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POLISHING GEMS: A SUPPLEMENTAL CURRICULUM FOR DEVELOPING THE
MUSICAL LITERACY AND MUSICAL EXPRESSION SKILLS OF JUNIOR HIGH FLUTE
STUDENTS

by

Jennifer Lynn Amox

A Dissertation

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Musical Arts

Major: Music

The University of Memphis

May 2018

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*For Mad,
my daughter, guinea pig, and muse*

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I would like to thank my parents, without whom this eight-year process would have been impossible. You believed in me when I didn't believe in myself, and you gave me the resources to continue when I thought all hope was lost. I endeavor to bestow the same foundation of support to my daughter and students that you have shown me.

Thank you to all of the (current and past) members of my committee: Professors Janet Page, Elise Blatchford, Bruce Erskine, John Baur, Ryan Fisher, Pu-Qu Jiang, Albert Nguyen, Michelle Vigneau, and Lecolion Washington for their encouragement, patience, and guidance.

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A special thank you to Drew. You have entertained me with compelling conversation during the early years of six-hour commutes to class, and you have supported me through the sleepless weeks with your commitment to keeping my house from caving under the endless piles of books. I love and appreciate you more than you'll ever know.

ABSTRACT

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This study determines the content for a supplemental curriculum designed to improve musical literacy and musical expression skills using the Arkansas School Band and Orchestra (ASBOA) all-state junior high flute etudes. It addresses the first two steps (“analysis of practical problems” and “development of possible solutions”) of a Design-Based Research (DBR) project. The author intends to address the third and fourth steps (“iterative cycles of testing and refinement” and “reflection and enhancement”) in future research studies.

A pilot study identified technical and interpretive deficiencies exhibited in nine (N = 9) student audition recordings using excerpts from the ASBOA etudes. A modified version of Saunders and Holahan’s Woodwind/Brass Solo Evaluation Form (WBSEF) was used to assess the recordings. The results showed deficiencies in the areas of tone, intonation, rhythmic accuracy, technique/articulation, and interpretation (primarily musical coherence). These results were compared to the Arkansas Department of Education (ADE) Beginning Band Curriculum Framework in order to determine possible modifications and/or additions to address the technical and interpretive difficulties found in the pilot study. The second step of the DBR process involves the creation of a supplemental curriculum framework designed to improve musical literacy and musical expression using Patrik Juslin’s GERMS model that explains the components of musical expression: Generative rules (G), Emotional expression (E), Random variability (R), Motion principles (M), and Stylistic unexpectedness (S).

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CHAPTER 1

INTRODUCTION

For the past seventeen years, I have taught music in a variety of settings, including directing secondary band and choir programs, teaching flute lessons and masterclasses, and teaching a variety of post-secondary general education, music theory, music education, and applied flute courses. I have participated in curriculum writing for several institutions in Arkansas—first in the construction of a district-wide band curriculum for North Little Rock High School and then in the restructuring of the theory, aural skills, and music history curriculum for Henderson State University. Through these curriculum-writing ventures, I began to see the value in the repertoire-based comprehensive music curriculum model, in which musical knowledge and skills are taught through the study of the performance repertoire itself.

Need for Study

There is one set of repertoire that every flute student in Arkansas public schools is encouraged to learn—the Arkansas School Band and Orchestra Association (ASBOA) etudes used for all-region and all-state honor band selection. Arkansas band directors often request that I teach an annual masterclass on the ASBOA honor band flute etudes either in person or via online video-conferencing; however, I find that any activities beyond rote teaching are difficult, due to the students' lack of fundamental knowledge and skills. Every year, when I revisit these programs, I see that my annual hourly masterclass contribution is effective in the slight improvement of student performance at all-region and all-state honor band competitions mainly through the elimination of pitch and rhythm errors and minor adjustments to flute technique, but no lasting improvement in musical literacy is evident. After these students arrive at my small liberal arts college as music majors and non-major participants in band, they continue to struggle

with fundamental concepts in music theory and aural skills in addition to the performance requirements placed upon them in applied lessons and band. More importantly, they are often frustrated in their inability to express themselves musically because they lack the necessary musical literacy skills. It was amidst this frustration that I began looking for a way to provide a supplemental curriculum to Arkansas flute students and their band directors that could go beyond the annual masterclass.

This dissertation is an attempt to identify the components of a supplemental curriculum needed to enhance musical literacy and musical expression skills designed around the ASBOA junior high honor band etudes. Two research questions will be addressed in the dissertation:

1. What technical and interpretive skills do select rural Arkansas flute students exhibit through audition performance?
2. What skills and concepts need modifications and/or additions to the Arkansas Department of Education (ADE) Beginning Band Curriculum Framework?

Research Design

Traditional experimental research is performed in a laboratory with few variables and often requires additional research into its implementation, an investment of time that most practicing educators cannot afford to make. In contrast, design-based research (DBR) develops in the “buzzing, blooming confusion of real-life settings where most learning actually occurs” in order to produce practical applications and means of intervention that can be immediately implemented by practicing educators.¹ DBR combines both theoretical and practical research into a four-step process that most educators employ in their own curriculum design: (1) identify deficiencies in student learning of curriculum content through the analysis of practical problems,

¹ Sasha Barab and Kurt Squire, “Design-Based Research: Putting a Stake in the Ground,” *The Journal of the Learning Sciences* 13, no. 1 (2004): 3, accessed March 20, 2017. https://doi.org/10.1207/s15327809jls1301_1.

(2) design a possible solution to address the deficiencies and/or reteach course objectives, (3) test the new solutions on current students, and (4) modify the approach as needed, based upon evaluation of student performance (figure 1). The process is cyclical.

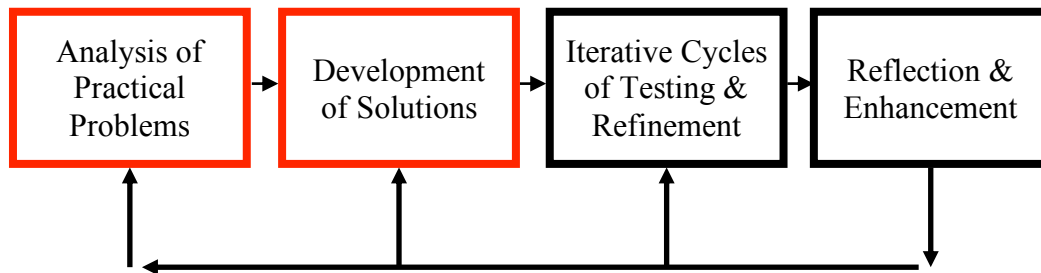


Figure 1. Design-Based Research Approach

Figure adapted from Jan Herrington et al., “Design-Based Research and Doctoral Students: Guidelines for Preparing a Dissertation Proposal,” paper presented at the 2007 World Conference on Educational Multimedia, Hypermedia, and Telecommunications, Chesapeake, VA, June 25-29, 2007, 4090, accessed March 20, 2017, <http://ro.ecu.edu.au/ecuworks/1612>.

I, like other music educators, had been using this approach in my own teaching for years; however, I had not analyzed the students’ performance deficiencies in the context of the curriculum that was already being delivered to them in other settings—specifically the band classroom. This dissertation encompasses the first and second segments of an ongoing DBR project designed to help students enrolled in band programs develop the necessary performance and musical literacy skills in order to be prepared for college music study.

Dissertation Format

The first chapter serves as an introduction to the study. The second chapter is a review of research related to honor band structure and selection, curriculum design at the junior high level, music performance assessment, and musical expression pedagogy. The third chapter describes the methodology that will be used in the first step of the DBR process—the analysis of recordings of Arkansas junior high students’ auditions ($N = 9$) in which they perform two ASBOA honor band etude excerpts and a sight-reading excerpt. This chapter also compares the

ASBOA etudes to the suggested Beginning Band Curriculum Framework provided by the Arkansas Department of Education (ADE).² The fourth chapter presents the findings of the performance analyses. The fifth chapter is a discussion of the results from Chapter 4. The sixth chapter is the second step of the DBR process—the proposal of supplemental curriculum content that addresses the deficiencies determined in Chapter 5. The seventh and final chapter will offer suggestions for future research, including the author’s plan for implementation of the third and fourth steps of the DBR process.

Foundations of Research: The GERMS Model of Musical Expression

During the early 2000s, Patrik Juslin, expanding on the work of several psychologists studying musical performance, determined that the expressive deviations performers employ when interpreting a musical score could be summarized through a series of components he referred to as the GERMS model: Generative rules (G), Emotional expression (E), Random variability (R), Motion principles (M), and Stylistic unexpectedness (S). Generative rules generally communicate syntax by highlighting the music’s structure with nuances associated with specific styles, while emotional expression communicates emotion and mood through nuances derived from emotional speech patterns. Motion principles relate musical passages to biological movement. Stylistic unexpectedness includes the purposeful violations of existing stylistic expectations (as found in the generative rules). Random variability consists of the

² Arkansas Department of Education, “Beginning Band I-IV Fine Arts Curriculum Framework” (Little Rock, AR: Arkansas Department of Education, 2014), accessed March 9, 2018, http://www.arkansased.gov/public/userfiles/Learning_Services/Curriculum%20and%20Instruction/Frameworks/Fine_Arts/BeginningBandI_IVRevised2014.pdf.

inconsistencies that humans inevitably make in performance.³ Juslin explains how the combination of these categories combines into the creative process of music-making:

My guess is that the first four components [generative rules, emotional expression, random variability and motion principles] are sufficient to achieve an acceptable performance, but that the S-component [stylistic unexpectedness] is what makes a performance really special. Thus, much of the artistic process aims at turning GERM performances into GEMS. That is, reducing random fluctuations to a minimum and increasing the originality of the musical interpretation.⁴

The title of this dissertation, “Polishing GEMS,” is derived from Juslin’s paper, which describes how the GERMS model can be used by music education practitioners:

The GERMS model offers an example of how research could benefit teaching by helping to “demystify” expression. Indeed, based on my research on expression over the last decade, I have come to believe that there are certain myths about expression, which have had a negative impact on music education ... One of these myths is that “expression cannot be studied objectively.”

This myth is associated with the notion that expression is a completely subjective quality, which cannot be explained in scientific terms. However, as demonstrated by the GERM study, acoustic correlates of perceived expression *can* readily be obtained and manipulated in performances, and listeners’ ratings of expression *can* be systematically and reliably related to these correlates. This paves the way for a more theoretically informed approach to teaching of expression.⁵

³ Patrik N. Juslin, “Five Facets of Musical Expression: A Psychologist’s Perspective on Music Performance,” *Psychology of Music* 31, no.3 (Summer 2003): 281-83, accessed January 2, 2015, <https://doi.org/10.1177/03057356030313003>.

⁴ *Ibid.*, 290.

⁵ *Ibid.*, 287.

Terminology

The terminology surrounding musical literacy and musical expression tends to be fairly ambiguous. For the purposes of this study, the following definitions will be used:

- Audiation: the ability to hear and comprehend music for which the sound is not physically present⁶
- Interpretation: a musical performance that is authentic (demonstrating understanding of the style, genre, and established performance practices associated with the composition), accurate (demonstrating comprehension of the notation), and coherent (demonstrating an understanding of the overall structure)⁷
- Musical expression: the large and small variations in timing, intensity or dynamics, timbre, and pitch that form the microstructure of a performance and differentiate it from another performance of the same music in order to communicate structure, emotion, motion, and/or style⁸
- Musical literacy: the ability to listen to and perform music and to read and write music notation with comprehension and not through mere imitation.⁹

⁶ Edwin E. Gordon, *Learning Sequences in Music: A Contemporary Music Learning Theory*, 2012 ed. (Chicago: GIA Publications, 2012), 397.

⁷ Gary E. McPherson and Emery Schubert, "Measuring Performance Enhancement in Music," in *Musical Excellence: Strategies and Techniques to Enhance Performance*, ed. Aaron Williamon (Oxford: Oxford University Press, 2004), 64.

⁸ Caroline Palmer, "Music Performance," *Annual Review of Psychology* 48, no. 1 (February 1997): 118, accessed January 2, 2015, <https://doi.org/10.1146/annurev.psych.48.1.115>; Juslin, "Five Facets," 290.

⁹ Gordon, *Learning Sequences in Music*, 40.

CHAPTER 2

BACKGROUND

This dissertation is an attempt to create a supplemental curriculum designed to develop musical literacy and musical expression skills in Arkansas junior high flute students using the Arkansas School Band and Orchestra Association (ASBOA) flute etudes; thus, the review of literature in this chapter reflects several broad categories:

1. regional and state honor band structure, procedures, and evaluation instruments used in Arkansas and throughout the United States;
2. music performance assessment and adjudication;
3. curriculum resources available to Arkansas band directors and their students; and
4. the GERMS model for musical expression and its application to music education.

Regional and State Honor Bands

Participation

Arkansas band students in seventh through twelfth grades have the opportunity to audition for membership in one of nine all-region honor bands sponsored by the Arkansas School Band and Orchestra Association (ASBOA) every year. Designed to “encourage good fellowship and sportsmanship between member bands and orchestras,” these honor bands meet in all-region clinics, in which the students rehearse music to be performed under the direction of a guest conductor.¹ Although students’ participation in honor bands is extracurricular, many band directors incorporate the honor band audition repertoire into their curricula by providing

¹ Arkansas School Band and Orchestra Association, “Constitution and Bylaws and Handbook for Directors: Rules and Regulations for Student Participation” (Russellville, AR: Arkansas School Band and Orchestra Association, 2017), 3, accessed October 1, 2017, <http://www.asboa.org/Constitution/W2017%20CONSTITUTIONREV.pdf>.

instruction for the ASBOA etudes in private lessons or masterclasses outside of designated class times.

In George Edward Baggett's 1974 study, "The Status of Secondary Instrumental Music Education (Band and Orchestra) in the State of Arkansas, 1970," sixty-seven of the 104 bands surveyed indicated that they encouraged all students to audition for all-region honor bands.² No recent large-scale studies of honor band participation in Arkansas could be located. Peter Maggio's 2016 study, "Perceptions of Musical Self-Beliefs among High School Band Students and Directors in Arkansas that Participate in Competitive Music Performance," was limited to only three schools, but all of the participating band directors encouraged their students to audition for the all-region honor band. One band director in the study explained why the preparation of this audition repertoire is important to the school music program:

As far as my personal goals, I try to make my goal for every kid to be able to play [his or her] instrument really well ... My goals are just to increase our all-region numbers every year, 'cause I think that's a good reflection of personal musicianship in the ensemble ... I do try to do well at marching and concert assessment, but I think if I put the focus on those other things I mentioned [individual musicianship, all-region numbers, honors bands], the assessments won't be quite as much work whenever we get there or quite as much stress on me or the kids.³

In addition to the betterment of the ensemble as a whole, participation in all-region honor bands has more personal rewards that students appreciate, as one student from Maggio's study explains:

² George Edward Baggett, "The Status of Secondary Instrumental Music Education (Band and Orchestra) in the State of Arkansas, 1970" (DME diss., University of Oklahoma, 1974), 84, accessed March 20, 2018, ProQuest Dissertations and Theses.

³ Peter Anthony Maggio, "Perceptions of Musical Self-Beliefs among High School Band Students and Directors in Arkansas that Participate in Competitive Music Performance" (DMA diss., Boston University, 2016), 107-8, 138, accessed February 4, 2018, ProQuest Dissertations and Theses.

Well, it allows you to play in a band that's composed of a lot of talent. There's something about seeing your name on that list and seeing how your hard work helped you to accomplish that and that makes me feel really good.⁴

Structure and Process

In Arkansas, seventh through ninth grade students compete for membership in junior high all-region honor bands, and tenth through twelfth grade students compete for membership in senior high all-region honor bands. Each all-region honor band's size is determined by that region's ASBOA leadership. The top nine flutes in each senior high all-region honor band attend a separate audition in February to compete for membership in one of three all-state honor bands. No all-state honor bands are offered for students below tenth grade.⁵

Two studies have examined the characteristics of all-state honor bands throughout the United States. In 1966, George Oldham's dissertation, "The Organization and Administration of All-State Bands and Orchestras," found that forty-six states hosted all-state honor bands. By the time of Leslie Welker's 1997 dissertation, "All-State Bands in the United States," all fifty states had begun hosting an all-state honor band. Eleven states had all-state junior high honor bands in addition to all-state senior high honor bands. Twenty states used membership in an all-region honor band as a pre-requisite for membership in the all-state honor band, similar to Arkansas's structure.⁶ This review of literature did not reveal any studies comparing different states' specific junior high all-region honor band audition processes.

⁴ Ibid., 138.

⁵ ASBOA, "Constitution and Bylaws and Handbook for Directors," 3.

⁶ Leslie Glenn Welker, "All-State Bands in the United States" (EdD diss., University of Alabama, 1997), 60-61, accessed March 20, 2018, ProQuest Dissertations and Theses.

Procedure

Most states use prepared music for auditions. Only two states in Welker's study did not use prepared material, relying only upon sight-reading or director recommendation for all-state honor band selection.⁷ Arkansas's flute audition materials are chosen from two method books published by Rubank. The Rubank series is inexpensive and is thus used by several states' organizations for honor band audition material, including Florida Bandmasters Association, Mississippi Lions All-State Band, West Virginia Bandmasters Association, and the Association of Texas Small School Bands.⁸ Not all states use etudes from method books. Some states commission their own composed etudes specifically for the audition, such as Tennessee and Georgia.⁹ Other states, such as New York and Connecticut, allow students to select a solo from a graded repertoire list.¹⁰

Strategies

Several studies have examined the effect of various practice and preparation strategies on intermediate student performance, but few studies have examined the impact of various practice strategies on the honor band audition process. Richard Dispenziere's 2013 study, "Middle and

⁷ Ibid., 60-64.

⁸ Association of Texas Small School Bands, "ATSSB Audition Information," accessed January 30, 2018, <https://fba.flmusiced.org/all-state/audition-requirements/>; Florida Bandmasters Association, "2017-2018 All-State Audition Requirements," accessed January 30, 2018, <https://fba.flmusiced.org/all-state/audition-requirements/>; Mississippi Lions All-State Band, "Audition Etudes and Information," accessed January 30, 2018, <http://www.misslionsband.org/auditioninfo.htm>; West Virginia All-State Band, "All-State Band Audition Requirements 2017-2018," accessed January 30, 2018, <https://www.wvallstateband.com/requirements>.

⁹ West Tennessee State Band and Orchestra Association, "All-West Audition Information: Middle School Band," accessed April 3, 2018, <http://www.wtsboa.website/all-west-convention/all-west-audition-music/>; Georgia Music Educators Association, "All-State Band Audition Information," accessed April 3, 2018, <https://www.gmea.org/asb-audition-information/>.

¹⁰ Connecticut Music Educators Association, "High School Audition Information," accessed April 3, 2018, <http://cmea.org/node/647>; New York State School Music Association, "The All-State Process," accessed April 3, 2018, <https://www.nyssma.org/parents-students/the-all-state-process/>.

High School Honor Band Auditions: Preparation Strategies and Techniques,” polled 119 students in New Jersey about performance anxiety, practice routines/strategies, and the audition experience and expectations. He then compared their answers to their honor band chair placement. His results were predictable—high-achieving students typically practice more (three or more days per week), take private lessons, exercise long-term planning and preparation strategies, and practice sight-reading regularly. He also noted that “having an understanding of the audition process was just as important as preparing the material” for student success.¹¹

Harold Jørgensen categorizes various practice strategies into four areas: executive strategies (e.g. mental practice, metronome techniques), evaluation strategies (e.g. error detection, self-assessment), planning and preparation strategies, and metastrategies.¹² Four books have been published that feature an overview of these various strategies and their related psychological studies—*The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning* (2002); *Musical Excellence: Strategies and Techniques to Enhance Performance* (2004); *Psychology for Musicians: Understanding and Acquiring the Skills* (1997); and *Musicians in the Making: Pathways to Creative Performance* (2007). Sight-reading preparation requires different strategies than those used for prepared material. Jennifer Mishra’s meta-analysis found that the following strategies may improve sight-reading performance: aural

¹¹ Richard Dispenziere, “Middle and High School Honor Band Auditions: Preparation Strategies and Techniques” (MM thesis, William Paterson University, 2013), 22-27, 30, accessed March 20, 2018, ProQuest Dissertations and Theses.

¹² Harold Jørgensen, “Strategies for Individual Practice,” *Musical Excellence: Strategies and Techniques to Enhance Performance*, ed. Aaron Williamon (Oxford: Oxford University Press, 2004), 86.

skills training, eye movement training (e.g. use of a Controlled Reader), creative music-making (e.g. composition, improvisation) activities, training in singing, and solmization system use.¹³

One particularly effective executive strategy is the development of a “performance plan” (a mental representation of the final, intended performance). The process of developing this mental representation helps with motivation, improves long-term learning, reduces pitch and rhythm errors, enhances musical expression, and helps develop audiation skills.¹⁴ In an effort to improve music reading skills and prevent rote-learning, some teachers are hesitant to encourage students to listen to recordings of the repertoire they are studying; however, use of live and recorded performance models while forming a performance plan has a positive effect on overall performance.¹⁵ Most students use recordings as performance models and may prefer finding free recordings over social media, such as YouTube, Facebook, or Instagram.¹⁶ Self-evaluation of

¹³ Jennifer Mishra, “Improving Sightreading Accuracy: A Meta-Analysis,” *Psychology of Music* 42, no. 2 (2013): 146, accessed April 16, 2018, <https://doi.org/10.1177/0305735612463770>.

¹⁴ Jørgensen, “Strategies for Individual Practice,” 89; Andreas Lehmann, John Sloboda, and Robert Woody, *Psychology for Musicians: Understanding and Acquiring the Skills* (Oxford: Oxford University Press, 2007), Kindle, location 2013, 3677; Karen Wise, Mirjam James, and John Rink, “Performers in the Practice Room,” in *Musicians in the Making: Pathways to Creative Performance*, ed. John Rink, Helena Gaunt, and Aaron Williamon (Oxford: Oxford University Press, 2017), 150, Kindle; Roger Chaffin, Gabriela Imreh, and Mary Crawford, *Practicing Perfection: Memory and Piano Performance* (Mahwah, NJ: Erlbaum, 2002), 66-73, Kindle; Debbie Rohwer and Jeremy Polk, “Practice Behaviors of Eighth-Grade Instrumental Musicians,” *Journal of Research in Music Education* 54, no. 4 (Winter 2006): 359, accessed March 30, 2018, <http://www.jstor.org/stable/4139756>; Nancy H. Barry, “The Effects of Different Practice Technique upon Technical Accuracy and Musicality in Student Instrumental Performance,” *Research Perspectives in Music Education* 1, no. 1, (September 1990): 6, accessed March 26, 2015, <https://files.eric.ed.gov/fulltext/ED359094.pdf>.

¹⁵ Lehmann et al., *Psychology for Musicians*, location 1953-83; Dispenziere, “Middle and High School Honor Band Auditions,” 24; Michael P. Hewitt, “The Effects of Modeling, Self-Evaluation, and Self-Listening on Junior High Instrumentalist’ Music Performance and Practice Attitude,” *Journal of Research in Music Education* 49, no. 4 (Winter 2001): 319, accessed February 22, 2018, <http://www.jstor.org/stable/3345614>.; Fraser Linklater, “Effects of Audio- and Videotape Models on Performance Achievement of Beginning Clarinetists,” *Journal of Research in Music Education* 45, no. 3 (Autumn 1997): 402-14, accessed January 30, 2018, <http://www.jstor.org/stable/3345535>.

¹⁶ Dispenziere, “Middle and High School Honor Band Auditions,” 24; Elizabeth Buck et al., “Preparing for College,” comp. Patricia George, Flute Talk, (October 2016), accessed February 17, 2017, <http://theinstrumentalist.com/articles/FluteTalk/October-2016/Preparing-For-College/>.

recorded performance, especially when compared to a model performance, has also shown to reduce pitch and rhythm errors and to enhance musical expression.¹⁷

Instructional Materials

There are few self-study resources available to Arkansas students preparing for ASBOA honor band auditions. Chris Roberts' book and video, *How to Make First Chair*, provides a generic long-term practice plan designed for students preparing honor band audition material.¹⁸ Texas Music Educators Association releases performance guides of each year's senior high audition material produced by college faculty.¹⁹ ASBOA releases only suggested tempo markings and errata for each etude.²⁰

Music Performance Assessment and Adjudication

Types of Assessment

Thirty-nine of the states in Leslie Welker's study provided standard scoring sheets for judges. Welker did not include examples of the scoring sheets in her published study but indicated that they were similar in construction, with prepared material receiving more weight than scales and sight-reading. The prepared material score was often broken down into

¹⁷ Michael P. Hewitt, "The Effects of Modeling, Self-Evaluation, and Self-Listening on Junior High Instrumentalists' Music Performance and Practice Attitude," *Journal of Research in Music Education* 49, no. 4 (Winter 2001): 307-22, accessed February 22, 2018, <http://www.jstor.org/stable/3345614>; Beth A. Wheeler, "The Effect of Using a Recording of Students' Performance Paired with Specific Feedback on the Self-Evaluation Calibration Accuracy among Novice Performers" (PhD diss., University of Kansas, 2016), accessed February 22, 2018, ProQuest Dissertations and Theses.

¹⁸ C. L. Roberts, *How to Make First Chair* (n.p.: I550 Publications, 2003).

¹⁹ Texas Music Educators Association, "All-State Band Audition Etudes: Performance Guides," Texas Music Educators Association, accessed July 31, 2017, <https://www.tmea.org/divisions-regions/band-audition-material/etudes>.

²⁰ Arkansas School Band and Orchestra Association, "All-Region/All-State Audition Material" (Russellville, AR: Arkansas School Band and Orchestra Association, 2017), accessed October 1, 2017, <http://www.asboa.org/ClinicMaterials/2017%20Revision/Revision2017.html>.

performance domains, such as tone, articulation, interpretation, tempo, phrasing, intonation, and general musicianship.²¹ There are generally two types of assessment—norm referenced, in which each audition receives a ranking or a point value, and criterion based, in which each audition is rated against a series of criteria.²² Jennifer Stewart’s meta-analysis of ninety-six music performance evaluation studies published over thirty years (1970-2000) found that norm referenced assessments are typically used. The performance domain criteria most frequently found in these evaluations include rhythmic accuracy ($n = 87$), pitch accuracy ($n = 46$), tempo ($n = 39$), tone quality ($n = 32$), articulation ($n = 30$), overall musical effect ($n = 25$), expression ($n = 23$), and intonation ($n = 22$).²³ In several studies, a high expression/musicality/interpretation score correlated with a high overall score.²⁴

Instruments

The most popular rating instrument in Stewart’s study, the Watkins-Farnum Performance Scale, measures the accuracy of the following performance domains: pitch, rhythm, slurring/articulation, tempo, expression (e.g. dynamics), caesura/fermata, and repeat signs. Tone

²¹ Welker, “All-State Bands in the United States,” 63.

²² Gary E. McPherson and Emery Schubert, “Measuring Performance Enhancement in Music,” in *Musical Excellence: Strategies and Techniques to Enhance Performance*, ed. Aaron Williamon (Oxford: Oxford University Press, 2004), 61.

²³ Jennifer L. Stewart, “Performance Evaluation in Music,” *Texas Music Education Research 2002: Reports of Research in Music Education* (paper presented at the Annual Meeting of the Texas Music Educators Association, San Antonio, TX, February 2002), 73-74, accessed February 16, 2018, https://www.tmea.org/assets/pdf/research/TexasMusicEducationResearch_2002.pdf.

²⁴ Kenneth M. Croft, “A Comparison of Successful and Unsuccessful All-State Band Auditionees through Analysis of Adjudication Results,” *Southeastern Journal of Music Education* 7 (1998): 76, accessed April 3, 2018, <http://www.music.uga.edu/news-and-events/sejome-online>; Curtis D. Owen, Jr., “The Assessment of Music Performance: Techniques for Classroom and Rehearsal” (PhD diss., East Texas State University, 1969), v, 94, accessed March 20, 2018, ProQuest Dissertations and Theses.

quality, intonation, and interpretation are not assessed.²⁵ It is designed to be used only with its corresponding graded exercises; thus, it cannot be used for honor band auditions using prepared material.²⁶ Three rating scales have been designed to measure characteristics in specific wind instruments—the Clarinet Performance Rating Scale (CPRS), the Euphonium and Tuba Performance Rating Scale (ETPRS), and the Brass Performance Rating Scale (BPRS). Harold Abeles developed the CPRS to evaluate one hundred junior high clarinet performances in Maryland. Using a five-point Likert scale, the CPRS evaluated the following performance domains: interpretation, tone, rhythm/continuity, intonation, tempo, and articulation. Abeles determined that the scale could easily be transferred to other instruments, as none of the criteria was specific to clarinet.²⁷ Tone and intonation were the only performance domains to demonstrate questionable reliability.²⁸ The ETPRS and BPRS were both designed by Martin J. Bergee. They consist of twenty-seven criteria prompts, each containing a five-point Likert scale,

²⁵ Mary Claire Jensen, “Measuring Music Reading: A Guide to Assessment Methods” (MA thesis, University of Ottawa, 2016), 48-49, accessed February 17, 2018, ProQuest Dissertations and Theses.

²⁶ This review will omit scales, rubrics, and aptitude tests that do not measure music-reading skills, such as Edwin Gordon’s Musical Aptitude Profile (MAP), as they are not designed to measure music-reading. For an overview of these materials, see: John Grashel, “The Measurement of Musical Aptitude in 20th Century United States: A Brief History,” *Bulletin of the Council for Research in Music Education* 176 (Spring 2008): 45-49, accessed February 7, 2018, <http://www.jstor.org/stable/40319432>.

²⁷ Harold F. Abeles, “Development and Validation of a Clarinet Performance Adjudication Scale,” *Journal of Research in Music Education* 21, no. 3 (Autumn 1973): 246-55, accessed April 3, 2018, <http://www.jstor.org/stable/3345094>.

²⁸ Stephen F. Zdzinski, “Measurement of Solo Instrumental Music Performance: A Review of Literature,” *Bulletin of the Council for Research in Music Education* no. 109 (Summer 1991): 47-58, accessed February 17, 2018, <http://www.jstor.org/stable/40318448>.

covering four performance domains: tone quality/intonation, technique, rhythm/tempo, and interpretation/musical effect.²⁹

T. Clark Saunders and John M. Holahan's criteria-specific rating scale, the Woodwind/Brass Student Evaluation Form (WBSEF), has been shown to be a reliable measurement for honor band selection and measures characteristics beyond pitch and rhythm accuracy. Used to evaluate 926 high school wind instrumentalists competing for placement in the 1994 Connecticut All-State Band, the scale contained the following performance dimensions using a five-point Likert rating scale: tone, intonation, melodic accuracy, rhythmic accuracy, tempo, and interpretation. Another additive rating scale measured technique/articulation. Sight-reading was assessed separately using the same rating scales for tone, melodic accuracy, rhythmic accuracy, technique/articulation, and interpretation.³⁰ Saunders and Holahan found that five performance domains produced the most reliable ranking results—tone, technique/articulation, rhythmic accuracy, interpretation, and sight-reading: interpretation.³¹ The technique/articulation performance domain has been shown to be the most inaccurate, possibly

²⁹ Martin J. Bergee, "An Application of the Facet-Factorial Approach to Scale Construction in the Development of a Rating Scale for Euphonium and Tuba Music Performance (PhD diss., University of Kansas, 1987), accessed February 4, 2018, ProQuest Dissertations and Theses; Martin J. Bergee, "A Comparison of Faculty, Peer, and Self-Evaluation of Applied Brass Jury Performances," *Journal of Research in Music Education* 41, no. 1 (April, 1993): 19-27, <https://doi.org/10.2307/3345476>.

³⁰ T. Clark Saunders, "A Study of Criteria for the Evaluation of Secondary School Instrumentalists when Auditioning for Festival Bands," *Newsletter of the Special Research Interest Group in Measurement and Evaluation (MENC)* 15 (Spring 1993): 7-11, accessed February 4, 2018, <https://eric.ed.gov/?id=ED029901>.

³¹ T. Clark Saunders and John M. Holahan, "Criteria-Specific Rating Scales in the Evaluation of High School Instrumental Performance," *Journal of Research in Music Education* 45, no. 2 (Summer 1997): 270, accessed February 4, 2018, <http://www.jstor.org/stable/3345585>.

due to its different scoring scale or due to its relationship to other domains (e.g. rhythm, tone quality).³²

Limitations of Assessment

Whether or not these categories can independently be assessed remains to be proven. Gary McPherson and Emery Schubert use a Johari window to present the complex relationship of variables that influence assessment (Figure 2). Several extramusical characteristics affect performance assessment, including any bias or deficit the adjudicator may exhibit. Some of these biases can be eliminated through the use of a blind audition.³³ Adjudicators cannot directly assess effort and preparation, as some students may exhibit exemplary performance through superior sight-reading skills. Measurement of performance characteristics does not indicate measurement of musical knowledge, as students may be capable of successfully reproducing performances through imitation without comprehension.

³² Nancy L. Summitt and Ryan A. Fisher, "Effect of Self-Listening on Self-Evaluation Accuracy" *Bulletin of the Council for Research in Music Education* no. 209 (Summer 2016): 72, accessed February 22, 2018, <http://www.jstor.org/stable/10.5406/bulcouresmusedu.209.0063>.

³³ Charles A. Elliott, "All-State Band Practices and Procedures," *Journal of Band Research* 30, no. 2 (1995): 87-94; McPherson and Schubert, "Measuring Performance Enhancement in Music," 67-68.

	known to performer	(typically) not known to performer
known to adjudicator	<p style="text-align: center;">Public Area</p> <p>Musical Characteristics:</p> <p>Technique</p> <ul style="list-style-type: none"> • Physiological • Physical <p>Interpretation</p> <ul style="list-style-type: none"> • Authenticity • Accuracy • Musical Coherence <p>Extramusical Characteristics:</p> <ul style="list-style-type: none"> • Previous relationship between adjudicator and performer • Adjudicator’s knowledge of performer 	<p style="text-align: center;">Blind Area</p> <p>Extramusical Characteristics:</p> <ul style="list-style-type: none"> • Attractiveness and flair of performer • Movement exhibited by performer • Expertise and training of adjudicator • Familiarity with score by adjudicator • Familiarity with acoustics of performance space by performer
	<p style="text-align: center;">Secret Area</p> <p>Extramusical Characteristics:</p> <ul style="list-style-type: none"> • Effort and preparation of performer • Musical knowledge of performer • Cognitive processes of performer • Luck and chance events of performance • Coping strategies of performer • Habits and superstitions of performer • Consistency of performer’s ability outside the judged performance 	<p style="text-align: center;">Hidden Area</p> <p>Extramusical Characteristics:</p> <ul style="list-style-type: none"> • Variability of performance • Mood and personality of adjudicator • General adjudication history of adjudicator • First impressions by adjudicator • Stereotyping by adjudicator • Order of performer in adjudication • Halo effects • Measurement error
(typically) not known to adjudicator		

Figure 2. Variables affecting performance assessment. Adapted from “Johari window” by Gary E. McPherson and Emery Schubert, “Measuring Performance Enhancement in Music,” in *Musical Excellence: Strategies and Techniques to Enhance Performance*, ed. Aaron Williamson (Oxford: Oxford University Press, 2004), 76.

The observable musical characteristics that can be assessed include those related to technique and to interpretation:

Technique

- Physiological
 - Breathing
 - Posture
 - Relaxation/tension
 - Balance
 - Coordination
- Physical
 - Sound (projection, control, consistency, clarity, and focus across registers and dynamic levels)
 - Range
 - Intonation
 - Physical control (stamina, endurance)
 - Bodily coordination

Interpretation

- Authenticity (understanding of the style/genre and established performance practice of the music)
- Accuracy
- Musical coherence (tempo, phrase shaping, dynamics, sense of line, and understanding of structure)³⁴

Terminology

Much literature has focused on attempting to define ambiguous terminology (e.g., musicianship, musical literacy, musical expression, interpretation) used to describe musical abilities and performance.³⁵ Ambiguous terminology must be addressed before meaningful discussion of performance assessment can occur, as the misinterpretation of this terminology may result in unreliable performance evaluation results and unhelpful feedback to students.³⁶

³⁴ McPherson and Schubert, "Measuring Performance Enhancement in Music," 63-64.

³⁵ Caroline Palmer, "Music Performance," *Annual Review of Psychology* 48, no. 1 (February 1997): 118, accessed January 2, 2015, <https://doi.org/10.1146/annurev.psych.48.1.115>; Juslin, "Five Facets," 290.

³⁶ Sam Thompson and Aaron Williamon, "Evaluating Evaluation: Musical Performance Assessment as a Research Tool," *Music Perception: An Interdisciplinary Journal* 21, no. 1 (Fall 2003): 26, 35, accessed February 17, 2018, <http://www.jstor.org/stable/10.1525/mp.2003.21.1.21>; Andreas Lehmann, John Sloboda, and Robert Woody, *Psychology for Musicians: Understanding and Acquiring the Skills* (Oxford: Oxford University Press, 2007),

Merriam-Webster defines literacy as “the ability to read and write” or the “knowledge that relates to a specific subject.”³⁷ The term’s definition has expanded since 2000. One such expanded definition reads “the process of using reading, writing, and oral language to extract, construct, integrate, and critique meaning through interaction and involvement with multimodal texts in the context of socially situated practices.”³⁸ Musical literacy historically referred to the ability to read and write notation, but the definition for it has expanded as well. Edwin Gordon states that musical literacy cannot occur without “audiation,” the ability to “translate sounds in your mind and give them meaning.”³⁹ Janet Mills and Gary E. McPherson define musical literacy in the following way:

our view, consistent with approaches to language literacy, is that literacy in situations related to Western classical music occurs as a result of children having developed their capacity to make music, reflect on the music in which they are engaged, express their views on music which they play, hear, or create, speak about and listen to music in order for form judgments, and read, write, comprehend, and interpret staff notation.⁴⁰

Musical literacy is often used interchangeably with “musicianship,” defined loosely by James Mainwaring as the ability to “think in sound.”⁴¹ Theory pedagogue Michael Rogers states

location 1660, Kindle; D. Royce Sadler, “The Origins and Functions of Evaluative Criteria,” *Educational Theory* 35, no. 3 (Summer 1985), 285-97, accessed February 22, 2018, <https://doi.org/10.1111/j.1741-5446.1985.00285.x>; McPherson and Schubert, “Measuring Performance Enhancement in Music,” 64.

³⁷ *Merriam-Webster Learners Dictionary*, s.v. “Literacy,” accessed April 3, 2018, <http://www.learnersdictionary.com/definition/literacy>.

³⁸ Katherine K. Frankel et al., “From ‘What is Reading?’ to What is Literacy?” *Journal of Education* 196, no. 3 (October 2016), 7, accessed April 3, 2018, <https://doi.org/10.1177/002205741619600303>.

³⁹ Edwin E. Gordon, *Learning Sequences in Music: A Contemporary Music Learning Theory*, 2012 ed. (Chicago, GIA Publications, 2012), 1.

⁴⁰ Janet Mills and Gary E. McPherson, “Musical Literacy: Reading Traditional Clef Notation,” in *The Child as Musician: A Handbook of Musical Development*, 2nd ed., ed. Gary McPherson (New York: Oxford University Press, 2016), 177.

⁴¹ James Mainwaring, “The Meaning of Musicianship: A Problem in the Teaching of Music,” *British Journal of Educational Psychology* 11, no. 3 (November 1941): 205.

that the concept of musicianship implies the “practical application of skills rather than the ivory-tower philosophizing that is sometimes implied by theory.”⁴² Robert Duke and James Byo define expert musicianship as having the following characteristics: “optimally, relaxed position of the body and instrument, beautiful tone, intonation, note accuracy, rhythmic precision, clear articulation, dynamic variation, and expressive inflection.”⁴³

Students typically describe musical expression as a process of emotional communication: “to communicate an emotion to the listener,” “to evoke feelings and emotional reactions,” etc. Teachers often use similar esoteric language in describing expression: “express the emotions I feel that the piece conveys,” “find the emotional content and project it,” “play with an emotional response,” “the part of performance that turns printed music into art,” “the artistic communication of human emotional, spiritual, intellectual, and physical experience,” etc.⁴⁴

Music theorists and psychologists describe musical expression using more concrete terminology. Grove Music Online defines it as “those elements of a musical performance that depend on personal response and that vary between different interpretations.”⁴⁵ In *Psychology for Musicians: Understanding and Acquiring the Skills*, Andreas Lehman, John Sloboda, and Robert Woody define expression as the “small-scale variations in timing, loudness, and other parameters

⁴² Michael R. Rogers, *Teaching Approaches in Music Theory: An Overview of Pedagogical Philosophies*, 2nd ed. (Carbondale, IL: Southern Illinois University Press, 2004), 13.

⁴³ Robert A. Duke and James L. Byo, “Building Musicianship in the Instrumental Classroom,” in *The Oxford Handbook of Music Education*, vol. 1 (New York: Oxford University Press, 2012), 718.

⁴⁴ Peter Laukka, “Instrumental Music Teachers’ Views on Expressivity: A Report from Music Conservatories,” *Music Education Research* 6, no. 1 (March 2004): 48, accessed December 19, 2015, <https://doi.org/10.1080/1461380032000182821>; Brian Gibbs, “Pedagogy for Musical Expression: Perspectives from Professional Wind Instrumentalists and Conductors” (PhD diss., Walden University, 2014), 135, accessed December 19, 2015, ProQuest Dissertations and Theses.

⁴⁵ Nancy Kovaleff Baker et al, “Expression,” Grove Music Online, accessed February 22, 2015, <http://www.oxfordmusiconline.com>.

that performers insert at specific points in a performance.”⁴⁶ Caroline Palmer describes expression in musical performance as “the large and small variations in timing, intensity or dynamics, timbre, and pitch that form the microstructure of a performance and differentiate it from another performance of the same music.”⁴⁷

Curriculum Resources

Arkansas Disciplinary Literacy Standards: Resource for Fine Arts

Developing cross-curricular literacy skills is a goal of the College and Career Readiness Anchor Standards in the United States Common Core State Standards Initiative. Arkansas’s Department of Education (ADE), like most states’ organizations, has adopted Disciplinary Literacy Standards for Fine Arts created from the Common Core’s English Language Arts Standards for Science and Technical Subjects.⁴⁸ Most of these standards involve the interpretation of symbols and terminology within music notation, such as the example given for the first standard: “students know to sing or play softly because there is a dynamic indication of *mp* at measure 14.” They also involve interpretive skills, such as the indication “students know the piece is a lullaby based on the soft dynamics, slow tempo, and legato phrase markings” under the second standard.⁴⁹

⁴⁶ Lehmann, Sloboda, and Woody, *Psychology for Musicians*, location 1741.

⁴⁷ Caroline Palmer, “Music Performance,” *Annual Review of Psychology* 48, no. 1 (February 1997): 118.

⁴⁸ National Governors Association Center for Best Practices, Council of Chief State School Officers, *Common Core State Standards: English Language Arts Standards: Science and Technical Subjects* (Washington, D.C.: National Governors Association Center for Best Practices, 2010), accessed March 3, 2018, <http://www.corestandards.org/ELA-Literacy/RST/introduction/>.

⁴⁹ Arkansas Department of Education, “Grades 6-12 Arkansas Disciplinary Literacy Resource for Fine Arts” (Little Rock, AR: Arkansas Department of Education, 2016), 9, accessed March 9, 2018, http://www.arkansased.gov/public/userfiles/Learning_Services/Curriculum%20and%20Instruction/Frameworks/Disciplinary_Literacy/DLFineArts.pdf.

Arkansas Band Curriculum Framework

ADE’s Beginning Band Curriculum Framework outlines the specific skills and knowledge students need to “create and perform or present original artistic work, as well as to respond and connect their own artistic work to that of other people and other cultures.”⁵⁰ ADE’s Band Curriculum Framework uses the four strands recommended by the National Core Arts Standards and the National Association for Music Education (NAFME)—“creating, performing, responding, and connecting”—as the basis of its public school music curriculum.⁵¹ Ensemble standards are designed within the four strands for eight levels of study—“Beginning Band I-IV” and “Band I-IV.”

Comprehensive Musicianship

The ADE and NAFME content strands closely resemble the Comprehensive Musicianship (CM) curriculum model that developed during the 1960s and 1970s in the United States.⁵² In 1959, composer Norman Dello Joio, sponsored by the Ford Foundation, began an outreach program, the Young Composers Project, that paired composers with students enrolled in public schools’ music programs. The Ford Foundation partnered with the Music Educators National Conference (MENC) to expand the program in 1963 into the Contemporary Musicianship Project (CMP), a broader endeavor that included the commission of several new

⁵⁰ Arkansas Department of Education, “Curriculum Framework Documents/Fine Arts” (Little Rock, AR: Arkansas Department of Education, 2015), accessed March 9, 2018, <http://www.arkansased.gov/divisions/learning-services/curriculum-and-instruction/curriculum-framework-documents/fine-arts-new-courses-valid-july-1-2015>.

⁵¹ *2014 Music Standards EUs, EQs, Definitions* (Reston, VA: National Association for Music Education, 2014), accessed January 16, 2017, <http://www.nafme.org/wp-content/files/2014/06/Core-Music-Standards-EUs-EQs-Definitions.pdf>.

⁵² James R. Austin, “Comprehensive Musicianship Research: Implications for Addressing the National Standards in Music Ensemble Classes,” *Update: Applications of Research in Music Education* 17, no. 1 (March 1998): 25, accessed November 1, 2014, <https://doi.org/10.1177/875512339801700106>.

works for school ensembles and continued to develop music composition skills in public school youth. One of the outcomes of this project was the Northwestern Seminar on Comprehensive Musicianship, in which music educators, composers, theorists, and musicologists discussed the overhaul of the undergraduate music curriculum.⁵³ The Northwestern Seminar established the following aims for a comprehensive musicianship curriculum:

- (a) To directly relate each component of basic music studies to one or more components; for example, theory to history, or ear training to analysis, writing, performance, sightsinging, and conducting.
- (b) To use materials illustrating techniques and styles from all periods and types of musical repertoire to establish a relationship between the music being written today and that of the past.
- (c) To devise a continuity between a course on one level and those preceding and following it. This articulation on all levels from preschool through college is a responsibility shared both by educational and by musical interests.
- (d) To help the student develop self-direction, exercise imagination, and sharpen critical judgment in a broad perspective of music.
- (e) To enable the student to generalize from particulars, and to deduce particulars from generalizations.⁵⁴

Repertoire-Based Curriculum

Designing learning outcomes around repertoire (rather than a succession of musical literacy concepts or technical skills) is common in ensemble-based classes. Many band directors rely upon the graded repertoire lists for state associations' large ensemble assessments to plan their curriculum. Some band directors rely upon the lesson plans included in the *Teaching Music through Performance in Band* series. The *Teaching Music through Performance* series is similar to the repertoire-based Comprehensive Musicianship through Performance (CMP) philosophy.

⁵³ Laura K. Sindberg, *Just Good Teaching: Comprehensive Musicianship through Performance in Theory and Practice* (Lanham, MD: Rowman and Littlefield Education, 2012), 61-62.

⁵⁴ Norman Dello Joio et al., "The Contemporary Music Project for Creativity in Music Education," *Music Educators Journal* 54, no. 7 (1968): 61, accessed April 4, 2018, <http://www.jstor.org.ezproxy.memphis.edu/stable/3391245>.

As an outgrowth of the Comprehensive Musicianship movement, CMP was developed by the Wisconsin Music Educators Association as a way to teach “musical understanding” through the performance repertoire itself.⁵⁵ Most of the resources available through the Wisconsin CMP project are for orchestra, band, and choir directors; however, some lesson plans are available for studio teachers. Unlike the *Teaching Music through Performance* lesson plans, these lesson plans provide not only historical background, formal/theoretical analysis, and teaching strategies for technical skills, but teaching strategies and suggested assessments for knowledge (music theory/literacy/history) and affective (musical expression) outcomes as well.⁵⁶

Method Books

The choice of beginning band method book is often more influential on curriculum at the junior high level than the ADE Curriculum Framework or performance repertoire. Tracy Heavner’s 1995 dissertation, “An Analysis of Beginning Band Method Books for Principles of Comprehensive Musicianship,” examined six method books to determine to what degree each book integrated the following Comprehensive Musicianship components. Heavner found that:

1. All method books contained all of the CM concepts (timbre, rhythm, harmony, form, melody, tonality, and texture).
2. Only two method books (*Standard of Excellence* and *Essential Elements*) contained all of the CM content (music theory, music history, music literature/style, ear training, composition techniques, improvisation techniques, performance practices, conducting practices, and music aesthetics).
3. Only two method books (*Standard of Excellence* and *Essential Elements*) contained all of the CM activities (performing, creating, conducting, analytical listening, and discussing).

⁵⁵ Wisconsin Music Educators Association, “Background of the Wisconsin Comprehensive Musicianship through Performance Project (est. 1977),” Wisconsin Music Educators Association, accessed July 7, 2017, http://wmeamusic.org/files/2016/03/CMP_Background-Wis.pdf.

⁵⁶ Cornelia Watkins, “CMP Teaching Plan: The Swan,” Wisconsin Music Educators Association, accessed July 7, 2017, http://wmeamusic.org/files/2016/03/CMPtp2009_Studio_TheSwan.pdf.

4. Three method books (*Standard of Excellence*, *Essential Elements*, and *Sound Spectacular*) contained all of the CM instructional literature categories (Western Art: 20th century, Romantic, Classical, Baroque, Renaissance, Medieval; Western: folk, traditional, jazz, pop, rock, sacred/spiritual; and Eastern/African: folk, traditional, sacred/spiritual).
5. Only one method book (*Standard of Excellence*) contained all of the CM evaluation techniques (descriptive, performing, creative, and attitude).⁵⁷

Supplemental Music Theory and Rhythm Curriculum Materials

Many directors use supplemental theory workbooks, such as *Five Minute Theory* or the music theory and history workbook that accompanies the *Standard of Excellence* method book.⁵⁸ Eric Harris examined several supplemental music theory method books in his 2006 dissertation, “Teaching Music Theory in the Traditional Wind Band Rehearsal.”⁵⁹ Harris compared each series with the theory pedagogy suggestions in Michael Rogers’s *Teaching Approaches in Music Theory: An Overview of Pedagogical Philosophies*. His research resulted in the creation of three comprehensive music theory workbooks designed to be used in the junior high and high school band classroom, *Fundamentals of Music Theory for the Windband Student*.⁶⁰ The workbooks are visually appealing and comprehensive in their approach to written music theory skills, but they lack aural skills exercises and repertoire-based application.

⁵⁷ Tracy Lee Heavner, “An Analysis of Beginning Band Method Books for Principles of Comprehensive Musicianship” (DME diss., University of Northern Colorado, 1995), 40, 141-45, accessed December 28, 2017, ProQuest Dissertations and Theses.

⁵⁸ Mark Wessels, *Five Minute Theory* (Desoto, TX: Mark Wessels Publications, 1998); Chuck Elledge, Jane Yarbrough, and Bruce Pearson, *Standard of Excellence Music Theory and History Workbook* (San Diego: Neil A. Kjos Music, 1993).

⁵⁹ Eric Lynn Harris, “Teaching Music Theory in the Traditional Wind Band Rehearsal: A Rationale, Survey of Materials, and Recommendations” (PhD diss., University of Southern Mississippi, 2006), accessed March 2, 2016, ProQuest Dissertations and Theses.

⁶⁰ Eric Lynn Harris, *Fundamentals of Music Theory for the Windband Student* (Huntersville, NC: North Land Music Publishers, 2005).

One tool used in many Arkansas classrooms is the multimedia resource “Rhythm Bee.”⁶¹ Rhythms flash across a screen—much like the Controlled Reader method in literacy classes.⁶² Many band directors adopt rhythm solmization (counting) systems, such as the “1-e-&a,” “ta-ka-di-mi,” and “1-ti-te-ta” approaches. Harris’s dissertation includes a thorough description of all of these systems.⁶³ Rhythmic accuracy improves with the consistent use of a rhythm solmization system, but no system has been shown to be superior to another.⁶⁴

Traditional approaches to rhythm-reading in beginning band method books introduce rhythms based on duration through notation (whole note, then half note, then quarter note, etc.). The concept of meter is introduced later and initially limited to the simple meter time signatures of 4/4, 2/4, and 3/4. In their comparison of method books, Kie Watkins and Amanda Mitchell found that compound meter is only mentioned in five method books: *The Habits of Musicianship* (2011); *Jump Right In* (2000); *Do It! Play in Band* (1997); *Flute 101: Mastering the Basics* (2010); and *Rubank Elementary Method* (1934).⁶⁵

⁶¹ A. N. Buzzy Green, “Introduction to Rhythm Bee” (YouTube video), December 9, 2015, accessed January 27, 2017, <https://youtu.be/jQNNefy7PdU>.

⁶² Neil A. McDowell, “The Effectiveness of the Controlled Reader in Developing Reading Rate, Comprehension and Vocabulary as Opposed to the Regular Method of Teaching Reading,” *The Journal of Experimental Education* 32, no. 4 (Summer 1964): 363-69.

⁶³ Tammy Renee Fust, “Syllable Systems: Four Students’ Experiences in Learning Rhythm” (MME thesis, University of Kentucky, 2001), 43, accessed August 21, 2017, ProQuest Dissertations and Theses; Todd Philip Howell, “The Effects of Two Approaches to Rhythm Study on the Sight-Reading Proficiency of Secondary Wind Instrumentalists” (PhD diss., Auburn University, 2016), 91, accessed February 16, 2018, ProQuest Dissertations and Theses.

⁶⁴ Harris, “Teaching Music Theory in the Traditional Wind Band Rehearsal,” 34-37.

⁶⁵ Kie Watkins, “An Analysis of Select Beginning Band Method Books and the Level to which They Address the National Standards for Music Education” (PhD diss., Ohio State University, 2011), accessed March 23, 2018, ProQuest Dissertations and Theses; Amanda Mitchell, “Teaching Rhythm: A Comparative Study of Beginning Band and Solo Flute Method Books” (DMA diss., University of North Carolina at Greensboro, 2017), 18-19, accessed March 20, 2018, ProQuest Dissertations and Theses; Robert A. Duke and James L. Byo, “Introductory Text,” *The Habits of Musicianship: A Radical Approach to Beginning Band* (Austin: Robert A. Duke and James L. Byo, 2011), 6, accessed March 23, 2018, <https://cml.music.utexas.edu/assets/pdf/habits/Introductory-Text.pdf>.

Music Learning Theory

Edwin Gordon's Music Learning Theory promotes the "sound before sign" philosophy, urging teachers to emphasize audiation before attempting to teach notation reading, and his rhythm activities reflect this approach. His learning sequence activities are designed to build musical literacy skills in the first five to ten minutes of a band class.⁶⁶ Gordon introduces the concept of simple versus compound meter first and then introduces rhythm patterns through a rhythm solmization (counting) system before introducing notation; thus, rhythmic patterns are identified by their sound rather than their notation.⁶⁷ His other sequences of musicianship skills (e.g., pitch, improvisation, analysis) are introduced in the same way—the student experiences the aural concept before the notation.

GERMS Model of Musical Expression

Background

Many students regard musical expression as an innate skill that cannot be taught.⁶⁸ Jessika Karlsson and Patrik Juslin found that teachers do teach musical expression but tended to "focus more on helping the student to *dare* to play expressively than on explaining *how* the expressive playing might be accomplished."⁶⁹ Brenda Brenner and Katherine Strand found that

⁶⁶ Gordon, *Learning Sequences in Music*, 300.

⁶⁷ Edwin E. Gordon, *Rhythm: Contrasting the Implications of Audiation and Notation*, 2nd ed. (Chicago, GIA Publications, 2009).

⁶⁸ Erik Lindstrom et al., "Expressivity Comes from Within Your Soul': A Questionnaire Study of Music Students' Perspectives on Expressivity," *Research Studies in Music Education* 21, no. 1 (June 2003): 23-47, accessed January 15, 2016, <https://doi.org/10.1177/1321103X030200010201>.

⁶⁹ Jessika Karlsson and Patrik N. Juslin, "Musical Expression: An Observational Study of Instrumental Teaching," *Psychology of Music* 36, no. 3 (2008), accessed January 4, 2016, <http://dx.doi.org/10.1177/0305735607086040>.

most studio teachers do teach musical expression skills but only in the context of addressing technical skills.⁷⁰

When music teachers do attempt to teach expression, they typically use modeling (e.g., demonstration through singing, playing on one's instrument or playing a recording of another's performance), metaphors (e.g., verbally or nonverbally expressing extramusical imagery), and concrete musical instruction (e.g., verbal directions to manipulate dynamics, tempo, timbre, etc.). Modeling an optimal performance can be an effective means for teaching a student to replicate a performance exactly; however, its usage alone appears to be ineffective in synthesizing the student's ability to apply expressive elements to other compositions or musical situations.⁷¹ Both modeling and using imagery often result in teacher feedback that is non-specific, such as "yes, that's good" or "no, that's not it," which provides little information for reflection and future application.⁷² Brian Gibbs's study concluded that most pedagogues believe that musical expression should be taught using analysis/interpretation via concrete musical instruction and phrasing skills demonstrated through modeling by expert performers.⁷³

⁷⁰ Brenda Brenner and Katherine Strand, "A Case Study of Teaching Musical Expression to Young Performers," *Journal of Research in Music Education* 61, no. 1 (April 2013): 95, accessed December 25, 2017, <https://doi.org/10.1177/0022429412474826>.

⁷¹ Richard Pamcutt and Gary McPherson, eds., *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning* (Oxford: Oxford University Press, 2002), 99-100, Kindle.

⁷² Robert H. Woody, "The Effect of Various Instructional Conditions on Expressive Music Performance," *Journal of Research in Music Education* 54, no. 1 (Spring 2006): 21-36, accessed December 15, 2015, <http://www.jstor.org/stable/3653453>.

⁷³ Gibbs, "Pedagogy for Musical Expression."

Generative Rules

Patrik Juslin proposed the GERMS model of musical expression in order to demonstrate that musical expression can be measurable, and thus that it can be taught in a systematic way.⁷⁴ The GERMS model is an outgrowth of a theory that was modeled after Noam Chomsky's generative linguistic theory developed in the 1960s. The "generative theory" in music states that musical expression can be reduced to a series of measurable deviations from a score or established performance and codified into a set of rules based on musical structure and style.⁷⁵ In 1991, Anders Friberg expanded upon these "generative rules" in order to imitate human expressive devices through computer-generated music. These expressive devices included manipulation of sound level, interonset interval (timing between the beginning of one pitch to the beginning of the next pitch), offset to onset duration (timing between the ending of one pitch to the beginning of the next pitch), vibrato amplitude, and deviation from equal temperament in cents. The researchers were able to define specific generative rules that communicate musical structure across multiple styles.⁷⁶ Some of these generative rules using the manipulation of dynamics, timing, vibrato, and intonation are:

- "high-loud" indicated that performers typically increase dynamics when ascending in pitch,
- "melodic-intonation" indicated that performers use a tuning scale similar to Pythagorean tuning with sharp leading tones,

⁷⁴ Patrik N. Juslin, "Five Facets of Musical Expression: A Psychologist's Perspective on Music Performance," *Psychology of Music* 31, no. 3 (Summer 2003): 281-83, accessed January 2, 2015, <https://doi.org/10.1177/03057356030313003>.

⁷⁵ Eric Clarke, "Expression in Performance: Generativity, Perception, and Semiosis," in *The Practice of Performance: Studies in Musical Interpretation*, ed. John Rink (Cambridge: Cambridge University Press, 1995), 21-22.

⁷⁶ Anders Friberg, "Generative Rules for Music Performance: A Formal Description of a Rule System," *Computer Music Journal* 15, no. 2 (Summer 1991): 56-71; Anders Friberg, Vittorio Colombo, Lars Frydén, and Johan Sundberg, "Generating Musical Performances with Director Musices," *Computer Music Journal* 24, no. 3 (Autumn 2000): 24-25, accessed December 15, 2015, <https://doi.org/10.1162/014892600559407>.

- “phrase-arch” indicated that performers increase dynamics and tempo when approaching the middle of an arch-shaped phrase and decrease dynamics and tempo when approaching the end of the phrase, and
- “phrase-articulation” indicated that performers typically lengthen the last note of a phrase or subphrase and insert a micropause before beginning the next grouping.⁷⁷

Emotional Expression

In 2006, Anders Friberg, along with Jessika Karlsson, Patrik Juslin, Erik Lindström, and Erwin Schoonderwaldt, created the computer program Feel-ME (Feedback-learning of Musical Expression) to analyze expressive devices (tempo, loudness, timbre, articulation, attack) in human performance in order to generate cognitive feedback. The program was shown to be more successful in improving emotional communication skills than verbal teacher feedback; however, 75% of the participants in the study were reluctant to consider it a viable teaching tool as they deemed receiving expression advice from a computer too impersonal. Although the program has not been adopted by mainstream teachers, the schema it generated can be used for cognitive feedback in the teaching of emotional expression. The schema can be found in Karlsson’s dissertation “A Novel Approach to Teaching Emotional Expression in Music Performance.”⁷⁸

Emotional communication cues were applied to passages in common flute repertoire in Karen McLaughlin Large’s dissertation “Affective Responses to Music: A Flutist’s Perspective.”⁷⁹ Using the schema found in Karlsson’s dissertation and David McGill’s model for

⁷⁷ Friberg, Friberg, Anders, Vittorio Colombo, Lars Frydén, and Johan Sundberg, “Generating Musical Performances with Director Musices,” *Computer Music Journal* 24, no. 3 (Autumn 2000): 25, accessed December 15, 2015, <https://doi.org/10.1162/014892600559407>.

⁷⁸ Jessika Karlsson, “A Novel Approach to Teaching Emotional Expression in Music Performance” (PhD diss., Uppsala University, 2008), 18, accessed December 19, 2015, ProQuest Dissertations and Theses.

⁷⁹ Karen McLaughlin Large, “Affective Responses to Music: A Flutist’s Perspective” (DMA diss., Florida State University, 2010), accessed March 22, 2017, ProQuest Dissertations and Theses.

emotional expression found in *Sound in Motion: A Performer's Guide to Greater Musical Expression*, Large polled four flute professors and twenty-three undergraduate and graduate music majors on their perceived emotional response to recorded passages from standard flute repertoire that she considered “emotionally-charged.” Large’s research bridges the gap between performer and theorist and provides suggestions for application to the teaching of musical expression beyond modeling.⁸⁰

Motion Principles

Young children often use movement, rather than words, to express the meaning of music, and older students can benefit from similar activities that encourage gesturing to convey musical meaning.⁸¹ The approach to movement designed by Émile Jaques-Dalcroze can strengthen skills relating to tempo and rhythm and to the understanding of expressive gesture in beginning and advanced students.⁸² Low sight-reading scores and musical “stuttering,” in which performers hesitate or repeat passages and disrupt steady tempo, are often associated with low rhythmic accuracy scores. For these students, body movement exercises appear to have a substantial effect on the improvement of rhythmic accuracy.⁸³

⁸⁰ David McGill, *Sound in Motion: A Performer's Guide to Greater Musical Expression* (Bloomington, IN: Indiana University Press, 2007).

⁸¹ Jane W. Davidson, Stephanie E. Pitts, and Jorge Salgado Correia, “Reconciling Technical and Expressive Elements in Musical Instrument Teaching: Working with Children,” *The Journal of Aesthetic Education* 35, no. 3 (Autumn 2001): 51-62, accessed January 11, 2016, <http://www.jstor.org/stable/3333609>.

⁸² Jane W. Davidson and Jorge Salgado Correia, “Body Movement,” in *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning*, Richard Parncutt and Gary E. McPherson, eds. (Oxford: Oxford University Press, 2002), 245-46, Kindle.

⁸³ J. David Boyle, “The Effect of Prescribed Rhythmical Movements on the Ability to Read Music at Sight,” *Journal of Research in Music Education* 18, no. 4 (December 1970): 307, 318, accessed April 4, 2018, <http://www.jstor.org/stable/3344498>.

Stylistic Unexpectedness

Stylistic unexpectedness relating to timing can best be explained by the concepts found in David Huron's *Sweet Anticipation: Music and the Psychology of Expectation*. Huron, expanding on Leonard Meyer's research in his epic 1956 treatise *Emotion and Meaning in Music*, theorizes that these expressive variations performers employ are used to exploit the pleasure-inducing capacity of prediction in listeners. He compares the pleasure we derive from music to the pleasure we seek in thrilling endeavors like riding a roller coaster or skydiving.⁸⁴ We inherently know that we are safe, yet the element of potential danger generates a state of arousal that induces excitement and relief when the event is over, and our prediction of safety is reinforced. Music, with its capacity for unexpected loud and arresting events, exploits this pleasure response.

The way these events are approached (often by delaying their arrival) often increases the emotional impact of the event. Huron compares this to the technique of elongating a pivotal scene in an action movie. We expect the result of the high-speed car chase or intense altercation to end positively for our protagonist; but often filmmakers will delay the resolution in order to increase tension and arousal so that the inevitable resolution is all the more pleasurable because of the tension we have been subjected to prior to it. Composers delay resolution through the inclusion of chromatic chords or distant modulations that prolong the arrival point of Western music's ultimate moment of respite—the authentic cadence. Performers delay resolution by manipulating the timing of the arrival by slowing down into the cadence, allowing the tension to be experienced slightly longer than notated. When the inevitable release finally arrives, our

⁸⁴ David Huron, *Sweet Anticipation: Music and the Psychology of Expectation* (Cambridge: Massachusetts Institute of Technology Press, 2006), 36.

arousal level has been increased and the emotional impact of the event is all the more pleasurable because of the tension we had to endure to reach it.⁸⁵

GERMS Applications

Few attempts to employ the model in education have been made to date. Patricia George and Phyllis Louke's beginning method book *Flute 101: Mastering the Basics* includes several of the generative rules and emotional expression schema in a list of phrasing rules that that are referred to numerically throughout the musical examples in the book.⁸⁶ Shawn Michael Condon's thesis "Creating a Musically Expressive Performance: A Study of Vocalists' Use of Emotions in Performance Preparation" is the only published attempt thus far to provide further suggestions for incorporating the GERMS model into performance-based education courses.⁸⁷

Conclusion

No standardized definitions of "musical literacy," "musicianship," or "musical expression" exist, thus creating confusion and inconsistency in curriculum guides and performance evaluation instruments. Recent studies that examine the honor band selection process throughout the United States are needed. More studies evaluating beginning band method books are needed, especially ones that examine the incorporation of the updated National Core Arts Standards. Patrik Juslin recommended that the GERMS model for musical expression be incorporated into the music education curriculum in 2003, yet his model remains to be a neglected pedagogical area in common curricular materials.

⁸⁵ Ibid., 317.

⁸⁶ Patricia George and Phyllis Louke, *Flute 101: Mastering the Basics* (King of Prussia, PA: Theodore Presser Company, 2010), 80-81.

⁸⁷ Shawn Michael Condon, "Creating a Musically Expressive Performance: A Study of Vocalists' Use of Emotions in Performance Preparation" (master's thesis, University of Jyväskylä, 2015), accessed December 19, 2015, ProQuest Dissertations and Theses.

CHAPTER 3

METHODOLOGY

Background

All-region and all-state honor band membership in Arkansas is determined by live, blind audition. The audition consists of prepared etudes, sight-reading, and three memorized scales. At all-region honor band auditions, one to two judges per instrument typically evaluate students. At the all-state level, five judges are used in an “Olympic scoring system,” in which the highest- and lowest-scoring judge’s points are omitted from the final score.¹ The prepared etudes are announced through the “All-Region/All-State Tryout Material” packet released by the Arkansas School Band and Orchestra Association (ASBOA). This is a three-year rotating list of scales, technical exercises, and etudes used for all-region and all-state honor band auditions. Each annual “set” of flute material is selected from method books and consists of three etudes and two technical exercises (e.g., arpeggios, thirds).² The three-year rotation increases adjudicator familiarity and reliability with the material.³ Senior high students must prepare all major and natural minor scales, in addition to a two-octave chromatic scale. Junior high students prepare only C, G, D, F, C, B-flat, E-flat, A-flat, and D-flat major scales, in addition to a two-octave chromatic scale and A, E, D, G, and C minor scales.⁴

¹ Arkansas School Band and Orchestra Association (ASBOA), “Constitution and Bylaws and Handbook for Directors: Rules and Regulations for Student Participation” (Russellville, AR: Arkansas School Band and Orchestra Association, 2017), 16, accessed October 1, 2017, <http://www.asboa.org/Constitution/W2017%20CONSTITUTIONREV.pdf>.

² Arkansas School Band and Orchestra Association, “All-Region/All-State Audition Material” (Russellville, AR: Arkansas School Band and Orchestra Association, 2017), accessed October 1, 2017, <http://www.asboa.org/ClinicMaterials/2017%20Revision/Revision2017.html>.

³ Emery E. Alford, “A Model for All-State Percussion Auditions,” *Music Educators Journal* 71, no. 9 (May 1985), 37-38, accessed March 20, 2018, <https://doi.org/10.2307/3396520>.

⁴ ASBOA, “All-Region/All-State Audition Material.”

Participants and Equipment

Thirty-two junior high flute students (entering grades seven through nine) attended a band camp at a liberal arts college in Arkansas in 2016. The camp typically attracts male and female students from mostly rural and small- to medium-sized band programs. The students usually do not take private lessons on their instrument. All students in this study had completed at least one year of beginning band prior to the camp. Participation in the study was voluntary. Invitations to participate in the study were emailed to each student and their parents using the email addresses included on their band camp applications. Consent and assent forms were attached to the email and made available at the camp registration.⁵ Nine junior high students ($N = 9$) participated in the study.

All students participated in blind auditions at the commencement of the band camp in order to determine chair placement in the camp ensembles. Audio recordings of the participants were collected during the audition process using the recording application GarageBand on an iPad with a Blue Snowball USB microphone placed on a table approximately four feet in front of the student's music stand. A chalkboard was placed between the music stand and the table used for the recording equipment and the audition judges to protect the students' anonymity. Each recording was assigned a random letter and edited to remove any speaking by the participants or audition room judges.

⁵ See Appendix A for IRB forms, including consent and assent forms.

Materials

Audition Material

The audition consisted of the performance of two prepared etude excerpts and one unprepared sight-reading excerpt.⁶ Band camps offered by Arkansas colleges often choose two of the ASBOA etudes for their summer auditions and then post the audition information on their camp website during the spring before the summer camp commences. This study's band camp director selected the first half of two of the ASBOA Set III junior high flute etudes. The judging committee reduced the etudes and announced these audition cuts to the students thirty minutes before the first scheduled audition time. In addition, the committee also provided a short sight-reading excerpt taken from an etude in Frans Vester's *125 Easy Classical Studies for Flute*. Students were given twenty seconds to study the sight-reading material in the audition room. The specific audition excerpts are indicated by red brackets in Figure 3. The excerpts consist of a transcription of "The Swan" from Camille Saint-Saëns's *Carnival of the Animals* and a duet by Jean-Louis Tulou, in addition to a short sight-reading excerpt in triple meter by Wilhelm Popp. The students are instructed to play the top line only of the duet. The excerpts were scanned directly from the source material in order to display the exact notation the participants encountered.

⁶ Arkansas School Band and Orchestra Association, "All-Region/All-State Audition Material" (Russellville, AR: Arkansas School Band and Orchestra Association, 2017), accessed October 1, 2017, <http://www.asboa.org/ClinicMaterials/2017%20Revision/Revision2017.html>.

Figure 3. Junior high audition excerpts, with cuts indicated by red brackets. Reprinted with permission from Himie Voxman, ed., *Advanced Method for Flute*, vol. 1 (Chicago: Rubank, 1940), 23, 67; Frans Vester, ed., *125 Easy Classical Studies for Flute* (London: Universal Edition, 1976), 5.

Excerpt 1

Adagio

1

p

This excerpt consists of three staves of music in a 3/4 time signature with a key signature of one flat. The first staff begins with a measure rest followed by a series of quarter notes. The second and third staves contain more complex rhythmic patterns, including eighth and sixteenth notes. Red brackets are placed at the end of the second and third staves to indicate where the excerpt should be cut.

Excerpt 2

Tempo di bolero (moderato)

5

TULOU

p

This excerpt is a piano accompaniment for a piece titled 'Tulou'. It features a 3/4 time signature and a key signature of one flat. The score is written for two staves, with the right hand playing a melodic line and the left hand providing a harmonic accompaniment. Red brackets are placed at the end of the second and third staves to indicate where the excerpt should be cut.

Sight-reading

Allegro

17

POPP

f

This excerpt is a sight-reading exercise in a 3/4 time signature with a key signature of one flat. It is marked 'Allegro' and 'POPP'. The score consists of three staves. Red brackets are placed at the end of the first and second staves to indicate where the excerpt should be cut.

ADE Beginning Band Curriculum Framework

These etudes were analyzed through the lens of the Arkansas Department of Education (ADE) Fine Arts Beginning Band Curriculum Framework. The nine participants in this study were required to have completed seventh grade and at least two years of band; therefore, they should meet the student learning expectations established in Beginning Band III. The Beginning Band Curriculum Framework states “each level continues to address earlier Student Learning Expectations (SLEs) as needed;” thus, the expectation is that the curriculum is based upon a spiral-learning model, in which concepts are revisited and expanded as the curriculum progresses.⁷

Each strand contains broad “content standards”:

Creating

1. Students will generate and conceptualize artistic ideas and work.
2. Students will organize and develop artistic ideas and work.
3. Students will refine and complete artistic work.

Performing

4. Students will analyze, interpret, and select artistic work for presentation.
5. Students will develop and refine artistic work for presentation.
6. Students will convey meaning through the presentation of artistic work.

Responding

7. Students will perceive and analyze artistic work.
8. Students will interpret intent and meaning in artistic work.
9. Students will apply criteria to evaluate artistic work.

Connecting

10. Students will synthesize and relate knowledge and personal experiences to make art.
11. Students will relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.⁸

⁷ Arkansas Department of Education, “Beginning Band I-IV Fine Arts Curriculum Framework,” 1.

⁸ Arkansas Department of Education, “Curriculum Framework Documents/Fine Arts,” 1.

Each content standard is further divided into more specific student learning expectations (SLEs). The ADE recommends these SLEs should coordinate with two-semester courses in fifth grade (Beginning Band I) through eighth grade (Beginning Band IV).⁹ Many of the state’s band programs do not begin until sixth or seventh grade; thus, some of the curriculum may be reduced to one-semester courses.¹⁰ Each SLE is labeled according to its strand, content standard, and course level. For example, SLE P.5.BBI.2 is the second student learning expectation (SLE) taken from the fifth content standard under the performing strand for Beginning Band I. The performance-based SLEs for the four beginning band courses are presented in Table 1.

⁹ Arkansas Department of Education, “Beginning Band I-IV Fine Arts Curriculum Framework,” 1.

¹⁰ The decision to offer Beginning Band I in sixth or seventh grade rather than fifth grade appears to have no impact on long-term student performance; however, the late start can positively influence student retention in later grades. See: Linda A. Hartley, “Influence of Starting Grade and School Organization on Enrollment and Retention in Beginning Instrumental Music” *Journal of Research in Music Education* 44, no. 4 (December, 1996): 304-318, accessed March 19, 2018, <https://doi.org/10.2307/3345443>; Linda A. Hartley, “A Comparison of Music Performance Ratings between Eight-Grade Instrumental Music Students Who Began in Fifth Grade and Those Who Began in Sixth Grade” *Journal of Band Research* 26, no. 2 (Spring 1991): 66-71.

Table 1. Performance-based Student Learning Expectations in Beginning Band I-IV

Beginning Band I	Beginning Band II	Beginning Band III	Beginning Band IV
CR.2.BBI.2 Demonstrate basic movement to maintain a steady tempo	CR.2.BBII.2 Apply basic movement to maintain a steady tempo	CR.2.BBIII.2 Apply appropriate movement to maintain a steady tempo	CR.2.BBIV.2 Apply a variety of appropriate movements to maintain a steady tempo
P.4.BBI.1 Play, alone and with others, simple music in contrasting styles	P.4.BBII.1 Play basic music, alone and with others, in contrasting styles	P.4.BBIII.1 Play, alone and with others, intermediate music in contrasting styles	P.4.BBIV.2 Play graded literature alone and with others in contrasting styles
P.4.BBI.2 Sight-read simple music	P.4.BBII.2 Sight-read basic music	P.4.BBIII.2 Sight-read intermediate music	P.4.BBIV.2 Sight-read advanced music
P.5.BBI.2 Identify characteristic tone quality using proper elements <ul style="list-style-type: none"> • breath support • embouchure • hand position • posture 	P.5.BBII.2 Demonstrate characteristic tone quality using proper elements <ul style="list-style-type: none"> • breath support • embouchure • hand position • posture 	P.5.BBIII.2 Demonstrate characteristic tone quality using proper elements <ul style="list-style-type: none"> • breath support • embouchure • hand position • posture • vibrato when appropriate 	P.5.BBIV.2 Demonstrate characteristic tone quality at various dynamic levels using proper elements <ul style="list-style-type: none"> • breath support • embouchure • hand position • posture • vibrato when appropriate
P.5.BBI.1 Read basic articulation and dynamic symbols (e.g., accents, staccato, piano, forte)	P.5.BBII.1 Read complex articulation and dynamic symbols (e.g., accents, staccato, piano, forte, mezzo-forte, mezzo-piano)	P.5.BBIII.1 Read more complex articulation and dynamic symbols (e.g., accents, staccato, piano, forte, mezzo-forte, mezzo-piano, fortissimo, pianissimo, crescendo, decrescendo)	P.5.BBIV.1 Read increasingly complex articulation and dynamic symbols (e.g., accents, staccato, piano, forte, mezzo-forte, mezzo-piano, fortissimo, pianissimo, crescendo, decrescendo, tenuto, legato, sforzando, ritardando, cantabile, fermata)
P.5.BBI.3 Identify characteristics (e.g., sharp, flat) of proper intonation	P.5.BBII.3 Demonstrate proper intonation	P.5.BBIII.3 Employ proper intonation	P.5.BBIV.3 Employ proper intonation consistently at various dynamic levels
P.5.BBI.4 Play basic articulation patterns (e.g., tongue, slur)	P.5.BBII.4 Play written articulation patterns (e.g., tts, tstt, tsss)	P.5.BBIII.4 Play written articulation patterns (e.g., tts, tstt, tsss, ttst)	P.5.BBIV.4 Play written articulation patterns with increased tempo and accuracy (e.g., tts, tstt, tsss, ttst, tsts)
P.5.BBI.5 Read basic rhythms and meters <ul style="list-style-type: none"> • time signatures: 4/4, 3/4, 2/4, cut time, and common time • whole, half, quarter, eighth, and sixteenth notes • dotted quarter-eighth and eighth-sixteenth patterns 	P.5.BBII.5 Apply knowledge of rhythm and meter <ul style="list-style-type: none"> • time signatures: 4/4, 3/4, 2/4, cut time, and common time • whole, half, quarter, eighth, and sixteenth notes • dotted quarter-eighth and eighth-sixteenth patterns 	P.5.BBIII.5 Apply knowledge of rhythm and meter at a proficient level <ul style="list-style-type: none"> • internalizing beat • varied meters • intermediate rhythmic patterns (e.g., dotted eighth and sixteenth notes, syncopation, duplets, triplets) • meter changes 	P.5.BBIV.5 Apply knowledge of rhythm and meter precisely with excellence <ul style="list-style-type: none"> • internalizing beat • varied meters • more complex rhythmic patterns (e.g., dotted eighth and sixteenth notes, syncopation, duplets, triplets) • meter changes

Note: The ADE indicates that “all items in a bulleted list are required to be taught.”

Table 1, continued

Table 1 (continued)

Beginning Band I	Beginning Band II	Beginning Band III	Beginning Band IV
<p>P.5.BBI.7 Play scales in concert pitch</p> <ul style="list-style-type: none"> • B-flat Major • E-flat Major • F Major • chromatic (one octave, quarter notes) 	<p>P.5.BBII.7 Play scales in concert pitch</p> <ul style="list-style-type: none"> • B-flat Major • G Natural Minor • E-flat Major • C Natural Minor • F Major • D Natural Minor • chromatic (one octave, quarter notes) 	<p>P.5.BBIII.7 Play scales in concert pitch</p> <ul style="list-style-type: none"> • B-flat Major • G Natural Minor • E-flat Major • C Natural Minor • F Major • D Natural Minor • A-flat Major • F Natural Minor • C Major • A Natural Minor • chromatic (one octave, eighth notes) 	<p>P.5.BBIV.7 Play scales in concert pitch</p> <ul style="list-style-type: none"> • B-flat Major • G Natural Minor • E-flat Major • C Natural Minor • F Major • D Natural Minor • A-flat Major • F Natural Minor • C Major • A Natural Minor • G Major • E Natural Minor • D Major • D-flat Major • chromatic (one octave, triplet eighth notes)
<p>P.5.BBI.8 Rehearse proper warm-up procedure (e.g., breathing techniques, long-tones, flexibility skills, octaves, arpeggios, thirds)</p>	<p>P.5.BBII.8 Demonstrate proper warm-up procedure</p>	<p>P.5.BBIII.8 Apply proper warm-up procedure (e.g., breathing techniques)</p>	<p>P.5.BBIV.8 Perform proper warm-up procedure</p>
<p>P.5.BBI.9 Rehearse correct practice procedures (e.g., warm-up, troubleshooting, problem solving, counting strategies, rhythm techniques to increase skill and speed level)</p>	<p>P.5.BBII.9 Demonstrate correct practice procedures</p>	<p>P.5.BBIII.9 Demonstrate correct practice procedures consistently</p>	<p>P.5.BBIV.9 Employ correct practice procedures</p>
<p>P.6.BBI.2 Demonstrate appropriate dynamics through basic repertoire</p>	<p>P.6.BBII.2 Demonstrate appropriate dynamics through more complex repertoire</p>	<p>P.6.BBIII.2 Demonstrate expressive elements (texture, dynamics, timbre, tempo) through increasingly complex repertoire</p>	<p>P.6.BBIV.2 Convey composer’s expressive intent through increasingly complex repertoire</p>
<p>R.6.BBI.1 Follow basic conducting patterns</p>	<p>R.6.BBII.1 Follow basic conducting patterns and gestures</p>	<p>R.6.BBIII.1 Follow conducting patterns and gestures including preparatory beat and various tempi and meters</p>	<p>R.6.BBIV.1 Follow conducting patterns and gestures including preparatory beat, various tempi and meters, tempo and meter changes, rubato</p>
<p>R.9.BBI.1 Identify characteristics of instrumental performances</p>	<p>R.9.BBII.1 Identify characteristics of exemplary instrumental performances</p>	<p>R.9.BBIII.1 Identify criteria for evaluating instrumental performances</p>	<p>R.9.BBIV.1 Evaluate instrumental performances using established criteria</p>

Source: Data adapted from Arkansas Department of Education, “Beginning Band I-IV Fine Arts Curriculum Framework” (Little Rock, AR: Arkansas Department of Education, 2014), 1, 3, 5-10, 13, 16, accessed March 9, 2018, http://www.arkansased.gov/public/userfiles/Learning_Services/Curriculum%20and%20Instruction/Frameworks/Fine_Arts/BeginningBandI_IVRevised2014.pdf.

The ADE standards provide no suggestions for recommended repertoire. Directors of these school ensembles are often limited in repertoire choice by another regulatory state organization that adjudicates student performance. ASBOA sponsors two large ensemble formal assessments: one in the fall semester for marching band and one in the spring semester for concert band. There is no repertoire requirement for marching band assessments, and ensembles are adjudicated on music, marching performance, and the “overall effect” of the performance.¹¹ The concert band assessment requires directors to select repertoire (usually three contrasting selections, including a march) for annual assessment from a six-level graded list based on school enrollment size and average grade level of the student members within each ensemble.¹² Ensembles are adjudicated on “fundamental technique” (tone quality, intonation, articulation/bowing, rhythm/precision/tempo, and note accuracy/technique) and “musical effect” (interpretation/style, balance and blend, phrasing and expression, and dynamics).¹³

Overall Level of Difficulty for Repertoire

SLEs P.4.BBI.1 through P.4.BBIV.1 address solo and ensemble repertoire selection, while the next SLEs (P.4.BBI.2 through P.4.BBIV.2) address sight-reading repertoire selection. As the student progresses through each of the Beginning Band courses, the repertoire is expected to increase in difficulty, but the language is intentionally kept vague (“simple” in Beginning

¹¹ Arkansas School Band and Orchestra Association, “ASBOA Marching Band Scoring Rubric” (Russellville, AR: Arkansas School Band and Orchestra Association, 2015), accessed March 9, 2018, <http://www.asboa.org/Documents/Rubrics%20Adjudication%20Sheets/ASBOA%20Marching%20Band%20Scoring%20Rubric.pdf>.

¹² Arkansas School Band and Orchestra Association, “Required Music List” (Russellville, AR: Arkansas School Band and Orchestra Association, 2016), accessed March 9, 2018, <http://www.asboa.org/Required%20Music/ConcertList2004Revision.htm>.

¹³ Arkansas School Band and Orchestra Association, “ASBOA Concert Scoring Rubric” (Russellville, AR: Arkansas School Band and Orchestra Association, 2017), accessed March 9, 2018, <http://www.asboa.org/Documents/Concert/ConcertRubricREV2017FF.pdf>.

Band I to “advanced” in Beginning Band IV). The language describing repertoire difficulty in the Beginning Band Curriculum Framework is extremely vague. The document does not provide any characteristics to describe simple, basic, or intermediate music. P.4.BBIV.1 mentions “graded literature,” which the Curriculum Framework defines as “music distinguished by progressive levels of difficulty, usually 1 through 6, used by music publishers and/or state music education organizations.”¹⁴ ASBOA provides a graded list for solo and ensemble repertoire but does not grade the all-state etudes on level of difficulty. Table 2 presents the characteristics found in each of the etudes included in this study and their associated grade level, using the criteria found in the graded lists produced by ADE and ASBOA.

¹⁴ Arkansas Department of Education, “Curriculum Framework Documents/Fine Arts,” 16.

Table 2. Suggested difficulty level of the audition excerpts based on characteristic descriptors established by the Arkansas Department of Education and the Arkansas School Band and Orchestra Association

	Tulou	Saint-Saëns	Popp
Rhythm	ADE Beginning Band IV ASBOA Grade 4 <ul style="list-style-type: none"> dotted eighth sixteenth rhythms syncopated rhythms triplets 	ADE Beginning Band II ASBOA Grade 3 <ul style="list-style-type: none"> dotted quarter eighth note patterns 	ADE Beginning Band I ASBOA Grade 1 <ul style="list-style-type: none"> quarter and eighth notes
Meter	ADE Beginning Band I ASBOA Grade 1 <ul style="list-style-type: none"> 3/4 	ADE Beginning Band III ASBOA Grade 4 <ul style="list-style-type: none"> 6/4 	ADE Beginning Band I ASBOA Grade 1 <ul style="list-style-type: none"> 3/4
Range/ Melodic Treatment^a	ASBOA Grade 3 <ul style="list-style-type: none"> D⁴-E⁶ some disjunct passages 	ASBOA Grade 3 <ul style="list-style-type: none"> G⁴-F⁶ mostly conjunct 	ASBOA Grade 1 <ul style="list-style-type: none"> G⁴-A⁵ mostly conjunct
Keys	ASBOA Grade 5 ADE Beginning Band IV <ul style="list-style-type: none"> A minor 	ASBOA Grade 1 ADE Beginning Band I <ul style="list-style-type: none"> B-flat major 	ASBOA Grade 1 ADE Beginning Band I <ul style="list-style-type: none"> F major
Articulation^b	ADE Beginning Band IV <ul style="list-style-type: none"> staccato accent complicated articulation patterns 	ADE Beginning Band II <ul style="list-style-type: none"> simple articulation patterns accent 	ADE Beginning Band II <ul style="list-style-type: none"> staccato simple articulation patterns
Dynamics	ADE Beginning Band IV ASBOA Grade 3 <ul style="list-style-type: none"> piano/forte crescendo/decrescendo 	ADE Beginning Band II ASBOA Grade 1 <ul style="list-style-type: none"> piano 	ADE Beginning Band I ASBOA Grade 1 <ul style="list-style-type: none"> forte
Interpretation / Expression	ADE Band III ASBOA Level 4 <ul style="list-style-type: none"> understanding and incorporating elements of style odd-length phrases 	ADE Beginning Band IV ASBOA Grade 3 <ul style="list-style-type: none"> use of rubato four measure phrases at a slow tempo extramusical expressive intent (depiction of swan) 	ADE Beginning Band I ASBOA Grade 1 <ul style="list-style-type: none"> predictable structure/form four measure phrases

Data adapted from Arkansas Department of Education, “Beginning Band I-IV Fine Arts Curriculum Framework” (Little Rock, AR: Arkansas Department of Education, 2014), accessed March 9, 2018,

http://www.arkansased.gov/public/userfiles/Learning_Services/Curriculum%20and%20Instruction/Frameworks/Fine_Arts/BeginningBandI_IVRevised2014.pdf; Arkansas School Band and Orchestra Association Music Materials Committee, “Request to Add a Selection to the Required List” (Russellville, AR: Arkansas Band and Orchestra Association, n.d.), 2-3, accessed March 10, 2018,

<http://www.asboa.org/Required%20Music/Request%20to%20Add%20Selection%20to%20List.pdf>

^a Range is not addressed in the ADE Beginning Band Curriculum Framework.

^b Articulation is not addressed in the ASBOA graded repertoire list.

Junior High Excerpt #1: Saint-Saëns

The first junior high excerpt is a transcription of “The Swan” from Camille Saint-Saëns’ *Carnival of the Animals*. The audition committee chose the second phrase (mm. 6-9) for the camp audition. This excerpt presents many challenges to junior high students. Most students do not understand that the excerpt is in compound meter since no compound meters besides 6/8 are introduced in SLE P.5.BBI.5 through P.5BBIV.5. They will also probably be confused by the beaming in the eighth measure. Students often fail to subdivide and to sustain longer durations in slow, lyrical selections; thus, the dotted half note in the seventh measure and the dotted quarter note in the eighth measure are likely to be problematic even though these rhythmic concepts are introduced in SLE P.5.BBIII.5.

One of the challenges of these auditions is playing excerpts that begin after the initial phrase. The student needs to think through the first phrase to play the second phrase effectively. There are no dynamic indications besides the *piano* at the beginning of the excerpt; however, an experienced performer would choose to add additional dynamic and other expressive elements to support the implied harmony as introduced in SLE P.6.BBIV.2. This second phrase begins parallel to the first phrase; however, the C-sharp heralds a secondary leading tone chord (vii^o/iii) that eventually cadences on the mediant in the ninth measure. Most students will not understand the harmonic implications of the C-sharp in the seventh measure and will likely fail to add any appropriate expressive devices. The passage is also an opportunity for expressive rubato, a concept introduced in SLE R.6.BBIV.1.

The students that I encounter in these masterclasses often have no access to private instruction and are not given recordings or study guides; however, they often seek aural models

through *SmartMusic*® or YouTube.¹⁵ SLE R.9BBII.1 states that students should be able to identify characteristics of exemplary performances. I expect that students attempt to imitate the rhythm and expressive devices of these models through rote learning. *SmartMusic*® includes this exact arrangement of “The Swan” in its selections from Rubank’s *Advanced Method*. No accompaniment is provided. *SmartMusic*® incorporates a playback feature of the solo line using a MIDI piano. The *SmartMusic*® file uses a default tempo of 62 beats per minute and is devoid of many expressive devices, including the variation of written articulation markings; thus, it is not particularly useful for rote learning beyond rhythmic imitation.

Yo-Yo Ma’s recording was the first available video on YouTube when searching “The Swan” (2016) and is an exemplary aural model. This recording includes several tempo variations, ranging from as slow as 60 beats per minute to as fast as 68 beats per minute. He gradually delays the onset of vibrato of the C-sharp in the seventh measure and then adds a slight accelerando in the eighth measure, only to soften and slacken the tempo on the resulting mediant pitch in the ninth measure.¹⁶

The first video to appear for a YouTube search of “The Swan flute” is a flute and piano MIDI recording. This recording, like the one found in *SmartMusic*®, provides no differentiation between the articulation markings in the score. The average tempo is 63 beats per minute, but the interonset interval (IOI) between the sixth and first beats is increased at the end of the first, second, fourth, fifth, and ninth measures making a very unbalanced and unnatural attempt at

¹⁵ Elizabeth Buck et al., “Preparing for College” compiled by Patricia George, Flute Talk, October 2016, accessed February 17, 2017, <http://theinstrumentalist.com/articles/FluteTalk/October-2016/Preparing-For-College/>.

¹⁶ Yo-Yo Ma and Kathryn Stott, “The Swan (Saint-Saëns)” (music video), posted August 5, 2015, accessed June 14, 2016, <https://youtu.be/3qrKjywjo7Q?t=34s>.

rubato. The MIDI flute employs a default vibrato of three pulses per beat that is barely perceptible.¹⁷

The next video, posted by Jay Lee, does not name the performer, but the vibrato depth and width is similar to James Galway's typical performance style. Although the approach is quite different than Yo-Yo Ma's performance, the recording is an excellent aural model as well. The average tempo is approximately 69 beats per minute, but a slight delay is inserted in the sixth measure on the fifth and sixth beats as the performer approaches the C-sharp in measure seven. Expressive tone color and dynamics are added in the fourth measure (crescendo), sixth and seventh measures (darkening of tone color and addition of crescendo into the E⁵ on the fourth beat), and eighth measure (crescendo into the F⁶ in the ninth measure).¹⁸

Marcel Moyse's recording is the third video found in this search. It does not incorporate as many expressive alterations as Yo-Yo Ma's, but still contains a slightly harder articulation and increased dynamic of the chromatic pitch in the seventh measure and a softening of the mediant pitch in the ninth measure. Moyse uses a fast, narrow vibrato that is most present on the opening quarter notes and the final tied dotted half note of each phrase.¹⁹ Although Moyse's recording is of historical importance, it is not an ideal candidate for an aural model in this setting, as the vibrato is faster and narrower than what is used in modern practice.

Some school band directors provide a series of instructional audio recordings featuring Carolyn Brown, Professor of Flute at the University of Central Arkansas. These recordings are

¹⁷ Sheetmusic2print, "Saint-Saens: Le Cygne – The Swan – Flute" (music video), posted June 16, 2012, accessed March 3, 2018, <https://youtu.be/L5zBWO2gts>.

¹⁸ Jay Lee, "Saint-Saens, The Swans (Flute)" (music video), posted February 6, 2011, accessed March 3, 2018, https://youtu.be/xi_fnLK-xao.

¹⁹ Marcel Moyse, "Marcel Moyse, Flute, Carnival of the Animals, The Swan" (music video), posted July 8, 2009, accessed June 14, 2016, <https://youtu.be/IouIrF4NZVo?t=30s>.

available for a small fee (\$15) via digital download on ViaMedia's website. Brown's recording of *The Swan* includes basic background information about the piece's origins and a reminder about lifting the left-hand index finger for D⁵ and E-flat⁵. Her recording that follows is beautifully performed, demonstrating arch phrase shape dynamics on the initial fragment (mm. 6-7), a slight tenuto on the E⁵ in the eighth measure, and a slight ritardando approaching the F⁶ in the ninth measure. The tempo varies between 66 and 72 beats per minute. Brown's vibrato averages four to five pulses per beat and slightly slows to three to four pulses per beat at the ends of phrases. She often delays the onset of vibrato to accentuate a particular note within a phrase, such as the B-flat⁴ in the sixth measure and the F⁶ in the ninth measure.²⁰

Junior High Excerpt #2: Tulou

Students are instructed to prepare the top line only for the duet by Jean-Louis Tulou. The audition committee chose the second phrase of the A section and the beginning of the B section (mm. 5-12). Although this excerpt uses a much more familiar time signature (simple triple meter), there are several rhythms involving syncopation and metric borrowing (triplet sixteenth notes) that will confound junior high students. The excerpt is in a key of one of the required ASBOA scales (A Minor) that is addressed in SLE P.5.BBIV.7; however, it includes several instances of the raised seventh scale degree. Since ASBOA requires only natural minor scales, students may be unfamiliar with the function of this pitch.

Tulou indicates dynamics that may be challenging for young flutists who have not mastered the necessary embouchure technique. Students are not expected to "demonstrate characteristic tone quality at various dynamic levels" until SLE P.5.BBIV.2. Junior high students

²⁰ Carolyn Brown, "Page 67 No. 1," JH Flute Set III, posted May 28, 2016, accessed January 16, 2018, (Conway: ViaMedia Professional Recordings, 2016), <http://www.viamediapro.com>, MP3.

will not likely be aware of the Spanish bolero dance style and its accompanying rhythms, as stylistic characteristics of specific genres are not introduced until Band III (eleventh grade).²¹

No YouTube or *SmartMusic*® aural models of this etude could be located; however, Brown’s instructional audio recording is an exemplary aural model that includes several stylistic suggestions. Brown’s first suggestion is regarding the articulation of the eighth-note C⁶ in measures one, three, five, and seven. Brown recommends keeping the eighth note staccato (as indicated in the first phrase) but not making it too short so that it becomes “too pecky or too hammered.” She recommends using an alternate fingering (lifting the right-hand pinky) for the E⁶ found in the third measure and being careful to distinguish between “duple and triple rhythms,” as in the pattern found at the end of the eighth measure.²²

Junior High Sight-reading Excerpt: Popp #17

The sight-reading excerpt taken from an etude by Wilhelm Popp found in *125 Easy Classical Studies*. The etude is in simple triple meter with no subdivisions smaller than 2 (eighth notes). It has a range of G⁴ to A⁵ and only one accidental (B-natural).

Evaluation Instrument

I initially evaluated these recordings using a modified version of the ASBOA Winds/Strings Audition Score Sheet (figure 4), as this is the rubric used to evaluate auditions at all-region and all-state events throughout Arkansas. Each judge may assign up to 406 points, with separate scores provided for scales (16 points each), tone (60 points), musical expression (40 points), prepared exercises (60 points each), and the following performance dimensions for

²¹ Arkansas Department of Education, “Band I-IV Fine Arts Curriculum Framework,” 1.

²² Carolyn Brown, “Page 23 5 (All—top line),” JH Flute Set III, posted May 28, 2016, accessed January 16, 2018, (Conway: ViaMedia Professional Recordings, 2016), <http://www.viamediapro.com>, MP3.

COMPOSITE

TOTAL Prepared
SR Scales/SR

ASBOA
Audition Score Sheet
WINDS/STRINGS

EXERCISE _____

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

No relationship to printed material Inaccurate in many areas Some rhythmic, expression, or pitch problems A few rhythmic, expression, or pitch problems A very accurate performance

EXERCISE _____

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

No relationship to printed material Inaccurate in many areas Some rhythmic, expression, or pitch problems A few rhythmic, expression, or pitch problems A very accurate performance

EXERCISE _____

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

No relationship to printed material Inaccurate in many areas Some rhythmic, expression, or pitch problems A few rhythmic, expression, or pitch problems A very accurate performance

MUSICAL EXPRESSION

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

No relationship to printed material Inaccurate in many areas Some rhythmic, expression, or pitch problems A few rhythmic, expression, or pitch problems A very artistic performance

SCALE #1 **SCALE #2** **SCALE #3**

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

SIGHT-READING

Pitch Accuracy Rhythmic Accuracy Tone and Musical Expression

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

TOTAL THIS PAGE

PREPARED MATERIAL

SCALES/SR

Figure 4. ASBOA Winds/Strings Audition Score Sheet. "ASBOA Audition Sheets" (Russellville, AR: Arkansas School Band and Orchestra Association, 2001), accessed June 13, 2016, <http://www.asboa.org/Documents/Audition%20Sheets.htm>.

sight-reading: pitch accuracy (26 points), rhythmic accuracy (26 points), and tone/expression (26 points). Ties are broken with the following categories: sight-reading, musical expression, tone, then scales.

I abandoned the ASBOA Winds/Strings Audition Score Sheet in favor of a modified version of Saunders and Holahan's Woodwind Brass Solo Evaluation Form (WBSEF) in order to measure more specific performance domains. The WBSEF has been used in several studies to assess music performance and has proven to have strong validity in the all-state band assessment setting.¹¹⁹ Each prepared etude was assessed using the following performance dimensions using a five-point Likert rating scale: tone, intonation, melodic accuracy, rhythmic accuracy, tempo, and interpretation. Another additive rating scale measured technique/articulation. Sight-reading was assessed separately using the same rating scales for tone, melodic accuracy, rhythmic accuracy, technique/articulation, and interpretation but omitting intonation and tempo, as Saunders and Holahan suggested. Figure 5 displays the specific criteria for each dimension.

¹¹⁹ T. Clark Saunders and John M. Holahan, "Criteria-Specific Rating Scales in the Evaluation of High School Instrumental Performance" *Journal of Research in Music Education* 45, no. 2 (Summer 1997): 259-72, accessed February 4, 2018, <http://www.jstor.org/stable/3345585>. See also: Michael P. Hewitt, "The Impact of Self-Evaluation Instruction on Student Self-Evaluation, Music Performance, and Self-Evaluation Accuracy" *Journal of Research in Music Education* 59, no. 1 (April 2011): 6-20, accessed February 22, 2018, <http://www.jstor.org/stable/23019434>; Nancy L. Summitt and Ryan A. Fisher, "Effect of Self-Listening on Self-Evaluation Accuracy" *Bulletin of the Council for Research in Music Education* no. 209 (Summer 2016): 63-78, accessed February 22, 2018, <http://www.jstor.org/stable/10.5406/bulcouresmusedu.209.0063>; Beth A. Wheeler, "The Effect of Using a Recording of Students' Performance Paired with Specific Feedback on the Self-Evaluation Calibration Accuracy Among Novice Performers" (PhD diss., University of Kansas, 2016), accessed February 22, 2018, ProQuest Dissertations and Theses.

TONE The student's tone:

(Check ONE only)

- 10 is full, rich, and characteristic of the tone quality of the instrument in all ranges and registers.
- 8 is of a characteristic tone quality in most ranges, but distorts occasionally in some passages.
- 6 exhibits some flaws in production (i.e., a slightly thin or unfocused sound, somewhat forced, breath not always used efficiently, etc.).
- 4 has several major flaws in basic production (i.e., consistently thin/unfocused sound, forced, breath not used efficiently).
- 2 is not a tone quality characteristic of the instrument.

INTONATION The student's intonation:

- 10 is accurate throughout, in all ranges and registers.
- 8 is accurate, but student fails to adjust on isolated pitches, yet demonstrates minimal intonation difficulties.
- 6 is mostly accurate, but includes out-of-tune notes. The student does not adjust problem pitches to an acceptable standard of intonation.
- 4 exhibits a basic sense of intonation, yet has significant problems, student makes no apparent attempt at adjustment of problem pitches.
- 2 is not accurate. Student's performance is continuously out of tune.

MELODIC ACCURACY The student performs:

- 10 all pitches/notes accurately.
- 8 most pitches/notes accurately.
- 6 many pitches accurately.
- 4 numerous inaccurate pitches/notes.
- 2 inaccurate pitches/notes throughout the music, (i.e., missing key signatures, accidentals, etc.).

RHYTHMIC ACCURACY The student performs:

- 10 accurate rhythms throughout.
- 8 nearly accurate rhythms, but lacks precise interpretation of some rhythm patterns.
- 6 many rhythmic patterns accurately, but some lack precision (approximation of rhythm patterns used).
- 4 many rhythmic patterns incorrectly or inconsistently.
- 2 most rhythmic patterns incorrectly.

TECHNIQUE/ARTICULATION The student demonstrates:

(Check ALL that APPLY, worth 2 points each)

- appropriate and accurate tonguing.
- appropriate slurs as marked.
- appropriate accents as marked.
- appropriate ornamentation as marked.
- appropriate length of notes as marked (i.e., legato, staccato)

TEMPO The student's tempo:

(Check ONE only)

- 10 is accurate and consistent with the printed tempo markings.
- 8 approaches the printed tempo markings, yet the performed tempo does not detract significantly from the performance.
- 6 is different from the printed tempo marking(s), resulting in inappropriate tempo(s) for the selection, yet remains consistent.
- 4 is inconsistent (i.e., rushing, dragging, inaccurate tempo changes).
- 2 is not accurate or consistent.

INTERPRETATION The student demonstrates:

- 10 the highest level of musicality including well-shaped phrases and dynamics.
- 8 a high level of musicality, but has some phrases or dynamic that are not consistent with the overall level of expression.
- 6 a moderate level of musicality and musical understanding.
- 4 only a limited amount of musicality and musical understanding.
- 2 a lack of musical understanding.

Figure 5. WBSEF prepared material criteria. Data from T. Clark Saunders and John M. Holahan, "Criteria-Specific Rating Scales in the Evaluation of High School Instrumental Performance," *Journal of Research in Music Education* 45, no. 2 (Summer 1997): 264-65, accessed February 4, 2018, <http://www.jstor.org/stable/3345585>.

Although the WBSEF provided much more information regarding specific errors than the ASBOA score sheet did, the wording of some of the criteria was problematic. Vibrato is listed as an element of a “characteristic tone quality” in SLEs P.5.BBIII.2 and P.5.BBIV.2, but it is not addressed specifically in the WBSEF. I considered it as a necessary component for a tone score of 8 or 10. Several of the criteria include only broad and/or vague statements; thus, additional comments and annotations regarding each category were marked directly on the musical score to identify specific problems. An example is provided in figures 6 and 7. These comments and annotations were extracted and analyzed after all recordings had been evaluated to determine common performance errors that could be addressed in a supplemental curriculum. The results of these analyses, along with the scores generated using the modified WBSEF, will be presented in Chapter 4.

JR HI #1 - blue

Tempo di bolero (moderato)

5

ULOU

E-E

d

f

p

This musical score is for a piece in 2/4 time, marked 'Tempo di bolero (moderato)'. It features a piano (p) and forte (f) dynamic range. The score includes handwritten annotations: a red bracket on the right side, purple and blue curved lines above notes, and green checkmarks and letters 'd' and 'E-E'.

JR HI #2 - red

Adagio

1

p

d

This musical score is for a piece in 4/4 time, marked 'Adagio'. It features a piano (p) dynamic. The score includes handwritten annotations: a red bracket on the right side, purple and green curved lines above notes, and green checkmarks and letters 'd'.

JR HI Sight-reading

Allegro

POPP

17

f

This musical score is for a piece in 2/4 time, marked 'Allegro'. It features a forte (f) dynamic. The score includes handwritten annotations: a red bracket on the left side, purple curved lines above notes, and a blue checkmark.

Figure 6. Annotated musical score detailing specific errors in Participant I's recording

I

WOODWIND/BRASS SOLO EVALUATION FORM

vibrato barely detectable
failure to maintain clarity
of octave on C⁶
tone forced & splitting
@ beginning
difficult to assess
due to tone issues

no demonstration of
> marking

eighth rest after
too long
difficult to assess due
to imprecise articulation
failed to hold tied/dotted rhythms
2 hesitations/restarts
highlighted

no dynamic change
demonstrated
phrase grouping appropriate
except for minor hesitations
no hierarchy of importance
within phrase demonstrated
through vibrato or timbre

consistently slurred
into beat 3

metric hierarchy
evident

SOLO EVALUATION

*TONE The student's tone:

(Check ONE only)

- 10 is full, rich, and characteristic of the tone quality of the instrument in all ranges and registers.
- 8 is of a characteristic tone quality in most ranges, but distorts occasionally in some passages.
- 6 exhibits some flaws in production (i.e., a slightly thin or unfocused sound, somewhat forced, breath not always used efficiently, etc.).
- 4 has several major flaws in basic production (i.e., consistently thin/unfocused sound, forced, breath not used efficiently).
- 2 is not a tone quality characteristic of the instrument.

INTONATION The student's intonation:

- 10 is accurate throughout, in all ranges and registers.
- 8 is accurate, but student fails to adjust on isolated pitches, yet demonstrates minimal intonation difficulties.
- 6 is mostly accurate, but includes out-of-tune notes. The student does not adjust problem pitches to an acceptable standard of intonation.
- 4 exhibits a basic sense of intonation, yet has significant problems, student makes no apparent attempt at adjustment of problem pitches.
- 2 is not accurate. Student's performance is continuously out of tune.

*TECHNIQUE/ARTICULATION The student demonstrates:

(Check ALL that APPLY, worth 2 points each)

- 2 appropriate and accurate tonguing.
- 2 appropriate slurs as marked.
- 2 appropriate accents as marked.
- 2 appropriate ornamentation as marked.
- 2 appropriate length of notes as marked (i.e., legato, staccato).

MELODIC ACCURACY The student performs:

(Check ONE only)

- 10 all pitches/notes accurately.
- 8 most pitches/notes accurately.
- 6 many pitches accurately.
- 4 numerous inaccurate pitches/notes.
- 2 inaccurate pitches/notes throughout the music (i.e., missing key signatures, accidentals, etc.).

*RHYTHMIC ACCURACY The student performs:

- 10 accurate rhythms throughout.
- 8 nearly accurate rhythms, but lacks precise interpretation of some rhythm patterns.
- 6 many rhythmic patterns accurately, but some lack precision (approximation of rhythm patterns used).
- 4 many rhythmic patterns incorrectly or inconsistently.
- 2 most rhythmic patterns incorrectly.

TEMPO The student's tempo:

- 10 is accurate and consistent with the printed tempo markings.
- 8 approaches the printed tempo markings, yet the performed tempo does not detract significantly from the performance.
- 6 is different from the printed tempo marking(s), resulting in inappropriate tempo(s) for the selection, yet remains consistent.
- 4 is inconsistent (i.e., rushing, dragging, inaccurate tempo changes).
- 2 is not accurate or consistent.

*INTERPRETATION The student demonstrates:

- 10 the highest level of musicality including well-shaped phrases and dynamics.
- 8 a high level of musicality, but has some phrases or dynamic that are not consistent with the overall level of expression.
- 6 a moderate level of musicality and musical understanding.
- 4 only a limited amount of musicality and music understanding.
- 2 a lack of musical understanding.

no tapering; tone very harsh for excerpt

SIGHT-READING

TONE The student's tone:

(Check ONE only)

- 10 is full, rich, and characteristic of the tone quality of the instrument in all ranges and registers.
- 8 is of a characteristic tone quality in most ranges, but distorts occasionally in some passages.
- 6 exhibits some flaws in production (i.e., a slightly thin or unfocused sound, somewhat forced, breath not always used efficiently, etc.).
- 4 has several major flaws in basic production (i.e., consistently thin/unfocused sound, forced, breath not used efficiently).
- 2 is not a tone quality characteristic of the instrument.

MELODIC ACCURACY The student performs:

- 10 all pitches/notes accurately.
- 8 most pitches/notes accurately.
- 6 many pitches accurately.
- 4 numerous inaccurate pitches/notes.
- 2 inaccurate pitches/notes throughout the music (i.e., missing key signatures, accidentals, etc.).

RHYTHMIC ACCURACY The student performs:

- 10 accurate rhythms throughout.
- 8 nearly accurate rhythms, but lacks precise interpretation of some rhythm patterns.
- 6 many rhythmic patterns accurately, but some lack precision (approximation of rhythm patterns used).
- 4 many rhythmic patterns incorrectly or inconsistently.
- 2 most rhythmic patterns incorrectly.

TECHNIQUE/ARTICULATION The student demonstrates:

(Check ALL that APPLY, worth 2 points each)

- 2 appropriate and accurate tonguing.
- 2 appropriate slurs as marked.
- 2 appropriate accents as marked.
- 2 appropriate ornamentation as marked.
- 2 appropriate length of notes as marked (i.e., legato, staccato).

*INTERPRETATION The student demonstrates:

(Check ALL that APPLY, worth 2 points each)

- 10 the highest level of musicality including well-shaped phrases and dynamics.
- 8 a high level of musicality, but has some phrases or dynamic that are not consistent with the overall level of expression.
- 6 a moderate level of musicality and musical understanding.
- 4 only a limited amount of musicality and music understanding.
- 2 a lack of musical understanding.

TOTAL: _____

Figure 7. Sample of Modified WBSEF used to assess Participant I's recording

Limitations

As detailed in figure 2 in Chapter 2, performance assessment does not measure musical knowledge. It is possible to understand a concept (i.e. compound meter) and not be able to demonstrate the knowledge through performance due to physical limitations. One limitation of this present study was the convenience sample. The sample size of the study ($N = 9$) was small, and the population was taken from a very small, rural area in the Southern United States. The audition recordings were only evaluated by one adjudicator; thus, the reliability of the performance evaluation instrument for this study is unknown. The author acknowledges the likely impact of a Halo Effect regarding musical expression since that is the expected deficit to be recorded.

CHAPTER 4

RESULTS

Introduction

Honor band selection processes are designed to rank students for the purpose of chair placement; therefore, their assessment rubrics often do not provide enough information for the diagnosis and remediation of student performance errors. Although the modified Woodwind/Brass Solo Evaluation Form (WBSEF) provides more specific performance domains than the ASBOA Audition Score Sheet, it is not enough to capture a holistic representation of a student's performance. Quantitative and qualitative data will be presented in this chapter in order to better present the subtleties of the individual participants' performances.

Quantitative Data

The total possible scores using the modified Woodwind/Brass Solo Evaluation Form (WBSEF) could range from 32 to 180, with scores approaching 180 indicating an accurate and optimal performance. The tone, intonation, melodic accuracy, rhythmic accuracy, tempo, and interpretation scores could each range from 2 to 10. No opportunities for ornamentation existed in the etude by Tulou; therefore, the technique/articulation scores could range from 0 to 8 for this excerpt. The Saint-Saëns and Popp excerpts lacked any indicated accents or ornamentation; thus, the technique/articulation scores for these excerpts could range from 0 to 6. Table 3 displays the overall scores and prepared and sight-reading subscores for Participants A through I.

Table 3. Scores and subscores (prepared and sight-reading material) for Participants A through I

	A	B	C	D	E	F	G	H	I	Overall Mean	S.D.
Prepared	28	50	82	94	106	80	64	88	68	73.33	23.83
Sight-reading	10	28	30	34	34	36	32	34	36	30.44	8.11
TOTAL	38	78	112	128	140	116	96	122	104	103.77	30.62

The total possible criteria scores could range from 6 to 30 for tone, melodic accuracy, rhythmic accuracy, and interpretation. Tempo and intonation are omitted from the sight-reading scores, per Saunders and Holahan’s instrument design; thus, the total possible criteria scores for these two domains could range from 4 to 20. Technique/articulation scores could range from 0 to 20. Table 4 displays the overall scores for each performance dimension assessed using the WBSEF.

Table 4. Scores for each performance domain: tone, intonation, melodic accuracy, rhythmic accuracy, technique/articulation, tempo, and interpretation

Criteria	A	B	C	D	E	F	G	H	I	Overall	
										Mean	S.D.
Tone	12	12	16	18	30	28	22	20	14	19.11	6.57
Intonation	4	4	12	10	16	14	6	10	8	9.33	4.24
Melodic Acc.	6	28	30	30	30	22	26	28	28	25.33	7.68
Rhythmic Acc.	6	14	22	24	10	16	14	18	22	16.22	5.95
Tech/Artic.	0	6	14	10	10	10	10	8	4	8	4.12
Tempo	4	6	6	14	18	12	8	20	14	11.33	5.66
Interpretation	6	8	12	22	26	14	10	18	14	14.44	6.54

Junior High Excerpt #1: Saint-Saëns

The total possible score for the Saint-Saëns excerpt ranged from 12 to 66. Table 5 displays the criteria scores generated by the modified WBSEF.

Table 5. Criteria scores for “The Swan” by Camille Saint-Saëns

Criteria	A	B	C	D	E	F	G	H	I	Overall	
										Mean	S.D.
Tone	4	4	4	6	10	10	8	8	4	6.44	2.6
Intonation	2	2	6	6	8	8	4	4	4	4.89	2.26
Melodic Acc.	2	10	10	10	10	10	10	10	10	9.11	2.67
Rhythmic Acc.	2	6	8	8	6	6	4	6	6	5.78	1.86
Tech/Artic.	0	0	4	4	2	6	4	2	2	2.67	2
Tempo	2	4	2	10	8	10	4	10	10	6.67	3.6
Interpretation	2	4	6	8	10	8	4	10	2	6	3.16
Total Score	14	30	40	52	54	58	38	50	38	41.56	13.81

Junior High Excerpt #2: Tulou

The total possible score for the Tulou excerpt could range from 12 to 68. Table 6 displays the criteria scores generated by the modified WBSEF for the second prepared excerpt.

Table 6. Criteria scores for *Tempo di bolero* by Jean-Louis Tulou

Criteria	A	B	C	D	E	F	G	H	I	Overall Mean	S.D.
Tone	4	4	4	6	10	8	8	6	4	6	2.24
Intonation	2	2	6	4	8	6	2	6	4	4.44	2.19
Melodic Acc.	2	8	10	10	10	2	6	8	8	7.11	3.18
Rhythmic Acc.	2	2	8	6	2	2	4	4	6	4	2.24
Tech/Artic.	0	0	6	4	6	0	0	0	0	1.78	2.73
Tempo	2	2	4	4	10	2	4	10	4	4.67	3.16
Interpretation	2	2	4	8	6	2	2	4	4	3.78	2.11
Total Score	14	20	42	42	52	22	26	38	30	31.78	12.47

Sight-reading Excerpt: Popp

The total possible score for the sight-reading excerpt could range from 8 to 40. Table 7 displays the criteria scores generated by the modified WBSEF for the sight-reading excerpt.

Table 7. Criteria scores for the sight-reading excerpt by Wilhelm Popp

Criteria	A	B	C	D	E	F	G	H	I	Overall Mean	S.D.
Tone	4	4	8	6	10	10	6	6	6	6.67	2.24
Melodic Acc.	2	10	10	10	10	10	10	10	10	9.11	2.67
Rhythmic Acc.	2	6	6	10	2	8	6	8	10	6.44	2.96
Tech/Artic.	0	6	4	2	2	4	6	6	2	3.56	2.19
Interpretation	2	2	2	6	10	4	4	4	8	4.67	2.83
Total Score	10	28	30	34	34	36	32	34	36	30.44	8.11

Qualitative Data

Tone Quality and Intonation

Participants E and F both had a very characteristic tone quality with a well-developed vibrato. Participants B and G employed no vibrato during any of the excerpts, and Participant H only used vibrato during “The Swan.” The other participants used vibrato but had major tone

production issues that made assessment of vibrato difficult, such as an inability to reliably produce the correct octave (Participants A and C). Participants C, H, and I performed with vibrato that was erratic in speed and/or width.

Several tone production issues affected intonation, such as an inconsistent airstream that caused intonation to fall during long durations (Participants G and I). Participants G, D, and I were noticeably flat on C⁶ throughout the Tulou excerpt. Participant G was also very flat on E⁵ in the same excerpt. Participants B and H were very sharp in the middle register, especially on C-sharp⁵.

The Saint-Saëns excerpt did not contain many flexibility challenges, as the excerpt is generally scalar with only two descending leaps of a perfect fifth in the second register of the flute. The participants who received tone scores of four or lower for this excerpt demonstrated “several major flaws in basic production” that were also reflected in their tone scores for the Tulou excerpt. The ascending E⁵-C⁶ leap that opens the Tulou excerpt presented challenges for Participants A, C, D, F, and G. The E⁶ in the seventh measure failed to sound for participants A, B, C, D, F, and I. Participants A and B produced its partial (A⁵), Participant I performed an E-flat⁶ in its place, and Participants C, D, and F produced the pitch but with a thin, unfocused tone quality.

Melodic Accuracy

Nine of the ten students were able to perform the Saint-Saëns and the Popp with no pitch errors. The Tulou excerpt presented more challenges. Participant F misinterpreted all of the G-sharps as F-sharps in the Tulou excerpt. Participant I performed the E⁶ as E-flat⁶. Most of these pitch errors coincided with the difficult rhythmic passages in measures 9-12. Participant G performed the B⁵ as B-flat⁵ in the tenth and eleventh measures, and Participant H performed F⁵

instead of G⁵ in the ninth measure. Participant A may have learned the beginning of the Tulou excerpt by rote—the opening phrase’s pitches and rhythms were performed correctly but the rest of the excerpt maintained only correct contour with numerous pitch and rhythm mistakes.

Participant A’s Saint-Saëns and Popp excerpts were almost completely unrecognizable as well.

Rhythmic Accuracy and Technique/Articulation

The opening phrase of the Tulou begins with a variation on the common eighth-quarter-eighth subdivision rhythmic pattern. In addition, it incorporates several advanced tongue/slur patterns and an accent notation. All of the participants struggled with the rhythms and/or articulations in this phrase. Participants B, D, E, F, and H were unable to perform the rhythm correctly. Participants E, F, G, and I were unable to perform the tongue/slur patterns correctly. Participant C slightly hesitated after the second eighth note but demonstrated accurate rhythm and articulation, including (unmarked) shorter note lengths associated with the style. Figure 8 compares the original notation with the approximate notation of each participant’s performance.

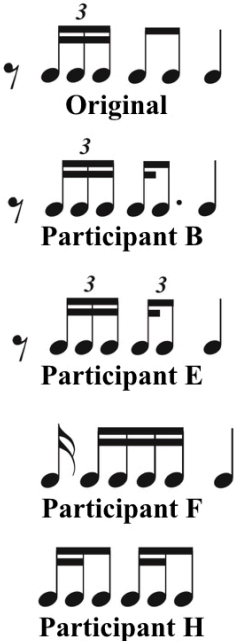
Figure 8. Approximate notation of performances by Participants B, D, E, F, G, H, and I compared with the original notation of the opening phrase of the Tulou excerpt

The figure displays seven musical staves in 3/4 time, each representing a different performance. The top staff is the 'Original' notation, featuring a sequence of notes: a quarter note, a quarter note, a triplet of eighth notes, a quarter note, a quarter note, and a dotted quarter note. Below it are seven participant notations: Participant B, Participant F, Participant D, Participant G, Participant E, Participant H, and Participant I. Each participant's notation shows variations in the original sequence, particularly in the handling of the triplet eighth notes and the eighth notes that follow.

Source: Himie Voxman, ed., *Advanced Method for Flute*, vol. 1 (Chicago: Rubank, 1940), 23.

Four of the participants misinterpreted the triplet sixteenths and/or the eighth notes that followed in measures 8-9. Figure 9 compares the original rhythmic notation with the approximate notation of Participant B, E, F, and H’s performance.

Figure 9. Approximate rhythmic notation of Participants B, E, F, and H's interpretation compared to the original notation of the rhythmic motive in measures 8-9 in the Tulou excerpt



All nine of the participants had rhythm and/or articulation errors in the final phrase of the Tulou excerpt. Participant C performed the rhythms correctly but restarted two rhythmic figures within the phrase. Figure 10 compares the original notation with the approximate notation of each participant's performance.

Figure 10. Approximate notation of performances by Participants B, D, E, F, G, H, and I compared with the original notation of the final phrase of the Tulou excerpt

The figure displays musical notation for the final phrase of the Tulou excerpt. At the top is the **Original** notation in 3/4 time, consisting of three measures: a triplet of eighth notes, a quarter note, and a quarter note. Below it are seven participants' approximate notations:

- Participant B:** Similar to the original, but with a quarter rest in the second measure and a triplet in the third measure.
- Participant F:** Similar to the original, but with a dotted quarter note in the second measure and a triplet in the third measure.
- Participant D:** Similar to the original, but with a quarter rest in the second measure and a triplet in the third measure.
- Participant G:** Similar to the original, but with a flat in the second measure and a triplet in the third measure.
- Participant E:** Similar to the original, but with a quarter rest in the second measure and a triplet in the third measure.
- Participant H:** Similar to the original, but with a quarter rest in the second measure and a triplet in the third measure.
- Participant I:** Similar to the original, but with a quarter rest in the second measure and a triplet in the third measure.

Source: Himie Voxman, ed., *Advanced Method for Flute*, vol. 1 (Chicago: Rubank, 1940), 23.

Errors in the Saint-Saëns involved the tie in the seventh measure and the dotted rhythm in the eighth measure. Figure 11 presents the original notation of the Saint-Saëns excerpt compared to the approximate notation of the participants' performances.

Figure 11. Approximate notation of performances by Participants A, B, C, D, E, F, G, H, and I compared with the original notation of the Saint-Saëns excerpt

The figure displays ten staves of musical notation in 6/8 time, each labeled with a participant name. The notation includes notes, rests, and accidentals. Participant A shows a hesitation (apostrophe) on the second measure. Participant B shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure. Participant C shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure. Participant D shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure. Participant E shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure. Participant F shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure. Participant G shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure. Participant H shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure. Participant I shows a hesitation on the second measure and a beamed eighth-note group on the fourth measure.

Original

Participant A

Participant B

Participant C

Participant D

Participant E

Participant F

Participant G

Participant H

Participant I

Source: Himie Voxman, ed., *Advanced Method for Flute*, vol. 1 (Chicago: Rubank, 1940), 67.
 Note: Hesitations shorter than an eighth-note duration are indicated by apostrophes and accented note-grouping is indicated by beaming.

Most of the participants performed the rhythms and articulations in the Popp excerpt correctly; however, Participant A's performance again contained many melodic and rhythmic accuracy errors that rendered the etude unrecognizable. Participant I extended the slurs to the final quarter note of each measure. Participant E altered the rhythm so that the performance was perceived as duple meter. Figure 12 compares Participant E's performance with the original notation.

Figure 12. Approximate notation of Participant's E performance of the Popp sight-reading excerpt compared to the original notation

Allegro POPP

Original

Participant E

The figure displays two musical excerpts side-by-side. The top excerpt, labeled 'Original', is in 3/4 time, marked 'Allegro' and 'f'. It consists of five measures of music. The bottom excerpt, labeled 'Participant E', is in 2/4 time, marked 'POPP'. It consists of five measures of music, where the rhythm is altered to fit a duple meter. The notes and slurs are approximately equivalent to the original but adapted to the 2/4 time signature.

Source: Frans Vester, ed., *125 Easy Classical Studies for Flute* (London: Universal Edition, 1976), 5.

Tempo and Interpretation

All of the participants used a remarkably similar average tempo for each excerpt; however, several participants struggled with maintaining a steady tempo due to several “hesitations” within phrases that resulted in a “musical stuttering” effect. The stuttering and rhythmic errors were so distracting that it was difficult to assess interpretation without considering rhythmic accuracy and tempo steadiness. Participants A, B, and G demonstrated stuttering in the Tulou excerpt, with the frequency of the phenomenon increasing near the end of the excerpt, where rhythm and articulation patterns increased in complexity. Participants A, B, C, G, and H included at least one hesitation in the third measure of the Saint-Saëns excerpt and several hesitations and/or restarts during the sight-reading excerpt.

The Tulou excerpt was the only example to indicate dynamic contrasts. Only two participants (D and E) displayed noticeable dynamic changes, and only one participant (D) demonstrated any shaping of phrases in this excerpt. Participants D, E, F, and H were able to demonstrate some phrase shaping in the Saint-Saëns excerpt. Participants D and E also demonstrated some phrase shaping in the Tulou Excerpt. Participant E’s confidence and attention to style resulted in a high interpretation score for the Popp excerpt, despite the rhythmic accuracy issues.

CHAPTER 5

DISCUSSION

Research Question #1

What literacy, technical, and expressive skills do select rural Arkansas flute students lack?

According to the quantitative data results, the participants' weakest performance area was intonation. The mean intonation score was 9.33 on a scale from 4 to 20 possible points.

Intonation skills in young wind instrumentalists take several years to develop; thus, low scores in this area are not unexpected.¹ My perception of the participants' intonation was likely influenced by my perception of their tone. Although the tone scores were higher than the intonation scores, previous research has shown that listeners have difficulty differentiating between tone quality and intonation errors, so it is probable that my intonation scores actually reflect tone quality scores.²

The improvement of fundamental tone production skills, such as embouchure, breath support, and posture, will likely also improve intonation.³ The mean tone score was 19.11 of a range from 6 to 30 possible points. Seven of the nine participants in this study need assistance with fundamental tone production skills, including reliably producing large ascending leaps to the third register (C⁶ and above) and maintaining a steady airstream to avoid flat intonation at the end of long durations and phrases.

¹ Cornelia Yarbrough, Brant Karrick, and Steven J. Morrison, "Effect of Knowledge of Directional Mistunings on the Tuning Accuracy of Beginning and Intermediate Wind Players," *Journal of Research in Music Education* 43, no. 3 (Autumn 1995): 232-41, accessed March 22, 2018, <http://www.jstor.org/stable/3345638>.

² John M. Geringer and Michael D. Worthy, "Effects of Tone-Quality Changes on Intonation and Tone-Quality Ratings of High School and College Instrumentalists," *Journal of Research in Music Education* 47, no. 2 (Summer 1999), 135-49, accessed March 22, 2018, <http://www.jstor.org/stable/3345719>.

³ Steven J. Morrison and Janina Fyk, "Intonation," in *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning*, Richard Parncutt and Gary E. McPherson, eds. (Oxford: Oxford University Press, 2002), 185.

Although dynamic contrast was assessed as part of the interpretation performance domain, the development of the skill generally requires manipulation of embouchure and breath support mechanisms and coincides with development of intonation skills. The lack of dynamic contrast in seven of the participants' performances may not have been due to inattention to this notation detail. It likely was related to the technical skills associated with tone production and intonation.

Interpretation

The mean interpretation score was 14.44 on a scale from 6 to 30 possible points. The WBSEF does not define "interpretation." Its 5-point criteria scale only includes two specific characteristics (dynamics and phrase-shaping) but mostly contains broad categories such as "musicality" and "musical understanding." The ambiguity of the term likely had a large impact on my scores, as it was difficult to divorce "musical understanding" from other performance dimensions such as rhythmic accuracy and steadiness of tempo that are necessary for structural communication. Most of the participants were able to demonstrate some "musical understanding" on isolated motivic material fairly accurately but were unable to combine these smaller "chunks" into larger meaningful units. Participant E performed appropriate phrase shaping, characteristic tone color and vibrato, and overall effective emotional communication on the Saint-Saëns excerpt. Participant E's sight-reading excerpt was performed confidently and with great attention to articulation, but the meter and rhythmic patterns were radically misunderstood.

Musical "stuttering," in which students hesitate and/or repeat small "chunks" of material after performing an error, is often found in inexperienced musicians' sight-reading attempts, but

the effect was found more frequently in the prepared material in this study.⁴ Participant B's hesitations generally increased near the end of the excerpt and occurred in both prepared sight-reading material.⁵ They could be attributed to issues with tone production or lack of adequate preparation. Participant C also had several hesitations and would often restart phrases at these junctures, resembling the stuttering pattern found in speech.⁶ Unlike Participant B, Participant C's smaller chunks were generally very accurate; thus, it is unlikely that the stuttering was due to lack of preparation and more likely due to performance anxiety, as the problem was virtually nonexistent in the first excerpt performance and increased with each subsequent excerpt performance.

Rhythmic Accuracy and Technique/Articulation

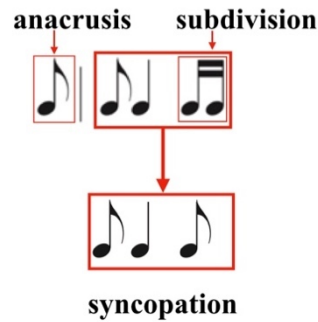
The average rhythmic accuracy score was 16.22 on a scale from 6 to 30 possible points, with the lowest score occurring in the Tulou excerpt with an average score of 4 on a scale from 2 to 10 possible points. Most of the rhythmic errors occurred in rhythmic patterns that combined more than one concept. As shown in Figure 13, the first rhythm in the Tulou excerpt combines an anacrusis with a subdivision within a syncopation. Participants D, E, F, and H performed one or more rhythmic errors within this motivic unit.

⁴ Andreas C. Lehmann and Victoria McArthur, "Sight-Reading," in *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning*, ed. Richard Parncutt and Gary E. McPherson (Oxford: Oxford University Press, 2002), 135.

⁵ Appendix B contains an audio recording of Participant B's audition.

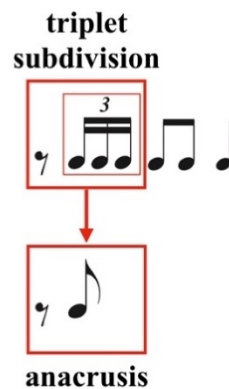
⁶ Appendix C contains an audio recording of Participant C's audition.

Figure 13. Anacrusis combined with syncopation containing a subdivision



Another motivic unit that combined multiple rhythmic concepts can be found in the Tulou excerpt. Figure 14 displays another recurring motivic unit within the Tulou excerpt that combines an anacrusis with a triplet subdivision.

Figure 14. Anacrusis containing a triplet subdivision



Many of the rhythmic errors coincided with articulation errors. The mean technique/articulation score for the nine participants in the study was 8 out of 20 possible points, with the Tulou excerpt receiving the lowest average score of 1.78 out of 8 possible points. Recurring rhythmic and melodic motives often have corresponding recurring articulation patterns, and students may be unable to separate the two elements unless specifically trained to do so. Participants D and I slurred the first eighth note in both instances of the recurring motive from the Tulou excerpt displayed in Figure 15.

Figure 15. Recurring articulation errors in recurring motives

The figure displays three staves of musical notation in 3/4 time. The first staff, labeled 'Original', shows two measures of music. The first measure contains a group of sixteenth notes with a slur and an accent (>) above it. The second measure contains a triplet of sixteenth notes followed by another group of sixteenth notes with a slur. Red circles highlight the articulation errors in both measures. The second staff, labeled 'Participant D', shows the same two measures with red circles highlighting the articulation errors. The third staff, labeled 'Participant I', also shows the same two measures with red circles highlighting the articulation errors.

When Participants B and F altered the rhythm of the excerpt from the Tulou etude displayed in Figure 16, these participants maintained the original articulation assigned to the note grouping. Although the rhythm was misinterpreted, the slur remained attached to the two sixteenth notes in the group.

Figure 16. Attachment of slur to duration groupings

The figure displays three staves of musical notation in 3/4 time. The first staff, labeled 'Original', shows a measure with a triplet of sixteenth notes, followed by a group of sixteenth notes with a slur and an accent (>) above it. Red circles highlight the articulation errors. The second staff, labeled 'Participant B', shows the same measure with red circles highlighting the articulation errors. The third staff, labeled 'Participant F', shows the same measure with red circles highlighting the articulation errors.

Research Question #2

What skills and concepts need remediation, clarification, and/or inclusion as a supplement to the ADE Beginning Band Curriculum Framework in order to improve the performance of the study’s participants?

The current tone and intonation Student Learning Expectations (SLEs) are vague and contradictory. Students are expected to “demonstrate appropriate dynamics through basic repertoire” during Beginning Band I (SLE P.6.BBI.2) but are not asked to “demonstrate *characteristic tone quality* at various dynamic levels” until Beginning Band IV (SLE P.5.BBIV.2). No discussion of register accompanies the SLEs currently associated with tone quality (P.5.BBI.2 through P.5. BBIV.2), but the scales mentioned in SLE P.5.BBI.7 indicate that a student should have a range of E-flat⁴ to B-flat⁵ by the conclusion of Beginning Band I.⁷ The development of a characteristic tone quality within the first two and half octaves of the flute should take priority over the ability to demonstrate dynamic contrast, and SLE P.6.BBI.2 should be postponed until later levels of development. Students should be encouraged to use tuners and audio/video recording equipment to experiment with their own physical actions (e.g. posture, hand position, fingering, embouchure formation, airspeed, air direction, lip plate placement) that produce the desired tone quality, intonation, dynamics, and vibrato discovered in their preferred performance models.

Compound meter is not mentioned specifically in the ADE Beginning Band Curriculum Framework, but the ASBOA junior high all-region etudes include 6/8 and 6/4. There is no reason why compound meter cannot be introduced alongside simple meter in Beginning Band I. SLEs CR.2.BBI.2 through CR.2.BBIV.2 encourage students to “apply appropriate movement to

⁷ Arkansas Department of Education, “Beginning Band I-IV Fine Arts Curriculum Framework,” 6, 10.

maintain a steady tempo.” Students are asked to “follow basic conducting patterns and gestures” in SLE R.6.BBII.1.⁸ In order to develop rhythmic independence, students should be able to generate movements that extend beyond simple pulse inference activities like foot-tapping into gestures that represent subdivision, meter, and phrase-shaping.

SLE P.6.BBIII.2 states that Beginning Band III students should be able to “demonstrate expressive elements through increasingly complex repertoire,” but no other reference to musical expression occurs.⁹ The identification of emotional expression and stylistic characteristics in music can begin in Beginning Band I and is an excellent introduction to more complex analytical skills, such as stylistic and formal analysis, introduced in upper levels of band and AP Music Theory. Symbols of some of these elements—such as dynamics and articulation—are introduced, but there is no opportunity to derive structural or emotional meaning from their use within the repertoire. These analysis activities are helpful for the long-term practice planning skills that are required in the ASBOA all-region band auditions. Table 8 synthesizes my recommendations for modification to the ADE Beginning Band Curriculum Framework.

⁸ Ibid., 3, 10.

⁹ Ibid., 10.

Table 8. Recommended changes (indicated in red and italicized) to the ADE Beginning Band Curriculum Framework

Beginning Band I	Beginning Band II	Beginning Band III	Beginning Band IV
<p>CR.2.BBI.2a <i>Apply basic movement (e.g., walking, tapping, conducting patterns) to maintain a steady tempo and demonstrate basic metric patterns</i></p> <ul style="list-style-type: none"> <i>pulse</i> <i>duple meter</i> <i>triple meter</i> 	<p>CR.2.BBII.2a <i>Apply basic movement (e.g., foot-tapping, walking, conducting patterns) to demonstrate basic metric hierarchies and rhythmic subdivision</i></p> <ul style="list-style-type: none"> <i>quadruple meter</i> <i>sextuple meter</i> 	<p>CR.2.BBIII.2a <i>Apply basic movement (e.g., foot-tapping, walking, running, conducting patterns) to demonstrate appropriate pacing in changes and cessation of tempo</i></p> <ul style="list-style-type: none"> <i>accelerando</i> <i>ritardando</i> <i>caesura</i> <i>fermata</i> 	<p>CR.2.BBIV.2a <i>Apply a variety of appropriate movements to demonstrate various phrase shapes and gestures</i></p> <ul style="list-style-type: none"> <i>decreasing intensity (ritardando with diminuendo)</i> <i>increasing intensity (accelerando with crescendo)</i> <i>arch phrase shape (increasing then decreasing intensity)</i>
<p>CR.2.BBI.2b <i>Apply basic movement (e.g. walking, tapping, conducting patterns) to demonstrate basic articulation and dynamic indications</i></p> <ul style="list-style-type: none"> <i>staccato</i> <i>legato</i> <i>piano</i> <i>forte</i> 	<p>CR.2.BBII.2b <i>Apply basic movement (e.g. walking, tapping, conducting patterns) to demonstrate articulation and dynamic indications</i></p> <ul style="list-style-type: none"> <i>tenuto</i> <i>sforzando</i> <i>pianissimo</i> <i>fortissimo</i> 	<p>CR.2.BBIII.2b <i>Apply a variety of appropriate movements to demonstrate basic styles</i></p> <ul style="list-style-type: none"> <i>cantabile</i> <i>dolce</i> <i>marcato</i> 	<p>CR.2.BBIV.2b <i>Apply a variety of appropriate movements to demonstrate alterations of articulation, dynamic, and style indications within graded repertoire</i></p>
<p>P.5.BBI.2 Identify characteristic tone quality using proper elements</p> <ul style="list-style-type: none"> breath support embouchure hand position posture 	<p>P.5.BBII.2 Demonstrate characteristic tone quality using proper elements <i>within an expanding range (recommended D⁴ to F⁶ for flute)</i></p> <ul style="list-style-type: none"> breath support embouchure hand position posture 	<p>P.5.BBIII.2 Demonstrate characteristic tone quality <i>at basic dynamic levels (e.g., piano, forte)</i> using proper elements</p> <p>embouchure</p> <ul style="list-style-type: none"> breath support embouchure hand position posture vibrato when appropriate 	<p>P.5.BBIV.2 Demonstrate characteristic tone quality at various dynamic levels using proper elements</p> <ul style="list-style-type: none"> breath support embouchure hand position posture vibrato when appropriate
<p>P.5.BBI.3 Identify characteristics (e.g., sharp, flat) of proper intonation <i>and demonstrate steadiness of air column, using a device for external feedback (e.g., tuner)</i></p>	<p>P.5.BBII.3 Demonstrate <i>pitch-matching and pitch-bending skills using a device for external feedback or input (e.g., drone, tuner)</i></p>	<p>P.5.BBIII.3 Employ proper intonation</p>	<p>P.5.BBIV.3 Employ proper intonation consistently at various dynamic levels</p>

Table 8 (continued)

Beginning Band I	Beginning Band II	Beginning Band III	Beginning Band IV
<p>P.5.BBI.5 Read basic rhythms and <i>simple and compound meters</i></p> <ul style="list-style-type: none"> time signatures: 4/4, 3/4, 2/4, 6/8, cut time, and common time whole, half, quarter, eighth, and sixteenth notes dotted quarter-eighth and eighth-sixteenth patterns (compound meter) dotted half, dotted quarter, quarter and eighth notes 	<p>P.5.BBII.5 Apply knowledge of rhythm and <i>simple and compound meter concepts</i></p> <ul style="list-style-type: none"> time signatures: 4/4, 3/4, 2/4, 6/8, cut time, and common time whole, half, quarter, eighth, and sixteenth notes dotted quarter-eighth and eighth-sixteenth patterns intermediate rhythmic patterns (e.g., dotted eighth and sixteenth notes, syncopation, duplets, triplets) (compound meter) dotted half, dotted quarter, quarter and eighth note 	<p>P.5.BBIII.5 Apply knowledge of rhythm and meter at a proficient level</p> <ul style="list-style-type: none"> internalizing beat varied meters intermediate rhythmic patterns (e.g., dotted eighth and sixteenth notes, syncopation, duplets, triplets) meter changes 	<p>P.5.BBIV.5 Apply knowledge of rhythm and meter precisely with excellence</p> <ul style="list-style-type: none"> internalizing beat varied meters more complex rhythmic patterns (e.g., dotted eighth and sixteenth notes, syncopation, duplets, triplets) meter changes
<p>P.5.BBI.9 Rehearse correct practice procedures (e.g., warm-up, troubleshooting, problem solving, counting strategies, rhythm techniques to increase skill and speed level)</p>	<p>P.5.BBII.9 <i>Identify effective practice procedures for long-term goal planning</i></p>	<p>P.5.BBIII.9 <i>Employ effective practice procedures for long-term goal planning</i></p>	<p>P.5.BBIV.9 Employ correct practice procedures <i>for long-term goal planning</i></p>
<p>P.6.BBI.2 <i>Identify expressive elements (e.g., articulation, tempo, dynamics, timbre) that communicate emotion</i></p> <ul style="list-style-type: none"> sadness tenderness anger fear happiness 	<p>P.6.BBII.2 <i>Employ expressive elements (e.g., articulation, tempo, dynamics, timbre) to communicate emotion in basic repertoire</i></p>	<p>P.6.BBIII.2 Demonstrate expressive elements (texture, dynamics, timbre, tempo) through increasingly complex repertoire</p>	<p>P.6.BBIV.2 Convey composer's expressive intent (the emotions, thoughts, and ideas that a composer seeks to convey by manipulating the elements of music) through increasingly complex repertoire</p>
<p>R.6.BBI.1 Follow basic conducting patterns</p>	<p>R.6.BBII.1 Follow basic conducting patterns and gestures <i>including preparatory beat and various tempi and meters</i></p>	<p>R.6.BBIII.1 Follow conducting patterns and gestures including preparatory beat and various tempi and meters</p>	<p>R.6.BBIV.1 Follow conducting patterns and gestures including preparatory beat, various tempi and meters, tempo and meter changes, rubato</p>
<p>R.9.BBI.1 Identify <i>characteristic and uncharacteristic traits in instrumental performances using criteria terminology from statewide assessments</i></p>	<p>R.9.BBII.1 <i>Distinguish between characteristic and uncharacteristic instrumental performances using criteria terminology from statewide assessments</i></p>	<p>R.9.BBIII.1 <i>Self-evaluate solo performance using criteria terminology from statewide assessments</i></p>	<p>R.9.BBIV.1 <i>Self-evaluate solo and ensemble performances using criteria terminology from statewide assessments</i></p>

CHAPTER 6

POLISHING GEMS: THE BASIS OF CURRICULUM CONTENT

Background

SLEs P.5.BBI.9 through P.5.BBIV.9 address practice procedures, such as establishing effective warm-ups, troubleshooting, and counting strategies. I propose to expand P.5.BBII.9 to include “long-term goal planning.” ASBOA all-region honor band auditions involve several components, such as scales, sight-reading, and multiple etudes. The strategy for preparing for these types of auditions is radically different than preparing a single excerpt for a chair placement test in the normal classroom setting.

Patrik Juslin’s suggestions for teaching musical expression through the GERMS model can be used to establish a structure for long-term goal planning:

One implication is that, at certain stages of learning, different aspects of expression might need to be taught separately, since they have different characteristics. According to the GERMS model, a music performance should [G] convey the structure of the music, [E] express emotions, [R] exhibit motor precision, [M] be suggestive of human motion and gesture, and [S] deviate from stylistic expectations in creative and aesthetically pleasing ways.¹

Deliberate practice strategies are often centered on the ability to “exhibit motor precision” through troubleshooting activities that correct pitch, rhythm, and articulation errors. The elimination of these errors is hardly enough to present a distinctly expressive interpretation of a musical score. The errors often are the result of fundamental musical literacy knowledge; thus, some preliminary activities must occur before the student begins troubleshooting practice. The GERMS model provides this structure. The E-component, emotional expression, and M-

¹ Patrik N. Juslin, “Five Facets of Musical Expression: A Psychologist’s Perspective on Music Performance,” *Psychology of Music* 31, no. 3 (Summer 2003): 290, accessed January 2, 2015, <https://doi.org/10.1177/03057356030313003>.

component, motion principles, are not dependent upon advanced analytical skills. Applying basic motion principles (e.g., foot-tapping, clapping, gesturing, conducting) to infer pulse, meter, and phrasing involves only lower-level musicianship skills. Students can identify emotional expression without much guidance using the schema Jessika Karlsson generated from several psychological studies (figure 17).

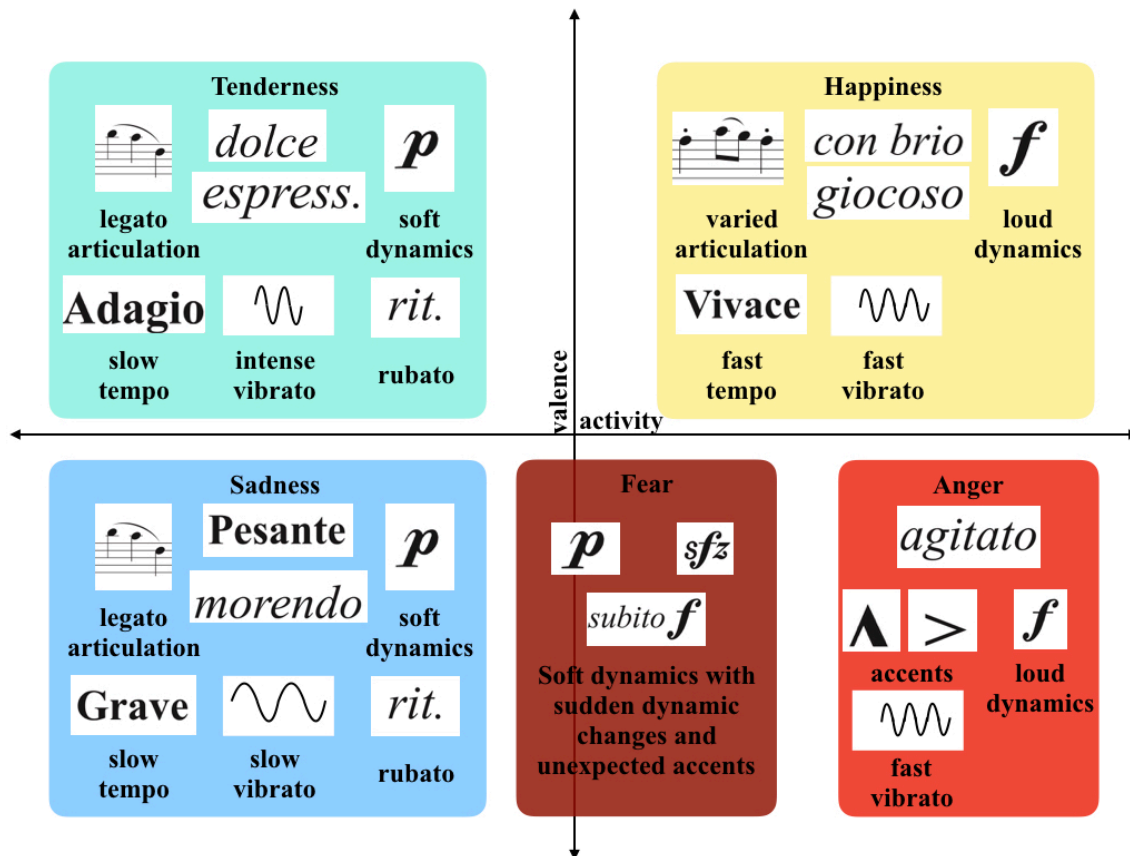


Figure 17. Valence/Activity Emotional Expression Cue Chart. Adapted from Figure 1, Summary of cue utilization in performer’s communication of emotions in music, Jessika Karlsson, “A Novel Approach to Teaching Emotional Expression in Music Performance” (PhD diss., Uppsala University, 2008, 18).

The G-component, generative rules, requires analytical skills, but these do not have to involve the advanced harmonic analysis of AP music theory classes. Students can identify rhythmic and melodic cadences with very little music theory knowledge. The S-component, stylistic unexpectedness, requires the greatest amount of music theory and history knowledge,

but it still can be introduced in the early stages of musical development through guided interpretive choices. For an example, Patricia George offers this advice on various ways of “coloring notes” in music of the common practice period in her beginning method book:

Based on the melodic contour, the following notes are important and should be colored, by playing louder, softer, longer or with faster vibrato:

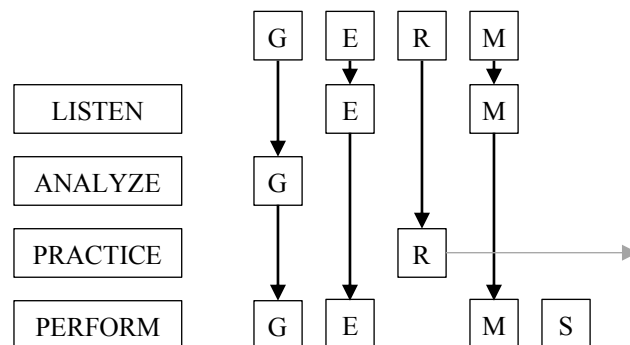
In a mountain—the highest note

In a valley—the lowest note

Going up or coming down—either the highest or the lowest note

In a gruppetto—the highest and lowest notes²

Although the skills within each of these components take years to develop, the GERMS process can be applied with each new composition. In Figure 18, I propose a four-step long-term practice planning procedure using Patrik Juslin’s suggestions for using the GERMS model to prepare new repertoire for performance.



1. Students **LISTEN** to several different aural models of the work to determine the emotional expression (E) and motion principles (M) most frequently used.
2. Students **ANALYZE** the music notation to identify the generative rules (G) of its structure and style.
3. Students **PRACTICE** the work deliberately to eliminate random variability (R).
4. Students **PERFORM** their unique interpretation of the work by introducing stylistic unexpectedness (S).

Figure 18. Polishing GEMS: Four-step long-term practice planning procedure to transform GERM performances to GEMS

² Patricia George and Phyllis Louke, *Flute 101: Mastering the Basics* (King of Prussia, PA: Theodore Presser Company, 2010), 80.

Polishing “GEMS”

“Polishing GEMS” is an eight-week supplemental curriculum based on this model. The information presented here is designed specifically for junior high flute students who are preparing for ASBOA all-region honor band auditions; however, it can easily be adapted for other instrumentalists, ability levels, and performance goals.

Introduction

This initial week-long unit is designed as an orientation to both the ASBOA audition process and the Polishing GEMS long-term practice planning procedure. Students will create a preparation timeline. Two mock auditions will be scheduled—one at the beginning of the *Practice* module and one at the ending of the *Perform* module. A suggested timeline is provided:

- Week 1: Introduction
- Weeks 2 & 3: *Listen*: Emotional Expression and Motion Principles
- Week 4: *Analyze*: Generative Rules
- Weeks 5 & 6: *Practice*: Random Variability; Mock Audition 1
- Weeks 7 & 8: *Perform*: Stylistic Unexpectedness; Mock Audition 2

Students will learn how to use the terminology used on the ASBOA Audition Score Sheet to describe tone quality. For example, a class discussion of a tone described as “a good tonal concept, but relatively immature” may accompany a performance model that demonstrates a focused and supported tone that is absent of vibrato. Students will review how specific technical skills (e.g. posture, embouchure, airspeed) influence tone quality, intonation, and dynamic contrast. Teachers will introduce the solmization system (e.g., scale degree numbers) of their choice through the practice of scales. *Hot Cross Buns* will be sung, transposed into all associated key areas, and performed with a drone in order to strengthen intonation skills. New melodies will be introduced each week throughout the eight-week period. Figure 19 presents the SLEs and specific objectives associated with the Introduction module.

Introduction

Time Frame: 1 week

ADE SLEs: P.5.BBIII.2 Demonstrate characteristic tone quality at basic dynamic levels (e.g., piano, forte) using proper elements: breath support, embouchure, hand position, posture, vibrato when appropriate.

P.5.BBII.3 Demonstrate pitch-matching and pitch-bending skills using a device (e.g., drone, tuner) for external feedback or input.

P.5.BBIII.7 Play scales in concert pitch: B-flat Major, G Natural Minor, E-flat Major, C Natural Minor, F Major, D Natural Minor, A-flat Major, F Natural Minor, C Major, A Natural Minor, Chromatic (one octave, eighth notes)

P.5.BBII.8 Demonstrate proper warm-up procedure.

P.5.BBII.9 Identify effective practice procedures for long-term goal planning.

R.9.BBII.1 Distinguish between characteristic and uncharacteristic instrumental performances using criteria terminology found in statewide assessments.

Objectives: The student will describe the performance domains found on the ASBOA Winds/Strings Audition Score Sheet: exercise, tone, musical expression, scales, sight-reading (pitch accuracy, rhythmic accuracy, tone/musical expression).

The student will devise a preparation timeline using the Polishing GEMS model.

The student will discriminate between tone quality descriptors in characteristic and uncharacteristic performance models (recordings/live performances): not supported, not centered, lacks focus, good tonal concept but relatively immature, minor focus or support problems, and characteristic sound.

The student will analyze the effect of body posture, head position, jaw position, lip pressure, aperture size, coverage of embouchure hole, tightness of corners, air direction, and air volume on tone quality, tone color, dynamics, and intonation using a tuner.

The student will practice long tones (straight tone, counted vibrato) with a tuner.

The student will assign scale degree numbers or (moveable do) solfege syllables to major and minor scales.

The student will sing and perform *Hot Cross Buns* in B-flat Major, E-flat Major, F Major, A-flat Major, C Major, G Major, D Major, D-flat Major, G Natural Minor, C Natural Minor, D Natural Minor, F Natural Minor, A Natural Minor, and E Natural Minor with a tonic drone.

Figure 19. Student learning expectations and objectives for the *Introduction* module

Listen

The first two GERMS components (emotional expression and motion principles) require no notation reading. In an effort to improve music-reading skills and prevent rote learning, some teachers are hesitant to encourage students to listen to recordings of repertoire. Unfortunately, many intermediate students are incapable of decoding the signs on the page into meaningful aural representations without aural models. Chapter 3 presented exemplary models for the Tulou and Saint-Saëns excerpts used in this study, but students need models that employ inappropriate stylistic characteristics as well. During this initial stage, students are encouraged to evaluate characteristic and uncharacteristic performances using the ASBOA Audition Score Sheet's "Musical Expression" category.

During the first week, students will learn how to identify emotional expression cues in speech and music. They will define basic musical expression terms and symbols found within each etude and analyze the musical notation and performance models of the ASBOA etudes for emotional expression cues (figure 16). The second week will include the establishment of pulse, the pacing of tempo changes (e.g., rubato), and the identification of basic phrasing gestures.³ Once students are able to demonstrate these basic gestures through movement, they will recreate them at a slower tempo using a metronome or drum beat. Students will play the basic rhythmic motives from the etudes by ear and count them using the counting system (e.g., Takadimi, 1-e-&-a, Eastman) syllables of the teacher's choice. These listening activities are designed to create "aural maps" of the etudes before encountering the difficulties associated with rhythm-reading and technical challenges on the instrument. Figures 20 and 21 present the SLEs for this module.

³ For a complete explanation of these gestures and their application to Saint-Saëns's "The Swan," see: Patricia George and Phyllis Louke, *The Flute Scale Book* (King of Prussia, PA: Theodore Presser Company, 2011), 24-5, 27.

Listen
Emotional Expression

Time Frame: 2 weeks

- ADE SLEs:** P.4.BBI.1 Play, alone and with others, basic music in contrasting styles.
- P.5.BBIII.1 Read more complex articulation symbols and dynamic symbols (e.g., accents, staccato, piano, forte, mezzo-forte, crescendo, decrescendo).
- P.5.BBIII.2 Demonstrate characteristic tone quality at basic dynamic levels (e.g., piano, forte) using proper elements: breath support, embouchure, hand position, posture, vibrato when appropriate.
- P.6.BBI.2 Employ expressive elements (e.g., articulation, tempo, dynamics, timbre) to communicate emotion in basic repertoire: sadness, tenderness, anger, fear, happiness.
- P.5.BBIV.7 Play scales in concert pitch: B-flat Major, G Natural Minor, E-flat Major, C Natural Minor, F Major, D Natural Minor, A-flat Major, F Natural Minor, C Major, A Natural Minor, G Major, E Natural Minor, D Major, D-flat Major, Chromatic (one octave, triplet eighth notes).
- R.9.BBII.1 Distinguish between characteristic and uncharacteristic instrumental performances using criteria terminology found in statewide assessments.

- Objectives:** The student will discriminate between musical expression descriptors in characteristic and uncharacteristic performance models (recordings/live performances) of Tulou’s *Tempo di bolero* and Saint-Saëns’s “The Swan”: no relationship to printed material, artistic performance.
- The student will classify the general emotional intent of characteristic and uncharacteristic performance models of Tulou’s *Tempo di bolero* and Saint-Saëns’s “The Swan” using the Valence/Activity Emotional Expression Cue Chart.
- The student will sing and perform *Frère Jacques* in B-flat Major, E-flat Major, F Major, A-flat Major, C Major, G Major, D Major, D-flat Major, G Natural Minor, C Natural Minor, D Natural Minor, F Natural Minor, A Natural Minor, and E Natural Minor with a tonic drone.

Figure 20. Student learning expectations and objectives for the E-component in the Listen module

Listen
Motion Principles

Time Frame: 2 weeks

ADE SLEs: P.4.BBI.1 Play, alone and with others, basic music in contrasting styles.

CR.2.BBII.2a Apply basic movement (e.g., foot-tapping, walking, conducting patterns) to demonstrate basic metric hierarchies and rhythmic subdivision: triple meter, quadruple meter, sextuple meter.

CR.2.BBIII.2a Apply basic movement to demonstrate appropriate pacing in changes and cessation of tempo: *accelerando*, *ritardando*.

CR.2.BBIV.2a Apply a variety of appropriate movements to demonstrate various phrase shapes and gestures: increasing intensity, arch phrase shape.

CR.2.BBII.2b Apply basic movement (e.g., walking, tapping, conducting patterns) to demonstrate articulation and dynamic indications: *staccato*, *legato*,

P.5.BBIII.1 Read more complex articulation symbols and dynamic symbols (e.g., accents, *staccato*, *piano*, *forte*, *mezzo-forte*, *crescendo*, *decrescendo*).

R.6.BBIV.1 Follow conducting patterns and gestures including preparatory beat, various tempi and meters, tempo and meter changes, and *rubato*.

R.9.BBII.1 Distinguish between characteristic and uncharacteristic instrumental performances using criteria terminology found in statewide assessments.

Objectives: The student will infer the pulse of various performance models of Tulou’s *Tempo di bolero* and Saint-Saëns’s “The Swan” through foot-tapping, clapping, and walking to the beat.

The student will infer the meter of various performance models Tulou’s *Tempo di bolero* and Saint-Saëns’s “The Swan” through conducting and full-body movement.

The student will practice breathing and performing on a preparatory gesture (*anacrusis*) in Tulou’s *Tempo di bolero*.

The student will aurally identify rhythmic motives found in Tulou’s *Tempo di bolero* and count the motives using syllables from a counting system.

The student will apply Patricia George’s down-up and forward flow gestures to B-flat Major, E-flat Major, F Major, A-flat Major, C Major, G Major, D Major, D-flat Major, G Natural Minor, C Natural Minor, D Natural Minor, F Natural Minor, A Natural Minor, E Natural Minor, and chromatic scales.

The student will identify down-up and forward flow gestures within Tulou’s *Tempo di Bolero* and Saint-Saëns’s “The Swan.”

Figure 21. Student learning expectations and objectives for the M-component in the Listen module

Analyze

In the next step of the GERMS to GEMS process, students associate aural concepts with their written notation counterparts in the etudes. During this one-week module, students will create a visual “map” of each etude: (1) create a “Rhythm Legend” of all rhythmic cells and their corresponding counting syllables, (2) create a “Pitch Inventory” of all pitches found within each phrase, and (3) create a dynamic and phrase shape “dot-to-dot” melodic contour map found in each etude.⁴ Students learn how to identify rhythmic cadences and conclusive (ending on tonic) and inconclusive (ending on any other pitch) melodic cadences in order to determine opportunities to breathe. The maps will be created using an acetate transparency film overlay and colored wet-erase markers in order to maintain a clean original of the sheet music. Once the Rhythm Legend is created, students will label the cells in the music. Figure 22 displays a sample phrase from Tulou’s *Tempo di bolero*.

Figure 22. Rhythmic cell overlay of a phrase from Tulou’s *Tempo di bolero*, using a word-based counting system with breaths indicated by checkmarks. Himie Voxman, ed., *Advanced Method for Flute*, vol. 1 (Chicago: Rubank, 1940), 23.



Students will learn how to determine the tonic and pitch collection by creating a Pitch Inventory. Pitches are labeled by letter names and then converted into the solmization syllables of choice. Inconclusive cadences are labeled with a “Q” (question) and conclusive cadences are labeled with an “A” (answer). Figure 23 displays a sample phrase from Tulou’s *Tempo di bolero*.

⁴ For more information regarding this exercise, see: Patricia George and Phyllis Louke, *Flute 101: Mastering the Basics* (King of Prussia, PA: Theodore Presser Company, 2010), 80.

Figure 23. Pitch Inventory of a phrase from Saint-Saëns’s “The Swan,” with inconclusive cadences indicated by “Q,” conclusive cadences indicated by “A,” and breath marks indicated by checkmarks. Himie Voxman, ed., *Advanced Method for Flute*, vol. 1 (Chicago: Rubank, 1940), 23.

Without any harmonic analysis, students are able to determine a phrase shape using Patricia George’s “dot-to-dot” melodic contour mapping method. They will then apply the “High Loud” generative rule established by Anders Friberg, in which loudness increases in proportion to the pitch height. Students can also employ the “Phrase Arch” generative rule in Saint-Saëns’s “The Swan,” in which a slight crescendo and accelerando are applied to the arch on the ascent and a slight diminuendo and ritardando are applied to the arch on the descent.⁵ Figure 24 displays a sample phrase from Saint-Saëns’s “The Swan.”

Figure 24. Melodic contour map of a phrase from Saint-Saëns’s “The Swan,” using Patricia George’s “dot-to-dot” method and Friberg’s “High Loud” and “Phrase Arch” generative rules. Himie Voxman, ed., *Advanced Method for Flute*, vol. 1 (Chicago: Rubank, 1940), 23.

⁵ Anders Friberg, “A Quantitative Rule System for Musical Performance,” The Music Group at the Department of Speech, Music, and Hearing, KTH, accessed January 8, 2016, <http://www.speech.kth.se/music/publications/thesisaf/sammfa2nd.htm>.

Students are taught how to quickly apply these three strategies (Rhythm Legend, Pitch Inventory, and Dot-to-Dot Melodic Contour Map) through the Level 1 sight-reading exercises found within the software *SmartMusic*®. Students scan the sight-reading excerpt for familiar rhythm cells, determine the key of the excerpt, note appropriate places to breathe, and decide upon appropriate expressive elements (e.g., dynamics, rubato, vibrato) to support the melodic contour. Students will not perform the sight-reading excerpts using their instruments during this module; they will merely analyze the pitch, rhythmic, and melodic content and sing the excerpt using counting and solmization syllables. During the *Practice* module, students will apply these skills during a mock audition that will include a sight-reading excerpt.

During this module, students will use the opening phrase of *Joy to the World* to discuss the function of the sixth and seventh scale degrees in melodic minor scales. Figure 25 displays this phrase in both major and melodic minor modes.

Figure 25. Opening phrase of *Joy to the World* in major and melodic minor modes, with red arrows indicating minor seconds between “ti” and “do” and “le” and “sol.” “Joy to the World,” *The Modern Psalmist*, ed. Lowell Mason (Boston: J.H. Wilkins and R.B. Carter, 1839), 144, public domain.

The figure displays two musical staves in 2/4 time. The top staff is in C major, with notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bottom staff is in C melodic minor, with notes G4, A4, Bb4, C5, Bb4, A4, G4, F4, E4, D4, C4. Red arrows highlight the minor second intervals between 'ti' and 'do' in both modes, and between 'le' and 'sol' in the melodic minor mode. A diagram to the right shows a vertical rectangle with 'do' at the top and 'sol' at the bottom. Red arrows point from 'ti' to 'do' and from 'le' to 'sol'. Black arrows point from 'do' to 'te' and from 'la' to 'sol'.

After students practice *Joy to the World*, they will be encouraged to find instances of the raised sixth and seventh scale degrees in Tulou’s *Tempo di bolero*. The *Analyze* module lays the foundation for fundamental rhythmic and pitch concepts to be used in AP music theory. Figure 26 summarizes these SLEs and objectives.

Analyze
Generative Rules

Time Frame: 1 week

ADE SLEs: P.4.BBI.1 Play, alone and with others, basic music in contrasting styles.
P.4.BBI.2 Sight-read simple music.
P.5.BBII.5 Apply knowledge of rhythm and simple and compound meter concepts: time signatures (3/4, 6/4), intermediate rhythmic patterns (e.g., dotted eighth and sixteenth notes, syncopation, triplets).
P.5.BBIV.7 Play scales in concert pitch: B-flat Major, G Natural Minor, E-flat Major, C Natural Minor, F Major, D Natural Minor, A-flat Major, F Natural Minor, C Major, A Natural Minor, G Major, E Natural Minor, D Major, D-flat Major, Chromatic (one octave, triplet eighth notes).
P.5.BBI.9 Rehearse correct practice procedures (e.g., troubleshooting, problem solving, counting strategies, rhythm techniques to increase skill and speed level).

Objectives: The student will identify rhythmic cells used in Tulou’s *Tempo di bolero* and Saint-Saëns’s “The Swan.”
The student will identify scales associated with Tulou’s *Tempo di bolero* and Saint-Saëns’s “The Swan.”
The student will compare and contrast melodic and natural minor scales and discuss the function of the raised seventh scale degree in minor keys.
The student will sing and perform the first phrase of *Joy to the World* (stopping on the word “king”) in B-flat Major, E-flat Major, F Major, A-flat Major, C Major, G Major, D Major, D-flat Major, G Minor, C Minor, D Minor, F Minor, A Minor, and E Minor with a tonic drone. The melodic minor mode will be used for all minor keys.
The student will create melodic contour maps by using Patricia George’s dot-to-dot mapping technique.
The student will determine appropriate breathing places in the ASBOA etudes by identifying rhythmic and melodic cadences.
The student will practice applying analysis skills using several examples from the Level 1 sight-reading exercises found within the software *SmartMusic*®.

Figure 26. Student learning expectations and objectives for the G-component in the Analyze module

Practice

This module is designed to be completed in two weeks and synthesizes concepts from most of the ADE Beginning Band Curriculum Framework (figure 27).

<p style="text-align: center;"><i>Practice</i> Random Variability</p> <p>Time Frame: 2 weeks</p> <p>ADE SLEs: P.4.BBI.1 Play, alone and with others, basic music in contrasting styles.</p> <p>P.4.BBII.2 Sight-read basic music.</p> <p>P.5.BBIV.1 Read increasingly complex articulation symbols and dynamic symbols.</p> <p>P.5.BBIV.2 Demonstrate characteristic tone quality at various dynamic levels using proper elements.</p> <p>P.5.BBIV.3 Employ proper intonation consistently at various dynamic levels.</p> <p>P.5.BBIV.4 Play written articulation patterns with increased tempo and accuracy.</p> <p>P.5.BBIV.5 Apply knowledge of rhythm and meter precisely with excellence.</p> <p>P.5.BBIV.7 Play scales in concert pitch: B-flat Major, G Natural Minor, E-flat Major, C Natural Minor, F Major, D Natural Minor, A-flat Major, F Natural Minor, C Major, A Natural Minor, G Major, E Natural Minor, D Major, D-flat Major, Chromatic (two octaves, triplet eighth notes).</p> <p>P.5.BBIV.8 Perform proper warm-up procedure.</p> <p>P.5.BBIV.9 Employ correct practice procedures for long-term goal planning.</p> <p>P.6.BBIII.2 Demonstrate expressive elements (dynamics, timbre, tempo) through increasingly complex repertoire.</p> <p>R.9.BBIII.1 Self-evaluate solo performance using criteria terminology from statewide assessments.</p>

Figure 27. Student learning expectations for the R-component in the Practice module

Students will employ several troubleshooting and problem-solving practice strategies in order to eliminate pitch, rhythm, and articulation errors (random variability). Students will make a list of problems anticipated within each piece after “playing through” each etude and generate a series of short practice techniques to address each specific problem. The students and teacher

will develop a list of possible audition cuts, using knowledge of phrase structure. During this module, students will perform the first of two mock auditions, involving three excerpts from the ASBOA etudes, three scales, and a Level 2 sight-reading excerpt using *SmartMusic*®. These auditions will be video-recorded and analyzed by both the student and teacher using a modified ASBOA Audition Score Sheet. Figure 28 displays the specific objectives for this module.

<i>Practice</i> Random Variability	
Objectives:	<p>The student will evaluate the ASBOA etudes for possible errors and audition cuts.</p> <p>The student will design practice strategies that address pitch, rhythm, articulation, tone, and expression problems within the ASBOA etudes.</p> <p>The student will synthesize analytical strategies from the previous module through sight-reading performance.</p> <p>The student will synthesize the emotional expression and motion principles concepts from the previous modules in order to create a musically expressive performance of the ASBOA etudes.</p> <p>The student will perform a mock audition consisting of excerpts from ASBOA etudes, scales, and sight-reading.</p> <p>The student will self-evaluate their mock audition using the ASBOA Winds/Strings Audition Score Sheet.</p> <p>The student will design practice strategies that address the errors discovered through self-evaluation.</p>

Figure 28. Objectives for the R-component in the Practice module

The students and the teacher will analyze the videos of the performances together to identify posture and ineffective movement.⁶ Using feedback from *SmartMusic*®, the video analysis, and the Modified ASBOA Audition Score Sheet (Figure 29), students and teachers will modify their practice techniques to address the identified pitch, rhythm, tone, and expression errors.

⁶ For a description of ineffective movement, see: Patricia George and Phyllis Louke, *The Flute Scale Book* (King of Prussia, PA: Theodore Presser Company, 2011), 26.

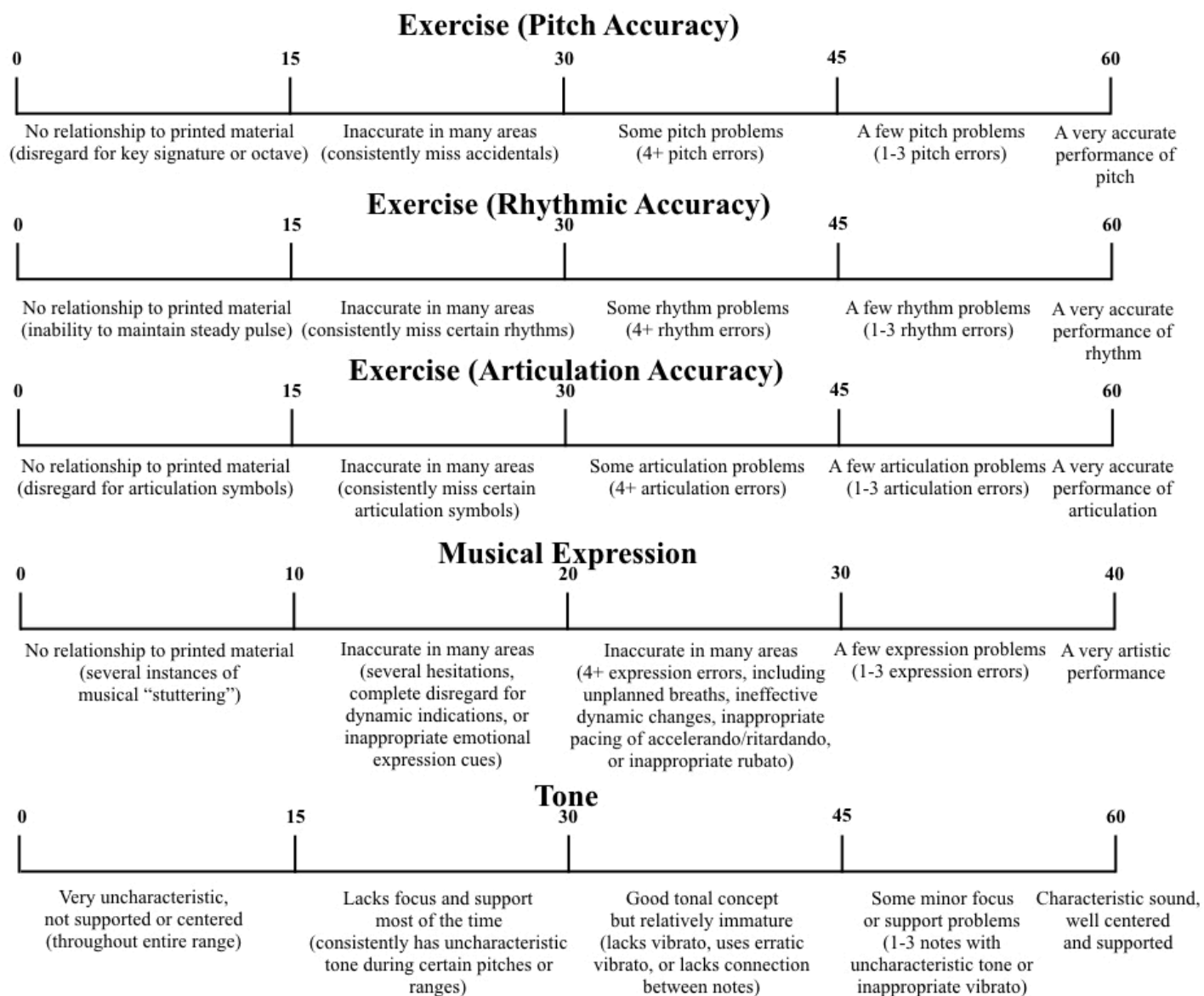


Figure 29. Exercise, musical expression, and tone categories from Modified ASBOA Audition Score Sheet for student self-evaluation

Perform

The two-week *Perform* module concludes the Polishing GEMS curriculum. For young intermediate students with little listening experience outside of the GERMS model, true stylistic unexpectedness will be difficult to obtain simply because there is not enough exposure to musical styles to make informed choices; however, these students should be able to find differences between model performances that they can choose to incorporate into their own performances. They will listen to the model recordings used in the *Listen* module and compare and contrast each interpretation, noting differences in tempo, dynamics, vibrato, and articulation. Students will make a list of any of these interpretations that they particularly enjoy. Using the results from the mock audition in the *Practice* module, students will determine their strengths (quality of tone, control of vibrato, clarity of articulation, soft dynamic levels, loud dynamic levels, tapering, rhythmic pacing of *accelerando* and *ritardando*, etc.). These strengths will be compared to the list of interpretive choices from the model recordings. Using this information, students will identify one to three opportunities to demonstrate their strengths and expressive skills in each etude. The module will conclude with another mock audition in which students will self-assess using the Modified ASBOA Audition Score Sheet. Figure 30 summarizes the student learning expectations and objectives for this module.

Perform
Stylistic Unexpectedness

Time Frame: 2 weeks

- ADE SLEs:** CR.2.BBIV.2a Apply a variety of appropriate various phrase shapes and gestures.
- P.4.BBI.1 Play, alone and with others, intermediate music in contrasting styles.
- P.4.BBIII.2 Sight-read intermediate music.
- P.5.BBIV.1 Read increasingly complex articulation symbols and dynamic symbols.
- P.5.BBIV.2 Demonstrate characteristic tone quality at various dynamic levels using proper elements.
- P.5.BBIV.3 Employ proper intonation consistently at various dynamic levels.
- P.5.BBIV.4 Play written articulation patterns with increased tempo and accuracy.
- P.5.BBIV.5 Apply knowledge of rhythm and meter precisely with excellence.
- P.5.BBIV.7 Play scales in concert pitch: B-flat Major, G Natural Minor, E-flat Major, C Natural Minor, F Major, D Natural Minor, A-flat Major, F Natural Minor, C Major, A Natural Minor, G Major, E Natural Minor, D Major, D-flat Major, Chromatic (two octaves, triplet eighth notes).
- P.5.BBIV.8 Perform proper warm-up procedure.
- P.5.BBIV.9 Employ correct practice procedures for long-term goal planning.
- P.6.BBIV.2 Convey composer's expressive intent (the emotions, thoughts, and ideas that a composer seeks to convey by manipulating the elements of music through increasingly complex repertoire.

- Objectives:** The student will evaluate the expressive devices used in performance model recordings.
- The student will design a performance plan employing personally-chosen expressive devices in order to convey the composer's expressive intent.
- The student will perform a mock audition consisting of excerpts from ASBOA etudes, scales, and sight-reading.
- The student will self-evaluate their mock audition using the ASBOA Winds/Strings Audition Score Sheet.
- The student will design practice strategies that address the errors discovered through self-evaluation.

Figure 30. Student learning expectations and objectives for the S-component in the Perform module

Conclusion

After the student has auditioned for the ASBOA all-region honor band, an exit interview shall be conducted by the teacher. The student will reflect upon the audition experience and interpret the official ASBOA Wind/Strings Audition Score Sheet results obtained through the audition. After this reflection, students will generate goals for the following year's ASBOA all-region honor band audition (i.e. "I will raise my average tone score by 10 points through daily tone exercises."). The teacher will help each student craft a daily practice routine that will strengthen the weaknesses determined in the ASBOA audition.

CHAPTER 7

CONCLUSION

When I collected and analyzed the audio recordings from the junior high band camp auditions, I expected to find explicit problems with musical expression. What I found were breakdowns at every level of the model indicative of a lack of musical literacy. Students didn't understand the G-component, the syntax of the musical language. Their R-component mistakes (mainly rhythm and articulation inaccuracies) were so numerous that any structural understanding they may have had was lost during the performance. The irregularity of pulse that should be generated by the M-component contributed to the lack of structural understanding. There was no effective "stylistic unexpectedness" employed because there was no understanding of style. Any emotional expression or intention was lost due to the confusion the other four components generated. Using the previous quote from Patrik Juslin, I compare the aural effect of many of these performances to written communication:

my guess is that the first **fur component** generative **rule** x emotional **espresso** ran *dom* variation and **motion principal** are sufficient to **achieve** an *accepting performance*...

The meaning is lost among many variables—seemingly random divisions of words (M-component), omission of capitalization and punctuation (G-component), and lack of stylistic awareness (S-component) are all compounded by the spelling and formatting errors (R-component). The E-component is a moot point because no meaning can be communicated. If these components are addressed in a systematic way, then it is possible to address musical expression in conjunction with the basic mechanics of music.

Limitations and Methodological Issues

DBR is, by design, an approach taken from one lens—the author’s view of one specific population. The results of the performance evaluations are likely not indicative of the performance skills of all flute students across the state; thus, the pedagogical recommendations made may not be appropriate in other settings. The Olympic scoring system is used for the ASBOA all-state honor band auditions to check for reliability, but only one scorer (the author) was used for this study. The GERMS categories themselves are large and incorporate all fields of academic study in music—music theory, music history, and applied music through the G-component and S-component, musicology and music psychology through the E-component, and rhythm and movement pedagogy through the M-component. Rather than attempting to create one comprehensive curriculum that incorporated all of those fields of study, I developed the “Polishing GEMS” curriculum to use the GERMS model to meet the unique needs of this specific student population as determined through this limited study. The curriculum concepts were intentionally kept broad so that the model could be adapted to different populations; however, it has not been tested and may prove ineffective at improving musical literacy and musical expression knowledge and skills.

Suggestions for Further Research

Chapter 2 revealed several research areas in need of further study, including the process and selection of junior high honor bands, the incorporation of the new National Core Arts Standards in beginning band method books, and the inclusion of musical expression pedagogical concepts into standardized curriculum. The pilot study conducted in Chapter 3 should be replicated with a much larger sample size using multiple evaluators in order to determine if the performance domain deficiencies found in this small population reflect statewide deficiencies in

the curriculum. Chapter 5 presented the possibility that the ASBOA Set III junior high flute etudes may cover concepts not introduced in the ADE Beginning Band Curriculum Framework. Further research is needed to determine if this is true of all of the ASBOA etudes at both junior high and senior high levels and whether an alteration of materials or curriculum is needed.

Concluding Remarks

Since the beginning of this study, my intention has been to create a series of open education resources needed for band directors to teach musical literacy and musical expression skills using the ASBOA junior high all-region honor band flute etudes. Chris Roberts, author of *How to Make First Chair*, asked me to create an instructional video for his website covering the ASBOA flute etudes using his long-term practice planning plan eight years ago. At the time, there were no instructional materials available to students besides the audio recordings produced by ViaMedia and a few video recordings made by band directors on YouTube. Using a very old version of PowerPoint and some teaching strategies I learned through lessons with Patricia George, I attempted to create an instructional video teaching musical literacy concepts through the ASBOA etudes (figure 31). The process was daunting, time-consuming, and outside the scope of Chris's vision for his website; thus, I abandoned the project as I began to concentrate on graduate school and teaching college.

I revisited the idea of an ASBOA etude open curriculum four years ago after I read *Sweet Anticipation: Music and the Psychology of Expectation* and *The Science and Psychology of Music Performance: Creative Strategies of Music Performance*. The implications of these books on musical expression pedagogy seemed too radical to ignore—students could be taught a set of rules and suddenly quantify that which seemed unquantifiable. I realize now that view was a bit naïve and simplistic. In the last two decades, the amount of research surrounding the pedagogy

of musical expression has flourished. With each new source I discovered, a plethora of more sources uncovered, and the process seemed like it would never end. I plan on creating Polishing GEMS curriculum materials over the next year and testing them in select schools during Fall 2019 when the Set III etudes are used again. Once the open curriculum for junior high flute students has shown to be successful, I hope to expand it to senior high students and other instrumentalists. Students who are not able to enroll in private lessons due to their rural location and/or socioeconomic status are at a severe disadvantage at the competitive honor band auditions. Although a supplemental curriculum cannot replace private instruction, it could increase basic musical literacy skills enough to give this unique population a chance at success.

The screenshot is a black rectangular box with white text and musical notation. At the top, it says "Time Signature". Below that, it says "Another way to count. . ." and shows a 12/8 time signature with two blue arrows pointing to the text "4 beats/measure" and "♩ = 1 beat". Below this, it says "This is *compound meter*. In compound meter, notes are in groups of 3, rather than 2." At the bottom, there is a musical staff with a treble clef and a key signature of one flat. The staff contains a sequence of eighth notes grouped in threes. Below the staff, there are red numbers and syllables: "1 la li 2 la li 3 ta li 4 la li". A blue arrow points from the text "Pronounced 'lee'" to the notes in the staff.

Figure 31. Screenshot from author-created open education resource (OER) covering an ASBOA flute etude

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APPENDIX A

INSTITUTIONAL REVIEW BOARD DOCUMENTS



Institutional Review Board

315 Administration Building

Memphis, TN 38152-3370

Office: 301.678.3074

Fax: 901.678.2199

irb@memphis.edu

Initial Review Request

This form must be completed according to the guidelines located here:

<http://www.memphis.edu/irb/forms.php>

1. Basic Information (See Initial Review Request Guidelines Section 1)

1.a: Lead Investigator

BannerU# U00391549	Academic Unit: Music
Last name: Amox	First Name: Jennifer
Email address: jenniferamox@gmail.com	
Investigator type:	CITI Training Info:
Faculty	Completion Report # 1705859
Student X	Completion Date: 02/21/2015
External	

1.b: Contact Person (if different from lead investigator)

Contact Banner U#	Contact Email:
Contact Last Name:	Contact First Name:

1.c: Faculty Advisor (this section required for students only)

BannerU# U00001156	Academic Unit: Music
Last name: Page	First Name: Janet

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Email address: jpage2@memphis.edu	
	CITI Training Info:
	Completion Report # 10021629
	Completion Date: 4/19/13

1.d: Study Information

Study Title: Polishing GEMS (Generative rules, Emotional expression, Motion Principles, and Stylistic Unexpectedness): A Curriculum Model for the Intermediate Flute Student, Examining the Intersection of Music Theory, Musical Expression, and Flute Repertoire
Anticipated Number of Subjects: 50
Co-Investigators:
Submission Type: Exempt Study <input type="checkbox"/> Secondary Analysis of Existing Data Only <input type="checkbox"/> All Other Studies <input checked="" type="checkbox"/>
Externally Funded? Yes No <input checked="" type="checkbox"/>

1.e: Affirmations

By checking the box below, Investigator affirms the following:

- 1) The research will not be initiated until written approval is secured from the IRB.
- 2) I will conduct this study as described in the approved study. If any changes are anticipated, I will contact the IRB staff prior to implementing the changes and request the appropriate form or procedure. I will not implement the changes until I receive approval from the IRB or its staff.
- 3) I will contact the IRB staff immediately if any of the following events occur: unanticipated problems involving risks to subjects, study deviations, and findings during the study that would affect the risks or benefits of participation.
- 4) If you are a student, you also affirm your understanding that approval of your Faculty Advisor is required before this document is submitted to IRB.

Investigator affirms: Yes No Date Affirmed: 5/13/2016

By checking the box below, Faculty Advisor affirms the following (required for graduate and undergraduate student research):

- 1) I have reviewed and approved the research plan of the student(s).
- 2) I assume responsibility for ensuring that the student(s) conducting research are aware of their responsibilities as researchers
- 3) The IRB will be immediately informed in the event of unanticipated problems involving risks to subjects, study deviations, or findings during the study that would affect the risks or benefits of participation.
- 4) I will submit the reviewed study to irb@memphis.edu on behalf of my student

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Faculty Advisor affirms: Yes X No Date Affirmed: 5/13/2016

*Required fields

2. Purpose of the Study (See Initial Review Guidelines Section 2)

The purpose of the study is to design a music theory curriculum that correlates with intermediate flute repertoire and reinforces musical expression concepts found in the GERMS (Generative rules, Emotional expression, Random variability, Motion principles, and Stylistic Unexpectedness) model. Recordings of secondary school flute students performing intermediate flute literature at a rural Arkansas summer band camp (at Henderson State University) will be analyzed for common technical and expressive errors that will be addressed in the study's curriculum guide.

3. Methods and Procedures (See Initial Review Guidelines Section 3)

The audio recordings will be taken during a blind audition process for chair placement in the band camp, in which students will not be seen or identified. Each student's recording will be coded with an anonymous number that cannot be connected to any identifying information of the student. The investigator will analyze both the audio recordings and the resulting waveform files generated by the recording software (GarageBand). Recordings will be analyzed for pitch and rhythm accuracy, tone quality and timbre, articulation, dynamic contrast, and rubato.

The blind audition process assigns a random identifier to each student at audition time (e.g. 11:05am). For the purposes of this study, that audition time information will be omitted from the recording. Only the sound recording of the student's performance will remain. Any recordings that include students who inadvertently speak during the audition process will be discarded. Recordings will be labeled using a randomizing number program in real time.

4. Secondary Analysis of Existing Data (See Initial Review Guidelines Section 4)

5. Investigator(s) Qualifications (See Initial Review Guidelines Section 5)

The investigator has taught applied flute at the secondary and post-secondary levels for eighteen years.

6. Human Subjects (See Initial Review Guidelines Section 6)

a. Characteristics Junior high and senior high students (ages 12-18) who audition on flute at a band camp hosted by a rural Arkansas college (Henderson State University) will be invited to participate. The auditions will occur on Tuesday, June 28, 2016, and Sunday, July 10, 2016.

b. Vulnerable Populations

Revised 2-2013

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These subjects are minors.

c. Pre-existing relationship to subject pool

The investigator has taught some of these students at previous band camps at the same institution; however, the investigator will be unaware of the students' identity when the audio recordings are collected.

d. Subject Selection

This study is limited to intermediate flute students, thus only students auditioning on flute for the "Junior II" (students entering 7th, 8th, and 9th grades) or "Senior" band camps (students entering 10th, 11th, and 12th grades) at Henderson State University are invited to participate.

e. Anticipated Number of Subjects

Approximately fifty student recordings will be collected.

7. Recruitment (See Initial Review Guidelines Section 7)

Students and their parents will be contacted via the email address provided on their band camp application form.

8. Subject Payment (See Initial Review Guidelines Section 8)

No compensation will be offered to subjects.

9. Potential Risks (See Initial Review Guidelines Section 9)

There are no potential risks to students participating in the study that would not occur under regular conditions of the audition (e.g. performance anxiety), and those potential risks are minimal. The recording equipment will be behind the audition screen, thus it will not be visible to the students.

10. Potential Benefits (See Initial Review Guidelines Section 10)

There are no direct benefits to the subjects. The collected recordings and resulting analyses are intended to provide useful information on common pitch, rhythmic and musical expression errors for music educators of intermediate flute students.

11. Assessment (See Initial Review Guidelines Section 11)

No such collection of audition audio recordings has been attempted in this setting. The potential risks to the subjects involved is minimized through the removal of all identifying information from recordings.

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The research findings are intended to evaluate areas in student performance that may need additional focus in the current music education curriculum.

12. Privacy (See Initial Review Guidelines Section 12)

Potential subjects and their parents will be contacted via the email address provided on their applications to the band camp. The student will never encounter the investigator during the audition recording process, since the audition is "blind." Each recording will be started after the lone identifying information (audition time) is stated by the audition room monitor. Each recording will immediately be assigned a coded number generated by a randomizing number application.

13. Confidentiality (See Initial Review Guidelines Section 13)

Student recordings and consent forms will be stored for 24 months after their collection and then will be destroyed.

14. Collaboration, Engagement & Sponsor Relationships

(See Initial Review Guidelines Section 14)

none

15. Sponsor Proposal (See Initial Review Guidelines Section 15)

16. Informed Consent (See Initial Review Guidelines Section 16)

See attached documents.

Submit this completed form via email to irb@memphis.edu

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315 Administration Bldg.
Memphis, TN 38152-3370
Office: 901.678.2705
Fax: 901.678.2199

ASSENT FORM

Polishing GEMS: A Curriculum Model for the Intermediate Flute Student Examining the Intersection of Music Theory, Musical Expression, and Flute Repertoire

You are invited to be in a research study being done by Jennifer Amox from the University of Memphis. You are invited because you are auditioning on flute for the Henderson State University Junior II or Senior High Band Camp this summer.

If you agree to be in the study, your audition for band camp will be recorded and analyzed. These recordings will not include your name or your audition time. Your audition experience will be identical whether you choose to participate in this study or not.

There is no payment for participating in this study, and you will be unable to request a copy of your recording after you audition. The results of the study will help develop new teaching methods designed to help flute students perform with more musical expression.

Your family will know that you are in the study. If anyone else is given information about you, they will not know your name. A number will be used instead of your name. ***Your parent or guardian will need to sign a permission form in order for you to participate.***

If something makes you feel bad while you are in the study, please tell the monitor in the audition room. If you decide at any time you do not want to finish the study, you may ask the monitor to stop the audio recording and continue with your audition as normal.

You can ask Jennifer Amox questions at any time about anything in this study. You can also ask your parent any questions you might have about this study. To learn more about this research, please contact Jennifer Amox at jenniferamox@gmail.com or 501-860-1921.

IRB ID#:
Expiration Date:

Parental Permission for Your Child to Participate in a Research Study
Polishing GEMS: A Curriculum Model for the Intermediate Flute Student
Examining the Intersection of Music Theory, Musical Expression, and Flute Repertoire

WHY IS YOUR CHILD BEING INVITED TO TAKE PART IN THIS RESEARCH?

Your child is being invited to take part in a research study about pitch, rhythm and musical expression in performances by intermediate flute students. Your child is being invited to take part in this research study because he or she is auditioning on flute for the 2016 Henderson State University Junior II or Senior High Band Camp. If your child takes part in this study, your child will be one of about fifty children to do so.

WHO IS DOING THE STUDY?

The person in charge of this study is Jennifer Amox, a doctoral candidate at the University of Memphis Department of Music. She is being guided in this research by Dr. Janet Page. There may be other people on the research team assisting at different times during the study.

WHAT IS THE PURPOSE OF THIS STUDY?

Students' audition recordings will be analyzed for pitch and rhythm accuracy and musically expressive devices in an attempt to develop a new curriculum for flute teachers. By doing this study, we hope to learn if there are certain common performance behaviors in intermediate flute students that could be assisted through new teaching techniques.

ARE THERE REASONS WHY YOUR CHILD SHOULD NOT TAKE PART IN THIS STUDY?

All students auditioning on flute at the HSU band camps are invited to participate. If your child feels that knowing the audition is being recorded would increase nervousness during the audition, then he or she should opt not to participate. The audio recording equipment will not be visible by the student, and the student is free to ask the audition monitor to stop the recording at any time.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The research procedures will be conducted at Henderson State University. The audio recording will be collected at the same time as your child's audition, thus no additional time will be required to participate.

WHAT WILL YOUR CHILD BE ASKED TO DO?

Your child will arrive on the first day of camp and audition for band placement as normal. The recording equipment will be behind the audition screen next to the judges in the audition room. It will not be visible by your child. After your child's audition time is announced, the recording will begin and will be stopped as soon as your child is done with the audition. If your child accidentally speaks during his or her audition, then the recording will be stopped and discarded.

Each recording will be assigned a random number so that your child cannot be identified by his/her recording. Small sections of these recordings will be included in a document discussing how music theory and musical expression can be



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taught to intermediate flute students. The complete recordings will be destroyed in 24 months. Due to the anonymous nature of the recordings, you and your child will not be able to request a copy of the recording.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things your child will be doing have no more risk of harm than your child would experience in everyday life.

WILL YOUR CHILD BENEFIT FROM TAKING PART IN THIS STUDY?

Your child will not get any personal benefit from taking part in this study. Your child's willingness to take part, however, may, in the future, help society as a whole better understand musical performance by intermediate flute students.

DOES YOUR CHILD HAVE TO TAKE PART IN THE STUDY?

If you decide to allow your child take part in the study, it should be because your child really wants to volunteer. Your child will not lose any benefits or rights your child would normally have if your child chooses not to volunteer. Your child can stop at any time during the study and still keep the benefits and rights your child had before volunteering. If you or your child decides not to take part in this study, your child's decision will have no effect on his or her chair placement within the camp.

IF YOUR CHILD DOESN'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If your child does not want to take part in the study, your child can audition for chair placement at band camp as normal.

WHAT WILL IT COST YOU FOR YOUR CHILD TO PARTICIPATE?

There are no costs associated with taking part in the study.

WILL YOUR CHILD RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

Your child will not receive any rewards or payment for taking part in the study.

WHO WILL SEE THE INFORMATION THAT YOUR CHILD PROVIDES?

We will make every effort to keep private all research records that identify your child to the extent allowed by law.

Your child's information will be combined with information from other children taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. Your child will not be personally identified in these written materials. We may publish the results of this study; however, we will keep your child's name and other identifying information private.

We will make every effort to prevent anyone who is not on the research team from knowing that your child's audio recording is included in the study.

2 of 3

IRB ID#:
Expiration Date:



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We will keep private all research records that identify your child to the extent allowed by law. However, there are some circumstances in which we may have to show your child's information to other people. We may be required to show information which identifies your child to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Memphis or Henderson State University.

CAN YOUR CHILD'S TAKING PART IN THE STUDY END EARLY?

If your child decides to take part in the study, your child will still have the right to decide at any time he/she no longer wants to continue. Your child will not be treated differently if your child decides to stop taking part in the study. Your child can simply ask the audition monitor to stop the audition recording.

The individuals conducting the study may need to withdraw your child from the study. This may occur if your child accidentally speaks during the recording process, if they find that your child's being in the study results in more risk than benefit to your child, or if the agency funding the study decides to stop the study early for a variety of scientific reasons. There are no consequences for withdrawing from the study.

WHAT IF YOUR CHILD HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?

Before you decide whether to accept this invitation for your child to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Jennifer Amox at jenniferamox@gmail.com or 501-860-1921. If you have any questions about your child's rights as a volunteer in this research, contact the Institutional Review Board staff at the University of Memphis at 901-678-2705. We will give you a copy of this permission form to take with you.

Name of [authorized] person obtaining informed consent

Date

IRB ID#:
Expiration Date: