structured practice, supervision of practice sessions, parental involvement, mental practice, self-assessment, and self-regulation), there is a need for more investigation into the individual perceptions of students on practice and why students choose the strategies they do during practice.

Future research might include a replica of this study, with regards to the middle school or elementary school level. Researching what younger, more inexperienced string students do when they practice could inform teachers earlier to change their teaching curriculum to include discussion on practice and implementation of effective practice techniques. Learning what younger students perceive about practice may also inform the teacher of difficulties for the student, possibly leading to attrition.

Another suggestion for future research would be to perform a replica of this study; however, include a longer period of time (1 year), with more video-taped practice sessions at the

participants' home and in the school setting, conducting more interviews involving the student and parents, and including set goals for each weekly rehearsal/lesson for the student to accomplish. It would be of interest to see if having set goals would motivate the student to practice differently outside of school as they do in the school setting. It would also be of interest to observe what practice strategies are used, and to what level parental involvement can influence student achievement.

Future researchers might consider analyzing the way teachers address practice in the classroom/individual school lessons as well as their students' immediate practice session and future practice sessions after observing the teacher. It would be of interest to see what strategies students remember and incorporate into their practice sessions and if these strategies are used on a regular basis. It would also be of interest to hear the students' perceptions as to why specific strategies were or were not used.

Another suggestion for research would be to conduct a longitudinal study examining the course of beginning string students through high school to observe how they are taught to practice, if the use of musical recordings during individual practice helps foster better performance and ability, and if taught practice techniques and musical recordings are used regularly in the individual practice session. It would be of interest to see how practice develops throughout the study, and at the end of their high school career, gather the participants' perceptions on practice, practice strategies, the use of musical recording during practice, and overall individual achievement. By analyzing this course study for a string student, teachers would be able to align curriculum better to develop deeper critical thinking and assessment skills in music, instill effective practice strategies and ear-training early on, and improve self-efficiency, in hopes for higher achievement and superior ability.

Conclusion

When this study began, I wanted to see exactly what my students do during their individual practice sessions and learn why they do what they do. Never did I realize that the information they presented would be able to change my teaching in a way that would be immediately beneficial to them and for my future students I teach. This study has allowed me to do a great amount of reflection along the way. Thinking about the past nine years of my teaching career, I have been able to re-evaluate the way I teach in my classroom, especially the topic of practicing. Using the research and information I examined during this study, I am now able to look at this next school year in a different way. With changes made to my teaching methods and a small start to designing a practice curriculum, I will be able to help my students become more successful on their musical instrument by discussing and implementing practice strategies into my classroom, hoping to encourage practice as enjoyable, instead of a task. While new ideas did immerge, this study could provide other string teachers with information that could be useful in their own classrooms, changing the way future string students practice. By teaching my students how to practice, that enthusiasm they walk into my classroom with at the beginning of the year can hopefully continue for the entire school year.

APPENDIX

Appendix A: Participant Recruitment Letter

February 2013

Dear Students and Parents,

The school year is off to a great start! As you might know, I am working on completing my master's degree in instrumental music education at the University of Michigan. The final requirement of this degree is to complete a research study and write a thesis that presents this project. I am asking for four students to participate in this study, which is called "A Description of Individual Practice Strategies of Ninth-grade String Students".

While previous studies have indicated that students may not always use the most effective practice strategies while independent practicing, a better understanding of my students will help me more effectively instruct my current and future students. Knowing this will help improve the quality of the Shawano String Program and other string programs across the country.

The purpose of this study is to examine ninth-grade students and teacher-researcher descriptions of student practice sessions. Research questions for this study are (a) How do students describe their home practice sessions on a questionnaire, in response to a videotape, and in an interview?; (b) How does the teacher-researcher describe the students' home practice sessions?; and (c) What is the qualitative comparison between the teacher and students descriptions?

I am looking for four student volunteers to help me with this project. Participation is completely voluntary. The project will include: two video-taped interviews (no longer than one hour in length), two video-taped practice sessions at home (one during February and one during March), answering a questionnaire after each recorded practice session, and two meetings with the teacher for viewing and answering questions on taped practice sessions within one week after practice sessions are recorded. If student does not have access to a video camera at home, we will make arrangements to tape practice sessions after school.

There will be no risks associated with participation in this study, and there is no fee for participation. *Students' grades in orchestra will not be affected by participating in this study or declining to participate.* Written transcripts of each interview will be provided to each participant for verification of the content. Upon completion of the study, all videotapes will be erased. All participants will be assigned a pseudonym; therefore, you will not be identified in any reports. I will be the only person who knows the identities of the study participants. Records will be kept confidential to the extent provided by federal, state, and local law.

However, the Institutional Review Board and university personnel responsible for monitoring this study may inspect these records. I will keep all tapes and transcripts at my home.

If you have any questions about this study at any time, please do not hesitate to contact me. You may also contact the University of Michigan Institutional Review Board at 734-764-1185 with any concerns. Your participation in this project is completely voluntary. If you choose to participate, you are free to withdraw from the study at any time. All participants may skip or refuse to answer any survey question that makes the participant feel uncomfortable, if any such questions exist. If you decide to take part in this study, you will help myself and other teachers across the country better understand how to more effectively teach ninth-grade orchestra students in the area of practicing.

If you are willing to participate, please return the consent forms on the following page to me by February 28, 2013. Remember that students under the age of 18 must have parent consent. If you have any questions, please contact me. I would be happy to discuss this research study with you.

Thank You!

Mrs. Jill Sousek

Music Education Graduate Student

University of Michigan-Ann Arbor

715-526-2175 ext.8130

sousekj@shawanoschools.com

Appendix B: Participant Assent Form

A Description of Individual Practice Strategies of Ninth-Grade String Students - Consent Form

Parent Participant Consent

I have read the information given. Jill Sousek has offered to answer any questions I may have concerning this study. I hereby consent to participate in the study.

Parent Participant Signature

Printed Name	Consenting Signature
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Please sign below if you are willing to be video-recorded. You may still participate in this study if you are not willing to be recorded.

Signature	Date
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Parental Consent for Minor Child Participant

I have read the information given. Jill Sousek has offered to answer any questions I may have concerning this study. I hereby consent for my child, _____ to participate in the study.

Parent Signature

Printed Name	Consenting Signature
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Please sign below if you are willing for your child to be video recorded. You may still participate in this study if you are not willing to allow your child to be recorded.

Signature	Date
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Appendix C: Student Interview Questions #1 – Beginning Interview

1. When did you begin playing your instrument?
2. Did you start on this instrument?
3. Why did you choose this instrument?
4. Describe what you do when you practice at home?
5. Is there a specific time of day that you set aside to practice? If so, what time is it? Why?
6. Where do you usually practice?
7. When you are practicing, what music do you practice?
8. How many minutes do you usually practice each time you practice?
9. How do you know when it is time to stop practicing?
10. What strategies do you use when you practice?
11. Where did you learn those strategies (school, private lessons, etc)?
12. Do you think it's important to practice? Why or why not?
13. Thinking back to last school year, has the way that you practice changed since then? If so, in what way(s)?
14. How are your parents or older siblings involved in your practicing? What do they do?
15. What activities do you like in school?
16. What activities do you like outside of school?

Appendix D: Practice Journal Entry #1 & #2 – For use after video recordings

Name _____

Date _____

List what you practiced today. Include specific measure numbers.

What strategies did you use to work out problem spots in the music during this practice session?

Name one exercise or song during this practice session that you can play the best, and explain what makes it stand out from the others.

Name one exercise or song that took many tries before you were able to play it, and explain what you did to be able to play it accurately.

Write a general statement about your work during this practice session to explain what improved, what needs more attention, or any question you have.

Appendix E: Questions for Observation of Recorded Video with Participant/Researcher

1. Describe to me what you have practiced during this session?
2. What strategies do you see yourself using?
3. Did those strategies work for you to help you improve?
4. Why did you choose those strategies?
5. Can you tell me what you were primarily focused on? Was it tone, intonation, rhythm, articulations, notes, etc.

*Throughout this part of data collection, I will ask these questions to all participants; however, there may be different questions asked also depending what is seen on the individual recordings.

*Prompting may be used during this part of the study also.

Appendix F: Students Interview Questions #2 – Ending Interview

1. Since we last spoke, has your practicing changed? How?
2. What strategies do you find most effective when you practice? Why?
3. What do you find to be the hardest thing about practicing? Why?
4. What do you find to be the easiest thing about practicing? Why?
5. What do you find to be the biggest distractions when you practice or that cause you not to practice?
6. Are there differences in your playing between when you practice and when you don't? What are they?
7. Has the way that you practice changed since you first started playing your instrument? Since the beginning of this school year?
8. Do you think there is a difference between playing your instrument and practicing your instrument? Can you describe it?
9. Think about a time you played something really well. How did you accomplish it?
10. What do you enjoy most about playing your instrument?
11. How do you think homework in high school has changed your time to practice?
12. Is it still possible to practice on a daily basis?
13. Do you enjoy practicing? Why or why not?
14. If you could give advice to the middle school students about practicing, what would it be?
15. What else would you like to tell me about practicing?

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