INSTRUMENTAL MUSIC AS CONTENT LITERACY EDUCATION: AN INSTRUCTIONAL FRAMEWORK BASED ON THE CONTINUOUS IMPROVEMENT PROCESS

by

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GRADUATE COMMITTEE APPROVAL

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| by majority vote has been to | found to be satisfactory. | |
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As chair of the candidate's graduate committee, I have read the project of Victor Russell Tarbet Neves in its final form and have found that (1) its format, citations and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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CHAPTER 1

OVERVIEW

THE LITERACY REFORM MOVEMENT

The current movement for reform in public education, which began in the 1990s, has focused on the acquisition and development of English language reading and comprehension skills. Oft cited researchers and theorists including Unsworth, ¹ Bruce & Davidson, ² as well as Brozo & Simpson, ³ call for the teaching of "literacy across the curriculum." The *Reading Framework* for the 1992 *National Assessment of Educational Progress* (NAEP) opens by stating that:

Reading is the most important, fundamental ability taught in the nation's schools. It is vital to society and to the people within it. It is the door to

¹Len Unsworth, *Teaching Multiliteracies Across the Curriculum: Changing Contexts of Text and Image in Classroom Practice*, (Philidelphia: Open University Press, 2001) 220-259

²Bertram C. Bruce and Judith Davidson, "An Inquiry Model for Literacy, across the Curriculum, Technical Report No. 598," Center for the Study of Reading, Urbana, IL. Journal of Curriculum Studies, 28(3), 281-300

³William G. Brozo and Michele L. Simpson, *Readers, Teachers, Learners: Expanding Literacy across the Content Areas. Third Edition.* (Iowa: Merrill Prentice Hall, 1999) Chapter 8

knowledge and a capability that can liberate people both intellectually and personally.⁴

The *No Child Left Behind* (NCLB) act (2001) holds public schools responsible for yearly progress in literacy education. Under the law, these literacy reforms must be based on:

... research that applies rigorous, systematic and objective procedures to obtain valid knowledge relevant to reading development, reading instruction and reading difficulties; and includes research that employs systematic, empirical methods that draw on observation or experiment....⁵

The implementation of NCLB also requires teachers in every content area to participate in "Professional development that is ongoing and high-quality and that supports scientifically research-based reading instruction for all students." These two mandates for the public schools resulted in an increased focus on strategies for teaching English language reading in every class, including music classes.

Several states, including Utah, have provided curriculum guidelines for music that include reading and journal writing about music as part of the daily ensemble rehearsal. This curricular focus can diminish the class time available for each student to participate in the actual experience of music itself. While reading, and writing about music provides students with valuable insights into the cultural context of the

⁴National Assessment Governing Board. *Reading Framework for the National Assessment of Educational Progress: 1992–2000.* Donahue, P. L., Voelkl, K. E., Campbell, J. R., & Mazzeo, J. Washington, DC:1

⁵Public Law 107-110 - January 8, 2002, 107th Congress - No Child Left Behind Act (NCLB - Title I, Part B, Subpart I - *Reading First*, Section 1208).

⁶Ibid. Section 1202

music, that framework should not be mistaken for music itself. Time spent in music class should focus on music, "musicing" and musicianship. That does not mean that literacy should be ignored. Rather, *music literacy* should be pursued. Music class instruction in literacy should focus on music awareness, music performance, music appreciation, and the decoding of music as a form of communication. When this is accomplished, music learning as content literacy learning can fulfill the literacy mandates of the National Assessment of Educational Progress (NAEP) and the No Child Left Behind Act (NCLB).

THE CONTINUOUS IMPROVEMENT PROCESS

The National Study of School Evaluation (NSSE) is the umbrella research organization for the six regional school accreditation commissions. Its mission is to "enhance and promote student achievement through accreditation processes." In an effort to provide research-based best practices of improvement and evaluation, the NSSE has participated in the development of the *Continuous School Improvement* process. ¹⁰

⁷David J. Elliot, *Music Matters*. (New York, Oxford University Press, 1995) 60-63

⁸David J. Elliot, *Praxial Music Education: Reflections and Dialogues*. (New York: Oxford University Press. 2005), 10-36.

⁹National Study of School Evaluation, "Mission" available from http://www.nsse.org/about_nsse/index.cfm#mission. accessed April 7, 2007

This process includes a locally developed, medium term and systemic strategic orientation based on student achievement data collection and analysis, implemented through periodic review and cyclic repetition. It can be described as the current focus of public school improvement in America and serves as the assessment mechanism currently implemented by all six regional accreditation authorities in the United States. In order to receive accreditation status, each school must create and implement an authentic continuous improvement process in every content area.

Use of the *Continuous Improvement Process* as a model for department or classroom level curriculum development lends the strength of providing research-based, data driven improvement, delivery and evaluation along with the additional usefulness of meeting public school accreditation requirements. While the *Continuous Improvement Process* is generally used for school wide improvement and accreditation, area specific planning, assessment, and improvement can benefit from its implementation.

¹⁰Ibid. "About NSSE" http://www.nsse.org/about_nsse/index.cfm

¹¹David Hopkins, *School Improvement for Real*. (Oxford: Routledge Taylor & Francis Group, 2001) 2-3

Desired Results for Student Learning

The continuous school improvement process follows a basic pattern. This pattern includes five specific sub-processes. First is the creation of consensus driven student improvement goals. Although these goals are generally referred to as "Desired Results for Student Learning" or "DRSLs" (pronounced "dursells") they may also be referenced as Desired Learning Outcomes or Desired Student Outcomes. According to the Commission on Accreditation and School Improvement, it is important that these goals meet several criteria. For the purposes of this professional improvement process, the DRSLs should be supported by previous research; support the mission of the school; be phrased in terms of student performance; emphasize student growth; and focus on higher level thinking skills.¹²

Second, when research-based DRSLs are established, action items are formulated for each goal. Third, the instructional curriculum is mapped and correlated for alignment with the DRSLs and action items. Areas needing improved curricular or instructional focus are noted. Fourth, strategies for improvement are developed, implemented, measured, and analyzed. Measurements include a baseline assessment of student achievement in the area of focus, an instructional strategy for improvement, and a post strategic assessment. Finally, results analyses are logged for

¹²North Central Association Commission on Accreditation and School Improvement, *Writing and Evaluating Student and Performance Goals.* 2001:2-3

future assessment and improvement. For the current project, a multi-dimensional analysis of curricular alignment was added to the continuous improvement process.¹³

MUSIC INSTRUCTION AS CONTENT LITERACY EDUCATION

The intent of this project was the development of a multi-variate assessment and improvement process for ensemble instruction in music literacy as content literacy within the mandates outlined by NAEP and NCLB. The creation of a process focused on literacy in music rather than literacy about music necessitated gathering, developing, and assessing literacy tools that provided specific measurable and/or observable results, and were applicable to the development of young musicians.

Most students who study music in the secondary schools do so as part of ensemble performance classes in which, by nature, the practices of music teaching and music learning are as varied as music itself. To explore these diverse ways of helping students develop literacy in music, a review of literature was conducted – including writings on music education philosophy, music literacy research, best practices in music pedagogy and multiple intelligence theory.

¹³National Study of School Evaluation (NSSE). *School Improvement: Focusing on Student Performance, A Comprehensive Guide for Data-driven and Research-based School Improvement Planning*. 1997. Kathleen A. Fitzpatrick, Project Director. Schaumburg, IL. pages 3.1 – 3.15.

CHAPTER 2

REVIEW OF LITERATURE: SUMMARIES AND IMPLICATIONS FOR THE PROJECT

In order to lay a foundation of current research for the project DRSLs, four areas of study were reviewed. These areas included:

- Music education philosophy,
- Research in music literacy,
- Current music education best practices, as related to large ensemble instruction and rehearsal,
- Multiple intelligence theory.

Most of the literacy related music education articles referenced here related to one or another of these broad categories. While many of the authors addressed each area to some degree, there seemed to be a division between the philosophers, researchers, and practitioners in music education. Reading, synthesizing and implementing ideas from all areas was an indispensable part of formulating the DRSLs for the improvement process. Each of the works examined in this review are summarized and implications are identified for use in the project. While the focus of the project was literacy acquisition in the context of the instrumental classroom large ensemble, value was found in writings related to other music learning settings. Where applicable, those writings were included in the project.

MUSIC EDUCATION PHILOSOPHY

A Philosophy of Music Education (Music Literacy and Music Reading) by Bennett Reimer, ¹⁴

Summary

Reimer points out that music literacy has come to mean the ability to read notes on a staff and posits that there is more to musicianship than the decoding of symbols. He refers to music education that focuses on reading as "an artistic counterpart of idolatry," redefining literacy as the understanding of notation symbols at a level of knowledge sufficient to significantly facilitate music composition and performance. While the acquisition of notation skills does not, in and of itself, constitute music literacy, it is an important step towards meaningful musical expression¹⁵.

Implications

Music literacy must be more than a set of decoding skills. Reimer alludes to the conceptual skills that modern language arts teachers call "reading comprehension" and "listening comprehension." Both of those language skills have counterparts in the realm of music education. The acquisition of these skills should lead to music reading and listening comprehension.

¹⁴Bennett Reimer, *A Philosophy of Music Education*. (New Jersey, Prentice Hall, 1970) 172-177

¹⁵Reimer describes music meaning and expression as "mysterious" and indefinable using spoken language.

Music Matters (Musicing) by David J. Elliot. 16

Summary

Elliot presents a "praxial" philosophy of music education, a term invented by Philip Alperson. 17 This "praxialism" is based on the idea that music is the sum of many human potentials being activated simultaneously. Music, according to Elliot, is more than a formal knowledge of the sounds, notes and rests involved. It must be "purposeful, contextual and socially-embedded." Authentic music is achieved through active music making within the cultural context of the person performing or listening to the music and includes conducting, performing and composing, each within its own context and in combination with the other contexts, all within an overarching cultural framework. Music literacy, the act of decoding written music, is parenthetical to the cultural context of authentic music and is not a required skill for most people. "Musicing," another original term, describes engagement in various musical activities, most of which do not require symbol decoding.

Implications

If one is to accept Elliot's assertions, presented in 1995, that music reading is a relatively unimportant part of musicianship, then the decoding of music notation among the general public can be viewed as a cultural and historical anomaly. This idea seems antithetical to the philosophical premise that music can improve the world

¹⁶David Elliot, Music Matters (New York, Oxford University Press, 1995), 60-63

¹⁷Phillip Alperson,. "What Should One Expect from a Philosophy of Music Education?" *Journal of Aesthetic Education* 25, no. 3. (Fall 1991) 215-242

by bringing present cultures into contact with the best parts of past cultures through the symbolic representation and recreation of their music. If all cultural contexts are equal, there is no reason to teach any kind of formal music. Participation in the music of any culture should be sufficient. The opposing worldview that there is increased value in well thought out art reinforces the need for music reading as a centrally important ability.

Praxial Music Education, Reflections and Dialogues (Musicing and Listening) by David J. Elliot. ¹⁸

Summary

In this later work by Elliot, the concept of "musicing" is explored at greater length. After further reflection, Elliot describes "musicing" as being engaged in five forms of music making: performing, improvising, composing, arranging and conducting which he believes are "mutually reinforcing and interdependent." The importance of reflective learning is highlighted. The concept of musical equality within cultural contexts is reaffirmed and various interpretations of "musicing" philosophy among the Praxial Music Education (PME) community are explored. Implications

While the expansion of musicing to five forms is more inclusive than the limited use of the original three, it is the opinion of the author of this project that listening or appreciation should also be included. Once again, the idea that all music

¹⁸David Elliot, *Praxial Music Education*, (New York: Oxford University Press. 2005), 10-36

can be equal seems to be questionable. As an "other" form of human communication, music is uniquely suited to convey human expression in a way that can differ greatly from normal verbalization, written word, or body language. It may be argued that highly developed music is needed to convey the expression of advancements in culture. From that point of view, music can be used to measure the development of the cultural context that surrounds it. All teachers in general, and music teachers in particular, serve as guardians of the culture, past, present and future. As such, they have a special obligation to encourage the best kinds of growth and development, including the acquisition of those skills with clear histories of cultural evolution linked to achievement, as notation is linked to the development of musical expression.

A Challenge for Change in Music Education, by Charles Leonhard¹⁹
Summary

Leonhard proposes rethinking the basic culture of music education, deemphasizing large ensemble achievement and re-emphasizing folk music cultures, including contemporary popular music, in an effort to build individual aesthetic appreciation in the context of each musician's culture. He encourages reflective thinking and the use of non-traditional music education strategies. The overarching goal of music literacy can then be met by using the student's existing cultural context.

¹⁹Charles Leonhard, "A Challenge for Change in Music Education" *Music Educators Journal*, 00274321, Nov. 1999, Vol. 86, Issue 3.

He warns against what he calls the "elitist virus" that leads teachers to value common practice music over folk and popular forms.

<u>Implications</u>

Leonhard's thoughts on music teaching mesh well with Elliot's philosophy of praxial music education – especially with the idea of "conceptual musicing." But he does not address the value of the enculturation that students achieve when they give themselves over to the rigors of what he terms to be "elite" music. As long as existing contexts are used as an entry points for the development of music literacy and not as the main areas of study, Leonhard's suggested changes in education culture should give broader accessibility to potential music students.

RESEARCH RELATED TO MUSIC LITERACY

Learning Sequences in Music (Symbolic Association) by Edwin Gordon ²⁰
Summary

Gordon proposes a complex system that differentiates between "presenting" music and "representing" music. This approach evaluates different systems of music literacy according to their serviceability for presentation or representation. Gordon accepts solfege, rejects letter names, and believes that audiation and pattern recognition are more important than the absolute naming of symbols. Symbolic

²⁰Edwin Gordon, *Learning Sequences in Music*, (Chicago, GIA Publications Inc. 2003) 61-123.

association in music is learned first on the aural/oral and verbal association level. These levels combine to form what he calls "partial synthesis." When partial synthesis is associated with symbols, composite synthesis is achieved, enabling notational audiation. In Gordon's words, "Notation can only assist us in recalling what we have already audiated" in symbolic association. Inference learning happens when familiar patterns are recognized in new material and converted to audiation. This empowers higher level learning - including theoretical understanding and creativity.

Implications

Even though Gordon's learning sequence theory does not advocate the use of absolute pitch symbols, given the cultural context in which most American school musicians operate, a decision was made to include the use of solfege with chromatic alterations used at the verbal association level. The use of letter names was included as a bridging activity in order to facilitate the move to inference learning – especially in the acquisition of Keyality (as differentiated from tonality and modality.) Gordon's stepwise and bridging activities between audiation/performance and symbolic representation provide a strong musical corollary to the interrelation between the language literacy concepts of fluency and literacy.

Learning Sequences in Music (Learning Sequence Activity) by Edwin Gordon²¹
Summary

Audiation (auditory awareness of the music) is at the center of Gordon's learning theory and forms the basis of his research into the way children learn music. The central concept of enables the acquisition of learning of skills and sequences. Gordon charts the sequence and categories in which music can be learned, suggesting sequential movement within and bridging movement between the categories. He advocates practical applications for moving learners through increasingly complex knowledge sets with the eventual goal of musical literacy combined with a firm understanding of tonality and "keyality," (discussed below.)

Implications

While the complexity of Gordon's system can seem somewhat daunting, it provides conceptual understandings involving the differences between sequential and bridging activities that were useful for this project. These included learning activities in tonality – involving hearing tonalities in general; and keyality – involving the skills necessary to creating a specific tonality. These domains should be approached as separate areas of focus within the field of ensemble musicianship.

²¹Ibid. 211-228

Teaching Music in the Secondary Schools (Reading Music) by Charles Hoffer ²²
Summary

Hoffer writes that successful teachers use a variety of strategies to teach students to read, noting that the acquisition of music reading ability occurs along a continuum, and not as a single occurrence. Music repertoire should serve as the teaching material and pattern recognition should receive great emphasis.

Furthermore, intervals and sequences must be understood and solfege should be used, but students should also learn the function of each note within a tonality by using the scale step and chord member number.

Implications

Hoffer's assertions are simple and yet congruent with the cultural context of American education. Step by step learning is necessary for the acquisition of new and complex skill sets. To say that music is learned by learning music encapsulates what music teachers should try to do.

²²Charles Hoffer, *Teaching Music in the Secondary Schools*. (Belmont, Wadsworth Publishing, 2001) 158-161

Visually Induced Auditory Expectancy in Music Reading: A behavioral and Electrophysiological Study, by Daniele Schon, and Mireille Besson²³

Summary

Schon and Besson measured auditory expectancy (audiation) by analyzing behavioral and electrophysiological reactions to auditory expectancies related to visual patterns in musical scores in fourteen subjects, trained musicians age 11-30 with a median age of 17. Results showed that musicians are able to perceive differences between visual and auditory representations of music based on musical perception dependent on visual representation and independent of listening.

Implications

The study showed that auditory anticipation ability (audiation) existed in the sample population and revealed a difference in the auditory anticipation perception ability of musicians based on tonality vs. atonality in a five note pattern. The findings of the study support Elliot's assertion that enculturation is a vital part of the musical praxis, as well as the generally accepted theories of audiation and pattern recognition as vital components of music literacy. This synthesis of audiation and pattern recognition as cultural literacies in music helped form the conceptual foundation of this project.

²³Daniele Schon, and Mireille Besson, "Visually Induced Auditory Expectancy in Music Reading: A behavioral and Electrophysiological Study," *Journal of Cognitive Neuroscience* 17:4. pp. 694-705

Emerging Musical Literacy: Investigating Young Children's Music Cognition and Musical Problem Solving through Invented Notations by Joan McCusker²⁴

Summary

McCusker's study explored the development of musical perception among eleven kindergarten and first grade student by examining the use of invented notation as related to other life influences, including musical aptitude, developmental readiness and language literacy concluding that developmental readiness and language literacy have the greatest influence on notation perception. A progression of pattern perception was assessed as students developed, with rhythmic patterns playing an important role. The author also noticed the importance of social interaction within the group as a determinant to musical growth.

<u>Implications</u>

Although the sample population of this study is younger than the target population of the project, the results are applicable as they reinforce the generally accepted practice of pattern repetition in music reading development as well as the importance of learning rhythm patterns and language literacy for developing musicians preparing to acquire notational literacy. The study also recommends that teachers facilitate the development of reading ability by assisting in the formation of literacy-focused learning communities, a central goal of the *Continuous Improvement Process*.

²⁴Joan McCusker, "Emerging Musical Literacy: Investigating Young Children's Music Cognition and Musical Problem Solving through Invented Notations." IHM, Ph.D. Dissertation. Eastman School of Music, Rochester New York 2001.

Instructional Methods on High School Band Students' Sight-Reading Proficiency, Music Performance, and Attitude, Price, Harry E.; Blanton, Frank; Turner Parrish, Effects of Two Instructional Methods on High School Band Students' Sight-Reading Proficiency by Price, Blanton, and Turner-Parrish²⁵

Summary

Price, Blanton, and Turner Parrish studied improvement outcomes among 58 high school band students using two different instructional methods for teaching sight reading. One group practiced reading "fundamental exercises" while the other practiced reading excerpts from the standard repertoire. The study showed that while there was no significant difference between the improvements in reading ability, there was a higher performance achievement and a more positive attitude for the excerpt group.

Implications

The study shows that, while some skills can only be taught using exercises, there is a benefit to teaching as many skills as possible using actual music repertoire. This finding is supported by the commercial success of the "Teaching Music Through Performance Series" as well as by the general success of instructional methods that rely on performance repertoire rather than on exercises.

²⁵Harry E. Price, Frank Blanton, Regena Turner Parrish, , "Effects of Two Instructional Methods on High School Band Students' Sight-Reading Proficiency, Music Performance, and Attitude," *Update: Applications of Research in Music Education*, v17 n1 Fall-Win 1998: 14-20

²⁶ GIA Publications, Chicago, Illinois

BEST PRACTICES IN MUSIC PEDAGOGY

How to Design and Teach a Successful School String and Orchestra Program by Jacquelyn Dillon and Casimer Kriechbaum²⁷

Summary

Dillon and Kriechbaum outline a learning sequence that builds music reading ability as playing skills are acquired. Rhythm is learned first with special attention given to rests as negative space in time. Instrument holding and positioning instruction comes next, followed by finger tapping on note fingerings and then pizzicato. Chanting, then singing – rhythm syllables and note names – accompany these activities as students learn pitch matching and tonal imitation. These repetitive drill routines allow teachers to evaluate and teach students in rapid succession while reinforcing correct fingerings and note names. Finally, bowing – including air bowing for bow alignment evaluation – is introduced and students play the music. As new skills are acquired, the cycle is repeated.

Implications

This useful, step by step method follows the general patterns outlined in many current, commercially available method books. The learning sequences set forth in these books document instructional best practices for teaching literacy in music, fulfilling an important goal of the NAEP mandates and help provide researched based rationales for the formation of the DRSLs of this project.

²⁷Jaccquelyn Dillon, and Casimer Kriechbaum, *How to Design and Teach a Successful School String and Orchestra Program.* (San Diego, Kjos West, 1978) 65-106

Teaching Tips: Simple Steps to Sight Reading on the Harp by Sydney Howell²⁸
Summary

Howell, a teacher of the Suzuki instructional method, does not teach note reading until the student is at the intermediate level. Prior to learning notation, students acquire an aural knowledge of higher and lower pitches along with half steps, whole steps, skips, intervals and patterns. They then learn the corresponding symbols of notation, including notes, clefs, accidentals and staff lines. Visual symbols are introduced in association with existing aural skills. Simplicity is the rule and new concepts are added when existing concepts are mastered. Instructor modeling with student imitation allows emerging readers to visually follow the musical line while reviewing and reinforcing symbolic associations.

Implications

Many intermediate Suzuki students, including several students past and present in the target population of this project, reach secondary school performance ensembles without developing a music notation reading skills. When these students join middle and high school ensembles where note reading is the norm, they often seem to feel overwhelmed and out of place. A key implication for a successful transition to music reading literacy is the ability to build on existing knowledge by helping students understand the symbolic association of notation within the context of the skills already acquired studying the Suzuki Method.

²⁸Howell, Sydney "Teaching Tips: Simple Steps to Sight Reading on the Harp", *American String Teacher* 53:3 (August 2003) p. 41-42, 44

School Orchestra Daily Rhythm Exercises by Christine Lipper²⁹

Summary

Lipper presents "Daily Rhythm Exercises" as an opening activity for classroom ensembles. The exercises revisit and separately emphasize the skills of counting, meter, dictation, and melodic rhythms. Exercises of varying difficulty provide opportunities for differentiated instruction.

<u>Implications</u>

For the purposes of engaging students in music literacy centered learning, opening activities in ensemble rehearsals should be quick, reflective, level appropriate and routine. This system meets those criteria and provides a useful model of comprehensive instruction for rhythm and aural pattern recognition.

Strategies for Teaching Strings and Orchestra by Straub, Bergonzi, and Witt³⁰
Summary

Straub, Bergonzi and Witt outline best instructional practices for each national standard. The strategies, when viewed as a whole, reflect that music making and note reading are separate entities. The exercises outlined in the article highlight the value of repetition in the acquisition of symbolic association. Technique, pitch matching,

²⁹Christine Lipper, "School Orchestra Daily Rhythm Exercises," *American String Teacher*, 52:2 (May 2002) 44

³⁰Dorothy A. Straub, Louis S.Bergonzi,; and Anne C. Witt, *Strategies for Teaching Strings and Orchestra*, (Reston, VA, MENC - no date available) 40-49

and harmonic relationships are important multitasking elements. The use of repertoire as drill material is encouraged. Indicators of success and follow-up activities are given for each strategy.

These concepts provide important examples of how to help students acquire a greater understanding of notes as symbols for music. They demonstrate teaching considered by the profession (as represented by the Music Educators National Conference) to actually represent best practice. Teaching should not be limited to these exercises; rather, each exercise should serve as a point of departure for pedagogical exploration within that standard.

Strategies for Teaching Strings by Robert Gillespie and Donald R. Hamann³¹
Summary

Gillespie and Hamann propose that content reading must be taught as part of a holistic learning strategy that is differentiated for each level of learner. For beginners, existing skills must be assessed and reviewed. The learning styles of each student should be evaluated and new skills acquired in sequence. Simple pitch patterns are learned, first aurally – then on the instrument. For intermediate musicians, finger patterns are reinforced as a vehicle for intermediate level aural skills with students imitating simple rhythms and melodies by ear. Harmonic tuning is introduced. At the advanced middle level, the vocabulary of symbols continues to

³¹Robert Gillespie and Donald R. Hamann, *Strategies for Teaching Strings*, (New York: Oxford University Press, 2004) 29-184

grow, and aural imitation skills become more complex with students imitating four note patterns within a key, simple rhythms, and major and minor scales. Accurate sight reading is required in frequently used major keys and time signatures. By high school, students should be proficient readers in all keys and should be able to fluently sight read music in first through fifth positions.

Aural skill development is a key to progress in reading. "Rote to note" can help students learn complex new skills that are then brought to students in as part of the ensemble repertoire. Review is used to reinforce previously learned skills and music repertoire is chosen that will allow students to have successful reading experiences. Information from original audition assessment is used to tailor instruction for each student. Sight reading, as an important part of each rehearsal should be based on desired outcomes for student learning and should be a positive, confidence building experience.

Implications

This set of practical steps creates a "lattice of learning." Skills are presented in sequence and built in succession. The underlying philosophy inherent in the program finds strong inter-applicability with the ideas of Gordon and Elliot. The program, as outlined, also provides a useful list of skill sets at each level that can be used to develop self evaluation rubrics. Since most current beginning methods are aligned with the skills outlined in this program, it can be used to augment and give shape to the large ensemble curriculum. The overarching analysis of skill sets also provides a framework for differentiated curriculum presentation to students in the same ensembles that have widely varying skill levels.

Developing Music Literacy Skills in a Transient Society by Kyle D. Brown³²
Summary

Brown's article highlights in the importance of note reading and reviews the different methods used to teach non-notational symbolic representations of music, including letter names, movable/immovable solfege, and number systems. In order to more easily develop musical perception and literacy, the author proposes an alternate system for note nomenclature based on nationwide uniformity of system rather than on common practice or instructional research. His system uses movable numbers (one, two three, etc.) to designate the tonal role of each note, with altered numbers ("lree" for "lowered three," etc.) in the different modalities. An alternate system of hand signals, Chromatic Movable Numbers Sign Language - based on American Sign Language is used instead of the Curwen system. No research based rationale or qualitative assessment of best practice is given as a need for a new system. In fact, the author states that a uniform system is impractical in our diverse society.

Implications

The article reinforces the importance of moveable do solfege with simple hand signals as tools for teaching music literacy. While Brown's system is complicated, his rationale is sound. The proposed hand system is remarkably similar to and reinforces the value of the "Yip" system suggested by Hong Kong Children's

³²Kyle D. Brown, "An Alternative Approach to Developing Music Literacy Skills in a Transient Society", *Music Educators Journal*, *Nov 2003*, *Vol. 90*, *Issue 2*

Orchestra founder Dr. Yip Wai-hong. The movable do solfege system with chromatic alterations (mi-meh and la-leh) for altered notes in minor keys is more traditional, and thus more responsive to the needs of the transient society.

How to Teach Suzuki Piano by Shinichi Suzuki³³

Summary

Suzuki's instructions for teaching note reading are very brief. He underscores the importance of not confusing written music with aural music and writes that as children learn to speak long before they learn read and write, so should they learn to play long before they are burdened with note reading. Expressive playing is more important than reading, and students should only spend lesson time on pieces that they can play without worrying about reading. Reading remains an important, but secondary skill best learned the mother in her role as musical guide for her child. After learning to read, students should relearn the skill of quick memorization. Other searches of Suzuki publications confirm that the method discourages reading until the fourth level and gives very few step by step teaching techniques for reading.

Implications

The Suzuki method is largely focused on the teaching techniques that bring young children to very high levels of performance musicianship. While lacking similar techniques for teaching note reading as a vital part of music literacy, value is

³³Shinichi Suzuki, *How to Teach Suzuki Piano*, (Miami, Birch Tree Group LTD. 1993) 11-13

found in the acquisition of music as literacy through aural modeling. Suzuki formulated his method based on a cultural construct where students often learn to play music as they learn to speak – before symbolic representation can be understood. This is often not the case in the United State where students begin musical studies later, at an age when they could learn to read but do not.

The difficulty experienced by some American Suzuki students, immersed in the method – demonstrating great fluency on their instruments but failing to achieve reading fluency – highlights the importance of following through with note reading skill development for young musicians. Helping those students through the essential steps to symbolic association is of paramount importance.

Idea Bank (Music Fluency) by Donald W. Stauffer³⁴

Summary

Stauffer describes music reading as a semi-automatic physical response to visual stimuli. To develop that response into fluent musical performance, teaching should focus on three main areas: "(1) rhythmic patterns; (2) scales and chords; and (3) musical terms, symbols, and styles or traditions." He then outlines learning activities that rely on modeling, repetition, and aural/visual association.

Implications

³⁴Donald W. Stauffer, "Idea Bank", *Music Educators Journal*, 0027-4321, Vol. 92, Issue 1 (2005)

The description of music fluency as a semi-automatic physical response lends scientific rigor to literacy education in music. The paradigm reinforces the work of Schon and Besson and shows the importance of building cognitive and behavioral responses as an important part of music skill acquisition. It also suggests a role for physiological response as a component of composite synthesis, suggesting that at some point composite synthesis can become semi-automatic.

The Yip System. Yip Wai-hong³⁵

Summary

In a private lecture at the University of Utah, Dr. Yip, director of the Hong Kong Children's Symphony Orchestra, proposed a system of hand signals using successively added fingers – the way people normally count. He asserted that its practicality and ease of use would cause it to surpass the traditional Curwen system of hand signals. Chromatic alterations are shown by rotating the hand up or down.

Number values within keys and tonalities are shown, and an accomplished director can conduct two different sections simultaneously using both hands. The system is simple. Students who already know how to sing a major scale using solfeggio syllables learn the system in minutes.

The Yip system is organized as outlined below.

do – index finger

re – the index and middle fingers

me - index, middle, and ring fingers

fa – all four fingers

³⁵Yip Wai-hong, Private Lecture, University of Utah, 1989, *The Yip System*.

sol – thumb and four fingers

la – thumb and pinky

ti – pinky alone ("crook you pinky for tea")

do – index alone

Implications

The Yip system, used in combination with movable do, and using chromatic alterations to the syllables for minor tonalities, teaches pitch degree recognition on the beginning level in a simple and effective way. This method also appears to be a valuable tool for teaching keyality as student achievement progresses and provides a conceptual understanding of scale steps and intervals as numeric values that the Curwen system does not address.

Building Music Literacy with Guided Composition by Timothy S. Brophy³⁶
Summary

Brophy outlines a system for teaching tonality, keyality and notation using guided composition. Beginning notes, ending notes, modalities and rhythmic motives can be specified by the instructor. Notation skill, both reading and writing is augmented while musical creativity is fostered.

³⁶Timothy S. Brophy, "Building Music Literacy With Guided Composition",

Music Educators Journal, 00274321, Nov96, Vol. 83, Issue 3 (1996)

Implications

Guided composition as part of a comprehensive approach to teaching notation can provide a useful bridging activity in the context of Gordon's learning sequence. and can be used within music learning sequences both as an instructional and evaluative tool.

Conducting a Choir by Imogen Holst³⁷

Summary

Holst suggests that after an assessment of the group is formed by testing each individual, a plan should be formulated that uses solfege to teach major and minor tonalities as well as letter names to teach individual notes and keys. Tonal and chromatic scales are used to teach whole steps and half steps before notation is introduced. Rhythmic and melodic patterns are learned aurally and visually at the same time and beginning patterns are composed of simple intervals and rhythms that progress sequentially. Progressively difficult sight reading in each rehearsal gives learners an opportunity to synthesize knowledge and skills.

<u>Implications</u>

Holst's methods find inter-applicability with the Music Learning Theory of Edwin Gordon. While her understanding of the learning process is more rehearsal process driven and less learning theory oriented, she explores the same concepts.

³⁷Imogen Holst, *Conducting a Choir*, (London, Oxford University Press, 1973), Part VI:16-17, 56-63

MULTIPLE INTELLIGENCE THEORY³⁸

Overview

Multiple Intelligence theory is built on the concept that "reason, intelligence, logic, (and) knowledge are not synonymous " Howard Gardner contends that most scholastic tests rely on static measurements of logical and linguistic skill and ignore other potential human abilities. Describing, exploring and developing those potentials is a major goal of the Multiple Intelligence movement.

A review of three of Howard Gardner's books was conducted to gain a clear conception of his theory, and to explore the practical applications of the theory in middle school large ensemble music education. An assessment of the implications follows the description of the theory.

Intelligence, according to Gardner, is not a single discreet entity, nor can it be measured in a static state. It is, rather, a combination of interactions between human potentials and cultural relevance. Because of this, descriptions of intelligence can not be limited to any single function. Accurate descriptions of intelligence must include

³⁸Howard Gardner, Frames of Mind – Tenth Anniversary Edition (New York, Basic Books, 1993), Intelligence Reframed (New York, Basic Books, 1997), Multiple Intelligences – New Horizons (New York, Perseus Books Group, 2006)

³⁹Howard Gardner, Frames of Mind – Tenth Anniversary Edition (New York, Basic Books, 1993) 6

⁴⁰ Ibid. 20

the varied abilities of the individual, each in its cultural context.⁴¹ In order to identify discrete intelligences, Gardner set parameters by which intelligences could be measured; qualifying the presentation of the system with a warning that because he was trying to create a scientific system of discovery, the theories must be verified and adjusted over time. The criteria for measuring intelligences include:

- Potential isolation by brain damage
- Existence of savants, prodigies, and other exceptional individuals
- An identifiable core set of processing operations or mechanisms that deal with one specific kind of input
- A distinctive developmental history, with "end-state" performances
- An evolutionary history and evolutionary plausibility
- Support from experimental and psychological tasks
- Support from psychometric findings
- Susceptibility to encoding from a symbol system⁴²

Using these criteria, a set of intelligences was initially identified and described. *Frames of Mind* provides detailed descriptions of the ways in which each intelligence meets each criterion. Gardner's eventual list included seven intelligences, briefly described below:

- Linguistic intelligence allows individuals to communicate and make sense of the world through language. Poets exemplify this intelligence in its mature form. Students who enjoy playing with rhymes, who pun, who always have a story to tell, who quickly acquire other languages – including sign language – all exhibit linguistic intelligence.
- Musical intelligence allows people to create, communicate, and understand meanings with sound. While composers and instrumentalists clearly exhibit this intelligence, so do the students who seem particularly attracted to informal musical sounds and sound patterns.

⁴¹Ibid. 31-58

⁴²Ibid. 62-67

- Logical-mathematical intelligence enables individuals to use and appreciate abstract relations. Scientists, mathematicians, and philosophers all rely on this intelligence. So do the students who "live" baseball statistics or who carefully analyze the components of problems either personal or school-related before systematically testing solutions.
- Spatial intelligence makes it possible for people to perceive visual or spatial information, to transform this information, and to recreate visual images from memory. Well-developed spatial capacities are needed for the work of architects, sculptors, and engineers. The students who turn first to the graphs, charts, and pictures in the textbooks, who like to "web" their ideas before writing a paper, and who fill the blank space around written notes with intricate patterns are also using spatial intelligence. While usually tied to the visual modality, spatial intelligence can also be exercised to a high level by individuals who are visually impaired.
- Bodily-kinesthetic intelligence allows individuals to use all or part of the body to create products or solve problems. Athletes, surgeons, dancers, choreographers, and crafts people all use bodily-kinesthetic intelligence. The capacity is also evident in students who relish gym class and school dances, who prefer to carry out class projects by making models rather than writing reports, and who toss crumbled paper with frequency and accuracy into wastebaskets across the room.
- Interpersonal intelligence enables individuals to recognize and make distinctions about others' feelings and intentions. Teachers, parents, politicians, psychologists and salespeople rely on interpersonal intelligence. Students exhibit this intelligence when they thrive on small-group work, when they notice and react to the moods of friends and classmates, and when they tactfully convince the teacher of the need for extra time to complete a homework assignment.
- Intrapersonal intelligence helps individuals to distinguish among their own feelings, to build accurate mental models of themselves, and to draw on these models to make decisions about their lives. Although it is difficult to assess who has this capacity and to what degree, evidence can be sought in students' uses of the other intelligences--how well they seem to be capitalizing on strengths, how cognizant they are of weaknesses, and how thoughtful they are about decisions and choices. 43

⁴³Ibid. Chapters 5-7

Over time, Gardner and his associates examined other intelligences. Of these, Intelligence Reframed contains in-depth descriptions of two: Naturalist and Existentialist. Naturalist intelligence is described as that which allows people to distinguish among, classify, and use features of the environment. Farmers, gardeners, botanists, geologists, florists, and archaeologists all exhibit this intelligence, as do students who can name and describe the features of every make of car they see. Existential or Moral Intelligence is described as being fundamental to the realm and rules that governs our understanding of the sanctity for life, notably human life, but including other living creatures. Gardner accepts Naturalist Intelligence as a fully described intelligence and concedes the possibility of Existential or Moral Intelligence as work in process, 44 accepting a "Felliniesque possibility of eight and a half intelligences." Subsequent writings, including Multiple Intelligences – New Horizons (Gardner, 2006) treat naturalist intelligence as separate from most formal learning domains and disregard existential intelligence almost entirely, referring to the teaching of seven or eight intelligences. ⁴⁵ For application to large ensemble music education, only the original seven intelligences are referenced in this project.

⁴⁴Howard Gardner, *Intelligence Reframed* (New York, Basic Books, 1997) chapters 4-5

⁴⁵Howard Gardner, *Multiple Intelligences – New Horizons* (New York, Perseus Books Group, 2006)

Intelligence, Domain and Field

Humans are born with neurobiological potentials that can be described as *intelligences*. These intelligences combine to find cultural manifestation as *domains*. For example, a rhythmic dance describing a hatching egg may be described as a domain involving all intelligences: linguistic, musical, body-kinesthetic, spatial, logical-mathematical, interpersonal, intrapersonal, and naturalist. Domains can be described as the points where intelligences meet. They are the subjects taught in school. From this point of view, band is a multi-intelligence domain that also combines the domains of the individual instruments.

Intelligences can manifest themselves in a wide variety of domains, for example, mathematical intelligence is involved in the performance of a drum solo, in the construction of a gear box, and in the execution of a play in football. A *field* is a sociological construct that involves the "people, institutions, award mechanisms and so forth" that give cultural value to the various domains. ⁴⁶ The field of instrumental music education attaches significance to a band performance – a domain constructed of interacting intelligences. The field of architecture teaches and evaluates the domain of home design. Home design, as a domain, can involve spatial, naturalistic, kinesthetic, and mathematical intelligence.

The implications of intelligence, domain and field for educational instrumental ensembles are significant. The current best practices in music education strive to

⁴⁶Howard Gardner, Frames of Mind – Introduction to the 10th Anniversary Edition, page xvii

bring developmentally responsive teaching strategies to each student. Instrumental music, as a domain within that field, should seek to identify the intelligences involved in and served by the activity. This awareness then facilitates the formation of desired results for student learning which in turn guide the creation of education action plans. This interaction then becomes an invaluable tool for fostering the development of music education as literacy education.

Canalization and Plasticity⁴⁷

Canalization is the propensity of an organic system to develop in a certain way rather than in others. Development occurs in a sequence along a time line.

While environmental factors can influence that development, the system will tend to fulfill its genetic potential. There are also critical periods in the development of the organism when growth or lack of growth can have far reaching effects. Plasticity refers to the ability of a system to reset its schedule if development is disrupted.

While this plasticity is limited by the timing and extent of the disruption, organic systems have a general tendency to grow toward the fulfillment of genetic potential.

For example, an animal deprived of a potential ability because of injury or disease will often be able to compensate in other ways.

In the instrumental music classroom, the implication of the principle of canalization and plasticity is that while every human may have the potential for well developed intelligences, environmental factors in early developmental stages

⁴⁷Howard Gardner, Frames of Mind, 31-58

combined with genetic potentials create a variety of outcomes. In the domain of instrumental music, where multiple intelligences intersect, individual students are likely to be as dissimilar as trees in a forest. (That is to say, very similar but also widely varied.) An important task of the music educator is to create an environment that will foster the development of each intelligence to its highest potential, within the constraints created by prior environmental factors.

Individually Configured Education⁴⁸

Gardner states that individually configured education is "the key imperative" of the Multiple Intelligence movement. He suggests the following school wide strategies as possible options:

- Collect as much data as possible about how each child learns and share that information with the educational stakeholders.
- Allow students to remain with the same teacher for several years to foster stronger familiarity.
- Assign students and teachers flexibly for maximum compatibility.
- Have an effective information-transmission system in place so that the next year's teachers know as much as possible. Give teachers ready access to that information so they can keep it up to date.
- Use peer learning strategies and have students with compatible or complimentary approaches work together.
- Use emerging technologies to individually configure education for each student.

Because each student is an individual learner, Gardner suggests that curriculum should be tailored to the needs of each child.

⁴⁸Gardner, *Intelligence Reframed*, 135-156

In the author's middle school instrumental music room, the application of the principle of individually configured education is limited by the constraints of class size and available time. Neither of these factors can be easily mitigated by the music director. Indeed, if the band succeeds at reaching individual students, one of the hallmarks of successful instruction, class sizes will probably increase. There is, then, a need to develop and collect a set of strategies for more effective instruction, including better tracking and time use with the goal of individually configured education in mind. To borrow a metaphor from Gardner, while part of this strategy set must include instructional practices that use "scattergun tactics," at no time should the teacher simply fire eight shotguns at once and think the job is done.⁴⁹

Gardner warns against a shallow approach to the application of MI theory in the classroom. Among his specific concerns are:

- Attempting to use all the intelligences to teach each concept.
- Believing that intelligences can be activated through specific motions.
- Memorizing a list by singing it and calling it "musical intelligence."
- Labeling students by dominant intelligence.

A more correct approach should begin with the proposition that "We are not all the same; we do not all have the same kinds of minds and education works most effectively if these differences are taken into account rather than denied or ignored." 50

As strategies are devised for teaching large ensemble instrumental music using MI theory, this proposition should remain at the forefront. With this in mind, a

⁴⁹Ibid. 79-92

⁵⁰Ibid. 91

successful strategy will include diversification of presentation with in-depth fostering of individual intelligences for each student.

Moving Beyond The Limits of Linguistic and Logical-Mathematical Teaching

Multiple intelligence theory began, in part, as an exploration of human potentials not measured by existing psychometric instruments. Because the I.Q. tests devised during the early and mid-twentieth century were only able to measure linguistic and logical-mathematical intelligence, the other intelligences were ignored. The importance of moving beyond linguistic and logical testing is an underlying theme in both books. Only by analyzing the varied potential of each individual can accurate assessment be made.

In the American educational tradition, most "music teaching" involves linguistic and logical-mathematical learning. The current focus on "content literacy" continues the emphasis linguistic learning. The cultural manifestation of formal instrumental music education is often one where actual music learning is secondary to learning music's symbol systems and body-kinesthetic manifestations. Teaching music performance as a multiple intelligence domain should focus efforts on actual music learning, giving special attention to an emphasis on the development of musical intelligence within the music education domain. While the music performance domains draw on development of the varied intelligences to a great extent – perhaps more than any other domain – it is imperative to emphasize the importance of music intelligence development in the music domain.

Implications of Multiple Intelligence Theory

As a resource for educators, the value of Gardner's work transcends the practical application of knowing the intelligences with their cultural histories and symbolic developments. The rationale he develops as a framework for the theory has great importance – especially the validation of music as an educable and separate intelligence, part of educating the whole child. The following items have deep reaching implications in the middle school music classroom and deserve discussion:

- The delineation of intelligence, domain and field, with proper emphasis on the intelligence education of each student;
- Field and domain must serve intelligence education, never the opposite; Canalization and plasticity as guiding principles for devising developmentally responsive educational objectives;
- Individually configured education as a means of addressing the multiple intelligence needs of each student;
- Using multiple intelligence awareness as more than an extended set of mnemonic devices;
- Moving beyond linguistic and logical teaching, especially within the domain of instrumental music education.

CHAPTER 3

A FRAMEWORK AND CURRICULUM GUIDE FOR TEACHING MUSIC AS CONTENT LITERACY

A framework for teaching music as content literacy was developed with the intent of meeting the literacy reform requirements of the current educational climate while simultaneously serving the music education needs of large performance ensembles. Multiple intelligence theory provided a systematic approach to observation and documentation, providing triangulation as the dominant measurement of group and individual learning results. Where available and practical, published instructional materials were used. Where necessary, new materials were developed and implemented. Assessment instruments in the form of rubrics were also created for instruction, measurement and redirection.

INDICATOR COMPILATION AND CODING

Performance Skill Domain Indicators

In the context of multiple intelligence theory and within the field of ensemble performance, student musicians are expected to develop skill sets in several domains.

A list of skill domains, as yet unpublished, used for this project was developed by Gregg I. Hanson, director of bands at the University of Arizona. The domain

descriptions below were developed for use in ensemble rehearsal instruction. (For purposes of the multi-dimensional analysis, each skill is denoted with a number SD-x. SD designates "Skill Domain" and x designates each indicator.)

- (SD-01) Tone is the characteristic musical sound of the instrument or voice. Good tone is clear and resonant. Tone is learned by listening to great musicians and learning the techniques required to achieve a characteristic sound.
- (SD-02) Intonation is the pitch frequency of a given musical note how high or low it sounds. Musicians with good intonation are said to play "in tune." Intonation is easier to hear when good tone is present. Tim Salzman, director of bands at the University of Washington, and author of Sound Warm-ups for Band, taught, in a series of lectures beginning in 1988, that good intonation is achieved through listening, correct posture, adequate breath support, correct external mouth formation (embouchure), an open internal oral cavity and finally by the length of the instrument.
- (SD-03) Blend is when sections sound "as one." Individual musicians meld their individual sounds into a single sectional voice. The result is more power in the form of constructive interference. Blending as a section is not possible without good intonation and tone.
- (SD-04) Balance occurs when the voices of each section play at the volume level needed for each sound to be heard with the correct priority within the group. Balance depends on correct section blend.
- (SD-05) Rhythm can be described as the time patterns in music. These
 patterns are measured mathematically as fractions of measures and of
 individual beats.
- (SD-06) Style involves the grouping, weight, length and shape of notes. Playing with good style requires appropriate and varied articulation, including each note's attack, decay, and release depending on the intent of the composer.
- (SD-07) Interpretation is where performer and composer meet, allowing the performer to bring the expressive intent of the composer to the audience. This is the goal and ideal which David Elliot calls "musicing."

Music Pedagogy Best Practice Indicators

Large ensemble music education should, as set forth in the discussions of philosophy, research and pedagogy discussed above, include several important characteristics. The list compiled here is neither absolute nor final. Operating in the

context of the *Continuous Improvement Process*, it will evolve and be renewed over time as it is applied to the bands and orchestras in the project's target program. When indicated practices conflict, choices should be made to provide optimal learning and development opportunities based on available potentials. (For purposes of the multi-dimensional analysis, each best practice is denoted with a number BP-x, where *x* designates each indicator.) Best practices music education should:

- (BP-01) Teach music comprehension (Reimer).
- (BP-02) Provide an environment that facilitates music learning through musicing (Elliot).
- (BP-03) Foster the development of a literacy oriented learning community (McCusker).
- (BP-04) Include step by step instruction for skill acquisition (Hoffer).
- (BP-05) Build melodic fluency from a foundation of rhythm pattern learning, adding increasingly complex skill sets as mastery is achieved. (Dillon and Kriechbaum.)
- (BP-06) Teach aural and visual pattern recognition: rhythmic and melodic (Gordon, Schon and Besson, McCusker).
- (BP-07) Focus on musicianship and fluency as the primary objective, using music symbol decoding as a developmental skill leading to higher levels of fluency and performance (Howell, Reimer, Gordon, Suzuki).
- (BP-08) Provide stepwise and bridging activities between audiation/performance and symbolic representation, (Gordon) taught as fluency and literacy.
- (BP-09) Favor the use of repertoire over etude material for the teaching of performance skills (Price, Blanton, Turner Parrish).
- (BP-10) Teach concepts of tonality and keyality (Gordon).
- (BP-11) Frequently assess each individual student's skill development including the assessment of independent reading levels in an acoustically isolated environment (Holst).
- (BP-12) Use self starters that are "quick, reflective, level appropriate and routine." (Lipper)
- (BP-13) Provide a differentiated learning sequence for each student in each fundamental area that advances students from level to level creating a lattice of learning (Gillespie and Hamman).
- (BP-14) Teach tonal relationships using movable do (Gordon) and the Yip hand signals. (Yip)

Multiple Intelligence Indicators

For the culminating multi-dimensional analysis, each intelligence is denoted with a number MI-x. MI designates "multiple intelligence" and x designates each indicator.

- (MI-01) Linguistic intelligence involving communication and language
- (MI-02) Musical intelligence understanding meanings made out of sound.
- (MI-03) Logical-mathematical intelligence enabling the use and appreciation of abstract relations.
- (MI-04) Spatial intelligence perception of visual or spatial information.
- (MI-05) Bodily-kinesthetic intelligence the use of all or part of the body to create products or solve problems.
- (MI-06) Interpersonal intelligence recognizing and making distinctions about others' feelings and intentions.
- (MI-07) Intrapersonal intelligence accurate perception and understanding of one's own feelings.

CHAPTER 4

IMPLEMENTATION

OVERVIEW

In the Continuous Improvement Process, Desired Results for Student Learning (DRSLs) and action plans are used to measure the instructional effectiveness of curriculum design. The objective of the current project was to outline a broad curriculum focused on music literacy. The curriculum would be correlated with the DRSLs and action plans along with the best practice and multiple intelligence research indicators.

While the literacy project began with an exploration of research in string pedagogy, the insights gained were quickly implemented in all the groups at the author's seventh through ninth grade middle school. The instrumental music program includes an "all level" orchestra including beginning through seventh year players, and three band classes divided into beginning, second and third year bands. For the purpose of the literacy focused curriculum design and analysis, the third year band was selected. This decision was based on three reasons. First, the skill development of nearly all the students in the group fell within a relatively narrow range. This allowed a simpler curriculum design than would have been possible with the orchestra class, but still provided for opportunities for the development individually

differentiated instructional strategies. Second, key instructional materials incorporated in the design, including Tim Salzman's *Sound Warm-ups for Band*, were already known and available. This facilitated an increased focus on the development and implementation of necessary new materials. Third, music literacy instruction with a strong emphasis on aural modeling, as extrapolated from the research, received more appropriate development and implementation in the author's area of stronger expertise – wind instrument performance.

Implementation of music literacy DRSLs in the string program will continue as part of the overarching Continuous Improvement Process. This ongoing development is discussed in the Conclusions and Recommendation chapter of the project.

MUSIC LITERACY FRAMEWORK: DRSLS AND ACTION PLANS

The literacy framework developed for the project and outlined below includes a Desired Result for Student Learning (DRSL) for each performance domain, along with an action plan for each DRSL. The action plans were developed to include DRSL specific indicators and were then assessed for rigor against the requirements of the research literature and the needs of multiple intelligence instruction. The DRSLs and action items, correlated with reviewed research, combine to form a set of skill acquisition goals for music as content literacy.

FIGURE 1 DRSL I - TONE

I. Tone – the characteristic sound of an instrument

DRSL – Students will understand the ideal sound of their instrument and will develop the techniques necessary to creating that characteristic sound.

- A. Students will have access and exposure to professional level recordings on their instruments.
- B. Students will demonstrate the skills necessary to develop good tone.
- C. Students will engage in an ongoing development of the physical attributes necessary to produce good tone.
- D. Students will continually refine their concept and understanding of tone production.

FIGURE 2 DRSL II - INTONATION

II. Intonation – accuracy to the frequency of printed pitch DRSL – Students will play in tune.

- A. Students will aurally identify correct and incorrect intonation by recognizing interference nodes (beats) between unison similar instruments.
- B. Students will identify correct and incorrect intonation by learning to hear interference nodes (beats) between unison dissimilar instruments.
- D. Students will demonstrate correct fingerings, including alternate fingerings.
- E. Students will audiate and match pitch vocally.

Students will identify and accurately audiate and sing given tonal patterns.

- F. Students will identify and play patterns of keyality and tonality in:
 - Twelve major keys,
 - Commonly used minor scales,
 - Chromatic scales within a developmentally responsive range.
- G. Students will identify the intonational tendencies of their instrument.
- H. Students will modify the intonation of their instrument by improving/altering their
 - Personal, section and ensemble auditory awareness
 - Posture
 - Breath Support
 - Open inner oral cavity
 - Embouchure
 - Instrument Length
- F. Students will demonstrate interval tuning and ensemble tuning.

FIGURE 3

DRSL III - BLEND

III. Blend – the melding of a section into a single voice

DRSL – Students will identify the concept of blend and will demonstrate blend within their section.

- A. Students will perform with good tone and intonation.
- B. Students will identify the physical acoustics of constructive interference.
- C. Students will create constructive interference while minimizing destructive interference within their section.

FIGURE 4

DRSL IV - BALANCE

- IV. Balance the correct prioritization of sound levels within a group DRSL Students will perform as individual musicians, blended in sections and balanced within the ensemble.
- A. Students will identify the concept of balanced sound levels.
- B. Student's will identify McBeth's pyramid of ensemble balance.
- C. Students will identify the roles of melody and accompaniment in composition.
- D. Students will identify the diverse acoustic strengths and weaknesses of each section
- E. Students will perform concert repertoire with ensemble balance.

FIGURE 5

DRSL V - RHYTHM

V. Rhythm – time patterns in music

DRSL – Students will read and perform simple and compound duplets and triplets subdivided as small as sixteenth notes and in all common meters.

- A. Students will recognize rhythm patterns in sound.
- B. Students will identify standard rhythm notation, including time signatures, notes and rests, subdivided as small as sixteenth notes.
- C. Students will identify augmented and diminished rhythm patterns in notation and performance.
- C. Students will accurately read and perform the rhythm patterns in their performance music.

FIGURE 6 DRSL VI - STYLE

- VI. Style the length, weight, and shape of notes
- DRSL Students will identify and perform articulations as expressions of appropriate style.
- A. Students will read, identify and perform note lengths as indicated in a musical score.
- B. Students will read, identify and perform note weights as indicated in a musical score.
- C. Students will read, identify and perform various accents and note shapes as indicated in a musical score..

FIGURE 7 DRSL 7 - INTERPRETATION

- VII. Interpretation bringing the expressive intent of the composer to the audience. DRSL Students will correctly interpret the music they perform.
- A. Students will read, identify and perform standard music instructions in English as well as Italian.
- B. Students will read, identify and perform score expressions, i.e. crescendos, decrescendos, etc.
- C. Students will identify and perform music within the scope of its performance practice.
- D. Students will interpret, identify and perform conducted interpretation instructions.

CURRICULUM DESIGN AND ANALYSIS

In the curriculum outline and analysis below, research indicators with strong correlations were noted in **bold type**. Underserved indicator domains and areas of weakness were noted and corrective activities were implemented. Appropriate, pre-existing, commercially available activities were chosen where available. New activities, listed in *italics*, are discussed in the final section of the project titled Conclusions and Recommendations for Ongoing Development.

FIGURE 8 - First Quarter

| Learning Activities | Skill Domains | Best Practices | Multiple Intelligences |
|---|------------------|--------------------------------|--|
| Warm-ups - Sound Warm-ups 1,2,3,4,5 | 1, 2, 3 | 1, 2, 6, 7, 11, 12, 14 | 1, 2, 3, 4, 5 |
| Scales – Concert C-Db, 30 seconds | 2, 5 | 1 - 4, 6, 7, 8, 10 - 12, 14 | 1, 2, 3, 4, 5 |
| Scales – Concert Gb-G, 60 seconds | 2, 5 | 1 - 4, 6 - 8, 10 -12, 14 | 1, 2, 3, 4, 5 |
| Scales – Bb in canon, tuning unisons and thirds | 1, 2, 3, 4 | 1 - 4, 6 - 8, 10 - 14 | 1, 2, 3, 4, 5, 6 |
| Scales – F, Bb, Eb with dah, tah, and lah tongue, | 2, 5, 7 | 1 - 8, 10 - 14 | 1, 2, 3, 4, 5 |
| Chorales – coordinated with scales | 1 - 4, 6, 7 | 1 – 14 | 1, 2, 3, 4, 5, 6 |
| Dynamic ranges – pp-ff, tone, intonation, blend, and balance coordinated to chorales. | 1, 2, 3, 4, 7 | 1 - 14 | 1, 2, 3, 4, 5, 6 |
| Fussell Rhythms: conducted, counted, clapped, played | 1, 2, 3, 4, 6 | 1 - 8, 11 - 13 | 1, 2, 3, 4, 5 |
| Articulations – coordinated with rhythms | 5, 6, 7 | 1 - 8, 11 - 13 | 1, 2, 3, 4, 5 |
| Repertoire – F, Bb, or Eb – Patriotic (grades 2+2+3) part assignments by difficulty level | 1 - 7 | 1 - 14 | 1, 2, 3, 4, 5, 6 |
| Repertoire – F, Bb, or Eb – Lyric (grades 2+2+3) part assignments by difficulty level | 1 - 7 | 1 - 14 | 1, 2, 3, 4, 5, 6, 7 |
| Repertoire – F, Bb, or Eb – Educational (grades 2+2+3) part assignments by difficulty level | 1 - 7 | 1 - 14 | 1, 2, 3, 4, 5, 6, 7 |
| Skill development self assessment rubric | 1 - 7 | 1 - 13 | 1 , 2, 3 , 4, 5, 6 , 7 |
| Practice report with narrative self assessment. | 1 - 7 | 1 – 14 | 1 , 2, 3 , 4, 5, 6, 7 |
| Teamwork activity in sectional cooperative learning | 1 - 7 | 1 - 14 | 1 , 2, 3 , 4, 5, 6 , 7 |

FIGURE 9 – SECOND QUARTER

| Learning Activities | Skill Domains | Best Practices | Multiple Intelligences |
|--|------------------|--------------------------|---|
| Warm-ups - Sound Warm-ups 1,2,3,4,5 - doubled | 1, 2, 3 | 1, 2, 6, 7, 11 - 14 | 1, 2, 3, 4, 5 |
| Scales – Concert C-G, 60 seconds | 2, 5 | 1 - 8, 10 - 12, 14 | 1, 2, 3, 4, 5 |
| Scales – Bb in canon, tuning unisons and thirds | 1, 2, 3, 4 | 1 - 4, 6 - 8, 10 - 14 | 1, 2, 3, 4, 5, 6 |
| Scales – C, Ab, Db with dah, tah, and lah tongue, | 2, 5, 7 | 1 - 4, 6 - 8, 10 - 14 | 1, 2, 3, 4, 5 |
| Chorales – coordinated with scales | 1 - 6,7 | 1 - 14 | 1, 2, 3, 4, 5, 6 |
| Dynamic ranges – pp-ff, tone, intonation, blend, balance coordinated to chorales. | 1, 2, 3, 4, 7 | 1 - 14 | 1, 2, 3, 4, 5, 6 |
| Fussell Rhythms: conducted, counted, clapped, played | 1, 2, 3, 4, 6 | 1 - 8, 11 - 13 | 1, 2, 3, 4, 5 |
| Articulations – coordinated with rhythms | 5,6,7 | 1 – 8, 11 - 13 | 1, 2, 3, 4, 5 |
| Repertoire – F, Bb, or Eb – Christmas (grades 2+3+3) part assignments by difficulty level | 1- 7 | 1 - 14 | 1, 2 - 7 |
| Repertoire – F, Bb, or Eb – Holiday (grades 2+3+3) part assignments by difficulty level | 1 - 7 | 1 - 14 | 1, 2 - 7 |
| Repertoire – F, Bb, or Eb – Multi- cultural (grades 2+3+3) part assignments by difficulty. | 1 - 7 | 1 – 14 | 1, 2 - 7 |
| Skill development self assessment rubric | 1 - 7 | 1 - 13 | 1 , 2, 3 , 4, 5, 6 , 7 |
| Practice report with narrative self assessment. | 1 - 7 | 1 - 14 | 1 , 2, 3 , 4, 5, 6, 7 |
| Teamwork activity in sectional cooperative learning | 1 - 7 | 1 - 14 | 1, 2, 3, 4, 5, 6, 7 |

FIGURE 10 – THIRD QUARTER

| Learning Activities | Skill Domains | Best Practices | Multiple Intelligences |
|---|------------------|--------------------------|--|
| Warm-ups - Sound Warm-ups 1,2,3,4,5 – double time | 1, 2, 3 | 1, 2, 6, 7, 11 - 14 | 1, 2, 3, 4, 5 |
| Scales – Concert C-G, 60 seconds - mastery | 2, 5 | 1 - 8, 10 - 12, 14 | 1, 2, 3, 4, 5 |
| Scales – Bb in canon, tuning unisons and thirds | 1, 2, 3, 4 | 1 - 4, 6 - 8, 10 - 14 | 1, 2, 3, 4, 5, 6 |
| Scales – coordinated with festival repertoire | 2, 5, 7 | 1 - 14 | 1, 2, 3, 4, 5 |
| Chorales – coordinated with scales | 1, 2, 3, 4, 6, 7 | 1 - 9, 10 - 14 | 1, 2, 3, 4, 5, 6 |
| Dynamic ranges – pp-ff, tone, intonation, blend, and balance coordinated to chorales. | 1, 2, 3, 4, 7 | 1 - 14 | 1, 2 , 3, 4, 5, 6 |
| Fussell Rhythms: conducted, counted, clapped, played | 1, 2, 3, 4, 6 | 1 - 8, 11 - 13 | 1, 2 , 3, 4, 5 |
| Articulations – tenuto, stacatto, legato, accented, coordinated with rhythms | 5, 6, 7 | 1 - 13 | 1, 2, 3, 4, 5 |
| Repertoire – F, Bb, or Eb – Concert March (grades 2+3+3) part assignments by difficulty level | 1 - 7 | 1 – 14 | 1, 2 - 7 |
| Repertoire – F, Bb, or Eb – Lyric (grades 2+3+3) part assignments by difficulty level | 1 - 7 | 1 - 14 | 1, 2 - 7 |
| Repertoire – F, Bb, or Eb – Ed. Band Lit. (grades 2+3+3) part assignments by difficulty level | 1 - 7 | 1 - 14 | 1, 2 - 7 |
| Skill development self assessment rubric | 1 - 7 | 1 - 11, 13 | 1 , 2, 3 , 4, 5, 6 , 7 |
| Practice report with narrative self assessment. | 1 - 7 | 1 - 14 | 1, 2, 3, 4, 5, 6, 7 |
| Teamwork activity in sectional cooperative learning | 1 - 7 | 1 - 14 | 1 , 2, 3 , 4, 5, 6 , 7 |

FIGURE 11 – FOURTH QUARTER

| Learning Activities | Skill | Best | Multiple |
|---|-------------------|---|--|
| | Domains | Practices | Intelligence |
| Warm-ups - Sound Warm-ups 1,2,3,4,5 – double time | 1, 2, 3 | 1, 2, 6, 7, 11, 12, 14 | 1, 2, 3, 4, 5 |
| Scales – Concert C-G, 45 seconds - mastery | 2, 5 | 1 - 4, 6 - 8, 10 - 12, 14 | 1, 2, 3, 4, 5 |
| Scales – Bb in canon, tuning unisons and thirds, parallel fifth and quartal scales. | 1, 2, 3, 4 | 1 - 4, 6 - 8, 10 - 14 | 1, 2, 3, 4, 5, 6 |
| Scales – coordinated with concert repertoire | 2, 5, 7 | 1 - 4, 6 - 14 | 1, 2, 3, 4, 5 |
| Chorales – coordinated with scales | 1, 2, 3, 4, 6, 7 | 1 - 14 | 1, 2, 3, 4, 5, 6 |
| Dynamic ranges – pp-ff, tone, intonation, blend, and balance coordinated to chorales. | 1, 2, 3, 4, 7 | 1 - 14 | 1, 2, 3, 4, 5, 6 |
| Repertoire rhythms, conducted, counted, clapped, played | 1, 2, 3, 4, 6 | 1 - 13 | 1, 2 , 3, 4, 5 |
| Articulations – tenuto, stacatto, legato, accented, coordinated with rhythms | 5, 6, 7 | 1 - 13 | 1, 2, 3, 4, 5 |
| Repertoire – Pops March (grades 2+3+3) part assignments by even distribution | 1, 2, 3, 4, 5, 6, | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 | 1, 2, 3, 4, 5, 6, 7 |
| Repertoire – Pops lyric (grades 2+3+3) part assignments by even distribution | 1 – 7 | 1 - 14 | 1, 2, 3, 4, 5, 6, 7 |
| Repertoire – Pops Movie Theme (grades 2+3+3) part assignments by even distribution | 1 – 7 | 1 - 14 | 1, 2, 3, 4, 5, 6, 7 |
| Skill development self assessment rubric | 1 – 7 | 1 - 11, 13 | 1 , 2, 3 , 4, 5, 6 , 7 |
| Practice report with narrative self assessment. | 1 – 7 | 1 - 14 | 1, 2, 3, 4, 5, 6, 7 |
| Teamwork activity in sectional cooperative learning | 1 – 7 | 1 - 14 | 1 , 2, 3 , 4, 5, 6 , 7 |

IMMEDIATE RESULTS

The development of the project led to a significant immediate change in the author's rehearsal techniques and teaching strategies, which became more centered on an increased focus on audiation and music learning as separate learning domains from note reading. This, in turn, led to an immediate increased use of modeling and guided repetition as foundational processes in the acquisition of note reading skills. While the project began as a search for ways to teach literacy in music, it evolved into a compilation of multiple intelligence learning domains that are combined when teaching the field of music ensemble performance as content literacy.

As a young student, the author's personal music learning experience included countless positive musical moments where formal and informal experiences taught music literacy acquisition as an essentially musical activity with music symbol decoding serving as a peripheral tool. Later, teachers in more formal settings dismissed these ways of learning, pejoratively describing them as "rote teaching." The project led to a re-evaluation of the value of the rote system as aural modeling was explored and adopted as a useful tool for intermediate music literacy acquisition. As a result, student engagement increased as learning became more play oriented and less work centered.

This awareness also led to a renewed use of existing instructional materials such as Tim Salzman's *Sound Warm-ups for Band* and the rhythms from Raymond Fussell's *Ensemble Drills* as literacy acquisition tools for developing students. The Music Learning Theory of Edwin Gordon provided a focus on aural modeling

coupled with symbolic decoding as bridging activities leading to literacy acquisition and development.

Continuous Improvement Activities

Existing materials were expanded and new tools developed to meet the literacy goals described by the DRSLs. Activities in the personal intelligences, outlined below on this page, included a set of intrapersonal and interpersonal self assessment rubrics and activities, including a practice report designed to encourage reflective self assessment. A new curricular focus on keyality yielded the most important results in the process, including sheet music for 12 major scales, a set of 12 hymns in the major keys and a keyality self assessment rubric. Descriptions of the implementation of these materials, and evaluation of the accompanying activities in the form of narrative description is presented in this section.

Personal Intelligence Activities

While the development of intrapersonal and interpersonal intelligence is an essential part of music learning, that learning is rarely delineated for students in a systematic way. To meet this need, it was necessary to develop reflective learning activities in the form of self and group assessment rubrics. Intrapersonal learning was measured using the *Performance Skills Rubric* (Appendix A) and correlated *Practice Report* (Appendix B). Interpersonal learning was developed using an assessment process associated with cooperative learning entitled "Teamwork" (Appendix C).

The intrapersonal assessment activity helped create and maintain students' focus on the most essential skill domains at the heart of the music literacy framework while providing important opportunities for personal reflection. The completed *Performance Skills Rubric* (Appendix A) was used as the quarterly music class self assessment product for each student's conferencing portfolio. Students were invited to reflect on their personal development in each skill domain and work toward improvement in each area. The weekly *Practice Report* (Appendix B) provides opportunities for short term goal setting and assessment aligned with the long term goals of the *Performance Skills Rubric* and within the learning framework of the DRSLs and action plans. Reaction to the activities associated with the rubric was positive. As further implementation yields numerical data for analysis, future development based on the *Continuous Improvement Process* will provide a system of data driven progress.

The *Teamwork Rubric* and accompanying activities (Appendix C), focused on interpersonal learning, and had a positive effect on the quality of the sectional rehearsal process. The purpose of the rubric was to provide a logical framework for cooperative learning activities in the form of clearly defined roles and expectations, including short and medium term consensus driven goal setting processes. Student leaders reported fewer problems keeping sections focused and on task, and section members displayed greater satisfaction with the sectional rehearsals. Musical improvement results were also positive. In addition, the self reflective and group responsibility aspects of the project had a residual impact on student performance in the large ensemble rehearsals. The rubrics and activities brought the students and

sections to a better understanding of their roles in ensemble success. This growth was achieved in great part through development of intrapersonal, interpersonal, musical and linguistic intelligence.

Keyality

Keyality, as described by Edwin Gordon, is a separate learning domain from musical tonality and modality and requires the use of stepwise and bridging activities. In our musical tradition, the formal learning of keyality dates at least as far back as J. S. Bach's *Well Tempered Clavier*. From a Multiple Intelligence perspective, music literacy acquisition in the keyality domain requires the development of the musical, linguistic, logical-mathematical, and bodily kinesthetic intelligences. The acquisition of "keys signatures" as tonal centers of musical performance is an important part of music literacy development in Western culture.

A set of activities was devised for teaching keyality, including a sheet of 12 Major Scales (Appendix D), a set of 12 Hymns (Appendix E) set in the 12 major keys and a Keyality Rubric (Appendix F) as discussed below.

12 Major Scales

To minimize management time, a single page musical score with all twelve major scales (Appendix D) was prepared for student use. Treble and bass clef versions of the score were printed back to back so that a single version could be used by all ensemble members. Scales were written in multiple octaves, progressing by flats through the keys, from C through G. For the purposes of initial learning,

chromatic alterations were notated next to each note as accidentals, instead of as key signatures. Each student learned to pick the appropriate side, scale and octave.

Scales study became part of the initial daily starter activities and playing through all twelve scales became part of each student's routine.

Students received the scales at the beginning of their second year. By that time they were already familiar with their transposition group as well as the concert keys at B-flat and F. They were instructed to start on concert C and then number each scale from 1 to 12. From that point on, each scale, when referenced, was called by number and concert pitch. By the third year of instrumental study, the focus of this project, most students knew scales by concert names. As the culture of the literacy oriented learning community (BP-03) was built in each group, the numerical names were dropped and replaced concert key names. Students were asked to demonstrate mastery by playing all twelve scales in sixty seconds. Most students were able to do this by the end of the third year. Those who struggled receive peer tutoring or extracurricular instruction. Students who were not are able to play all twelve scales in sixty seconds were allowed to demonstrate them at a slower speed. This demonstration was not recorded as mastery but did recognize the differentiated accomplishments of the varied members of the ensemble as a learning community. They were also encouraged, but not required, to pass off all twelve in less than 30 seconds and to learn multiple octaves. Students participating in the early morning jazz band used colored pens to mark the scale sheets with chords and modes.

The scale sheet became a very useful tool. The activities generated by its flexible nature helped provide individual differentiation for the students in the

program. Nearly all members of the group, tested individually, demonstrated competency, defined as playing all twelve scales with very few missed notes in ninety seconds. About half the group, halfway through the second year of the project demonstrated mastery, defined as playing all the major scales in sixty seconds. In addition, a few of the students passed off the scales in 30 seconds or less, not as an assignment, but as part of a challenge game.

Developing these scale skills contributed to the literacy growth of each student as they acquired knowledge, competency and mastery of the musical, kinesthetic, and logical intelligences involved in scale learning.

12 Hymns in 12 Major Keys and The Keyality Rubric

A set of 12 hymn chorales in 12 major keys (Appendix E) was arranged for middle level concert band. With ease of paper management in mind, the hymn arrangements were organized in modified score form by instrumental choir and printed tabloid style in a back to back booklet. Each chorale is listed by concert key. Traditional key signatures are used as a midlevel bridging activity. A single version of the book is playable by band members on all instruments. Hymn Tunes were selected by considering three criteria.

- 1. Each tune had a single key area without significant modulation or tonicization. This allowed focused learning in a specific key area.
- 2. Hymns were chosen for denominational neutrality. Songs native to a specific religious practice were allowed when historically important to the ensemble music tradition. (Examples of this allowance include *Closer Walk* a tune with significance in the early history of jazz, *Rhoysmedre*, a hymn tune set for band by Ralph Vaughn-Williams, and *Panis Angelicus*, a Gregorian hymn arranged in a variety of ways by Cesar Franck.)

3. Third, hymns were selected by range accessibility. In any key, the highest trumpet note (transposed) is f-sharp on the top line of the staff.

Parts were assigned to facilitate balance within the instrumental choirs as well as for instrumental choir independence. Voicing roles were assigned by tradition with each chorale playable and balanced with woodwinds, brass or percussion only. Percussion parts were written with two voices on each staff and with both staffs in the treble clef, facilitating the development of double stop and four mallet technique.

Implementation of Continuous Improvement in music literacy acquisition required baseline and post treatment measurement of student learning in the keyality domain. To this end, a self assessment rubric was devised. The rubric served as a tool for concept delineation, personal reflection and self assessment. Using the rubric, students measured personal note accuracy, personal audiation, section and ensemble group awareness.

The hymn tunes were taught to the ensemble with audiation and keyality in mind. The introduction of each chorale was coordinated with scale exercises in that key. The chorales were used to apply skills learned using the scale sheet, and scale drills were coordinated to the rehearsal of each chorale. The key of concert B-flat was addressed first, and chorales were implemented moving outward around the circle of keys in the following order: F, E-flat, C, A-flat, G, D-flat, D, G-flat, A, E then B. The concert keys of E and B were addressed last. This provided a sequential progression as students gained familiarity with the use of less frequently played notes and patterns. "Rote to note" techniques were used as bridging activities on the

individual, section, and ensemble levels to help students conceptualize the sound patterns and problem notes inherent to each key area and instrument.

The chorale project, as implemented thus far, has had a positive impact on individual musicianship and ensemble achievement. Student performance in the various keys progressed from aural/visual and fingering pattern recognition in each key to a tonality based conceptualization of notes as functional key members with interdependent relationships. This progression was measured through individual assessment in the form of playing tests and was also evident in the ensemble sound of the target class.

The use of key signatures rather than chromatic alterations in the form of accidentals made individual performers responsible for the memorization of the notes in each key. Starting on concert B-flat and moving outward along the circle of keys provided valid stepwise learning and bridging activities in each key. The perceptual impact was immediate with most students. Baseline data from the *Keyality Rubric* (Appendix F) shows a heightened awareness of needed improvement. With that assessment in mind, an instructional plan was developed concentrated on keyality while also teaching breath impulse, rhythm and articulation patterns overlaid on each chorale as part of the daily starter routine. This multivariate instructional approach helped maintain student engagement and addressed secondary music learning needs while focusing the use of available class time on the goals of the project. Final data and analysis from the post instructional rubric assessment will be included as part of the Continuous Improvement process in following years.

Because the concert keys of B-flat and E-flat had a satisfactory ensemble sound from the beginning, students had a baseline standard against which to measure personal progress, including their own playing, the sound of the section and that of the ensemble. As the performance of each chorale was refined, and relationships of each keyality learned, solutions were generalized to difficult areas of keyality in the concert repertoire. When rehearsal learning activities shifted to the repertoire, students were better able to identify and correct missed notes in the associated sections, as evidenced by the sound of the ensemble. This fostered an appropriate shift in rehearsal focus away from the podium and to the individual achievement and learning of each student musician.

The hymn project had the added benefit of bringing students into contact with some of the great hymn tunes of our culture. Beginning each rehearsal with these chorales provided an opening activity that focused the ensemble in several ways, reinforcing individual responsibilities in tonality, keyality, intonation, and group awareness.

CONCLUSIONS AND RECOMMENDATIONS FOR ONGOING DEVELOPMENT

Assessment of the positive results generated by the implementation of Continuous Improvement in the form of the Music Literacy Framework provided confirmation of the principles outlined in the project. Among the results, the following are most revealing:

- Music literacy can be taught as content literacy
- Music literacy as a learning domain has its own body of research
- Music literacy instruction has a well documented body of best practices
- Music literacy instruction can create opportunities for authentic multiple intelligence growth
- This multi-dimensional approach to music literacy can provide instruction that fosters musical growth for students performing in large ensembles.

The framework, with its DRSLs and action plans, should receive continued use as the guiding mechanism for the third year band. In keeping with the continuous nature of the process, current activities should be completed, data analyzed and strategies assessed. The results should then be applied to the curriculum maps for the rest of the ensembles in the program. Curriculum development activities implemented for the younger bands as well as for the orchestra program should be designed with domain and field appropriate considerations, including, but not limited to developmentally responsive teaching, differentiated ear training needs, and varied repertoire sets.

New materials should be acquired or developed for the several groups as the continuous improvement process is refined and expanded. In order to meet the additional goals suggested in the research literature, these materials should include but not be limited to:

- A single page score of the 12 natural minor scales
- A set of chorales in minor keys
- Intermediate learning drills in the form of warm-ups for orchestra
- Intermediate learning drills in the form of warm-ups for appropriate to the needs of second year band students
- A blues scale sheet
- Intermediate rhythm exercises
- Assessment instruments coordinated to the new activities.

Again, the process must remain one of continuous improvement. Areas of strength should be noted and areas of weakness rectified. In order for the project to retain relevance, the best practices indicators should be updated as new music literacy research becomes available. Ongoing developmental and intelligence research should be reviewed and included as part of the continuous improvement process. Extramusical studies of literacy learning should also be reviewed. Finally, the concept of literacy should be expanded to include concepts of fluency. With fluency in mind, the whole project should be reexamined and refined again in an ongoing cycle of improvement. An anticipated project lifespan of four additional years will align that refinement phase with the accreditation cycle currently in place in author's school. That accreditation cycle, when developed and implemented, will create another cycle of improvement.

The framework of multi-dimensional curriculum assessment will then continue to provided a basis for the ongoing development and implementation of new teaching strategies as well as a process for continuous additional enhancement and reassessment. The continuous nature of this re-examination and development will extend the life of this Professional Improvement Project, satisfying the philosophical and procedural demands of the literacy movement while providing research-based best practice rationales for redirecting the instructional focus of large ensemble rehearsal toward music learning as content literacy.

The literacy mandate reflects an educational world view that runs strong and deep in American society, so much so that it may be stated that the current role of public education can be defined as helping students achieve literacy, including

language literacy, math literacy, social studies literacy, science literacy as well as literacy in other subject areas.

An important role of the music instructor, then, is to teach in such a way that music is defined and understood as a discrete, valid, and tangible way of knowing and learning within the literacy mandate. While the established "core" areas of language, math, social studies and science provide important knowledge bases for any musician, success in music will not be found through the exclusive study of literacy in those areas. Rather it must come though teaching music as a field with its own learning domains, and by using research-based techniques and proven best practices. This process will refine music education through better teaching of music as content literacy.

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APPENDIX A

PERFORMANCE SKILLS RUBRIC

| Orchestra and Band | | | | | |
|---|-------|-------------------|------|------|---------------------|
| Performance Rubric | | | | | |
| | | + | | | > |
| Student Name | 95 + | 06 | | | lov |
| State in Traine | 1 | t | + | | l be |
| Instrument | erior | e 11 e n t – 90 + | - 08 | 70 + | Poor – 69 and below |
| mstrument | r i | 11 | I | - 7(| 69 |
| D : 1 | ре | ce | p o | I r | <u> </u> |
| Period | n | × | 0 | ಡ | [00] |
| | S | 田 | Ŋ | ഥ | Ь |
| Preparation — on time with well maintained instrument, | | | | | |
| accessories, and music. | | | | | |
| Citizenship – all attention given to rehearsal and group | | | | | |
| improvement. | | | | | |
| Practicing – 20 minutes a day for beginners, 30 for advanced, | | | | | |
| five days a week at least. | | | | | |
| Hand position – open and connected to the instrument with | | | | | |
| correct placement. | | | | | |
| Posture – feet on floor, legs uncrossed, back upright, shoulders | | | | | |
| back, neck and head straight. | | | | | |
| Oral Cavity – open in the "ah" position – soft pallet up, | | | | | |
| tongue down, teeth separated. (band only) | | | | | |
| Note Reading – notes are known by their names, including | | | | | |
| key signatures, accidentals and fingerings. | | | | | |
| Rhythm Reading – rhythms are accurately counted using the | | | | | |
| "1-e-&-a" and "1-la-le" system. | | | | | |
| Tone – the sound color of the instrument is beautiful at all time. (timbre) | | | | | |
| | | | | | |
| Intonation – all notes are correct and played in tune. (pitch frequency) | | | | | |
| Blend – the instrument sounds "as one" with the other | | | | | |
| instruments in the section. | | | | | |
| Balance – volume is equalized between sections, and prioritized | | | | | |
| by melody and harmony. | | | | | |
| Rhythm – the student correctly interprets written rhythms | | | | | |
| printed in the music. | | | | | |
| Style – notes are played with the correct length, weight and | | | | | |
| shape, tonguing as appropriate. | | | | | |
| Interpretation – student plays with correct tempo changes, | | | | | |
| dynamic variations, and phrasing. | | | | | |

APPENDIX B

PRACTICE REPORT

Practice Log

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| Name | V | Veek | Class | Gra | and Total |
|--------------------|--------|---------|-----------|----------|-----------|
| | Monday | Tuesday | Wednesday | Thursday | Friday |
| Breathing / | | | | | |
| Bow Excercies | | | | | |
| Long tones | | | | | |
| Rhythms | | | | | |
| Tonguing/Bowings | | | | | |
| Scales & Arpeggios | | | | | |
| Major | | | | | |
| Minor | | | | | |
| Chromatic | | | | | |
| Intervals | | | | | |
| Sheet Music | | | | | |
| TOTALS | | | | | |

| The best thing I accomplished in my practice sessions this week was |
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| The thing I need to improve the most is |
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APPENDIX C

TEAMWORK RUBRIC

TEAMWORK

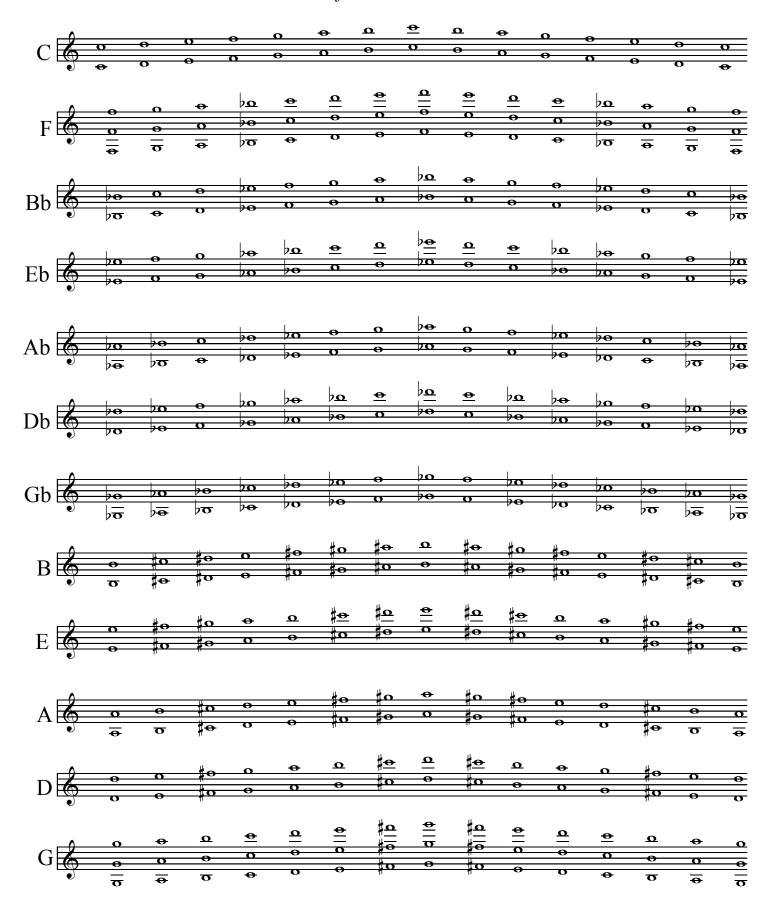
Democratic Process Rubric

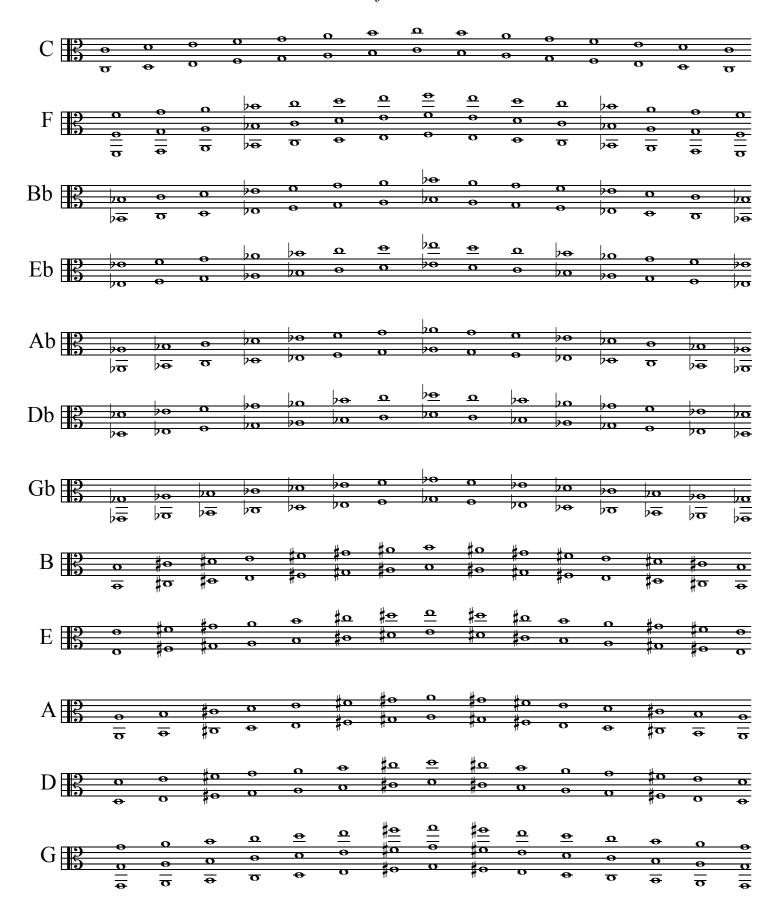
 $5 = \text{best} \dots \dots \dots \dots 1 = \text{worst}$

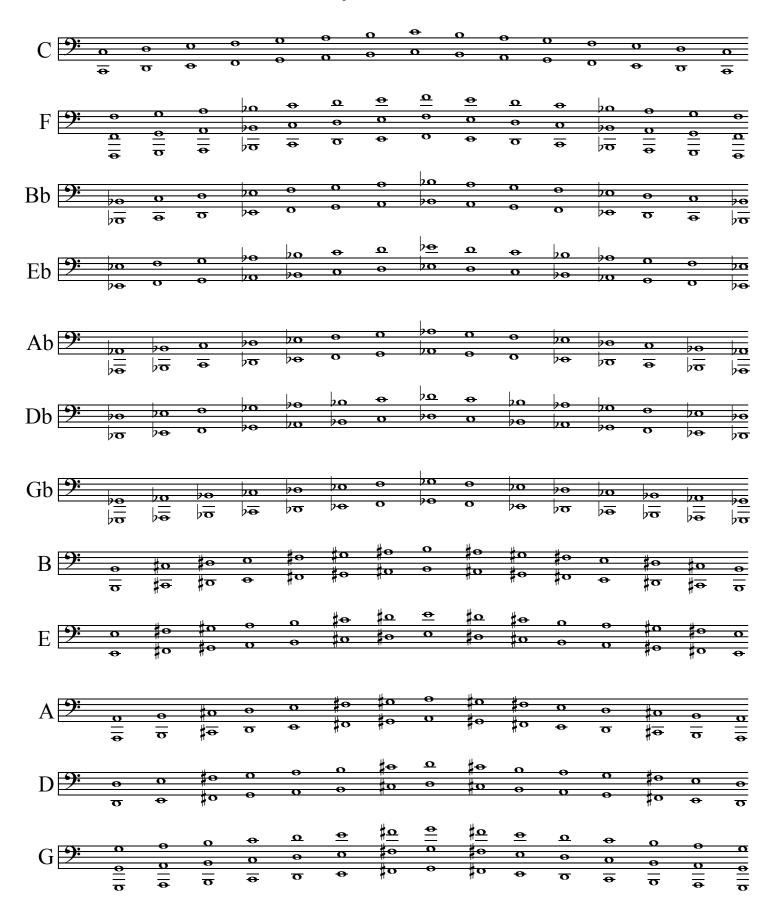
| Individual Responsibilities | 5 | 4 | 3 | 2 | 1 |
|------------------------------------|---|---|---|---|---|
| Participate | | | | | |
| Contribute | | | | | |
| Positive Attitude | | | | | |
| Focus/Stay on Task | | | | | |
| No Put Downs | | | | | |
| Listen to Others | | | | | |
| Don't Monopolize | | | | | |
| Group Responsibilities | 5 | 4 | 3 | 2 | 1 |
| Determine Needs | | | | | |
| Set Goals | | | | | |
| Set Strategies | | | | | |
| Assign Roles | | | | | |
| Work Toward Goals | | | | | |
| Reflect/Assess/Evaluate | | | | | |
| Repeat | | | | | |

APPENDIX D

12 MAJOR SCALES







APPENDIX E

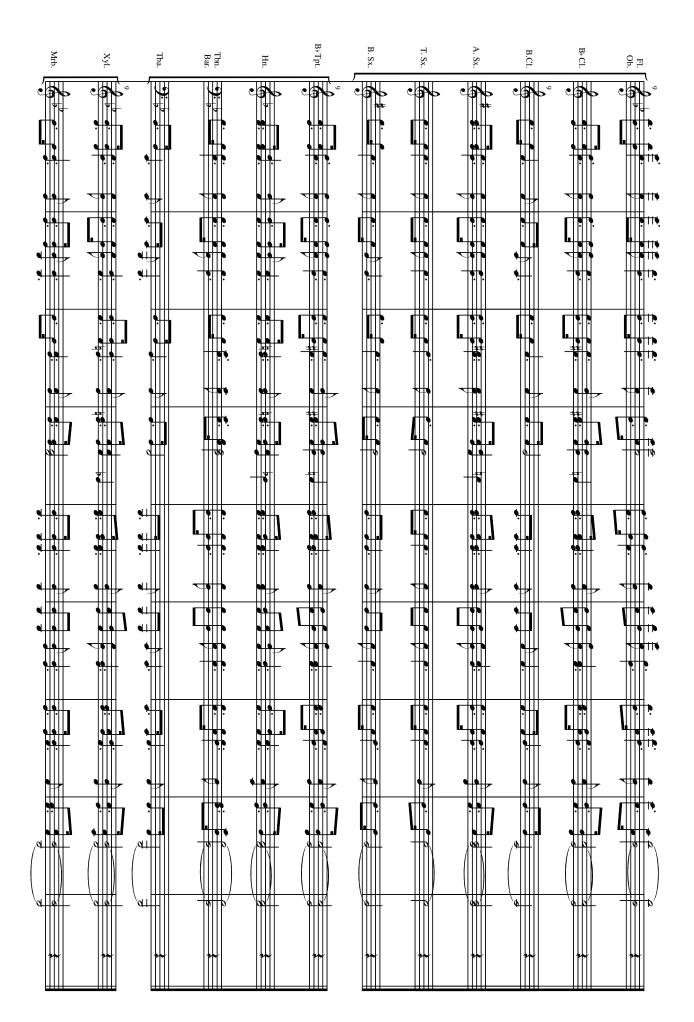
12 HYMNS

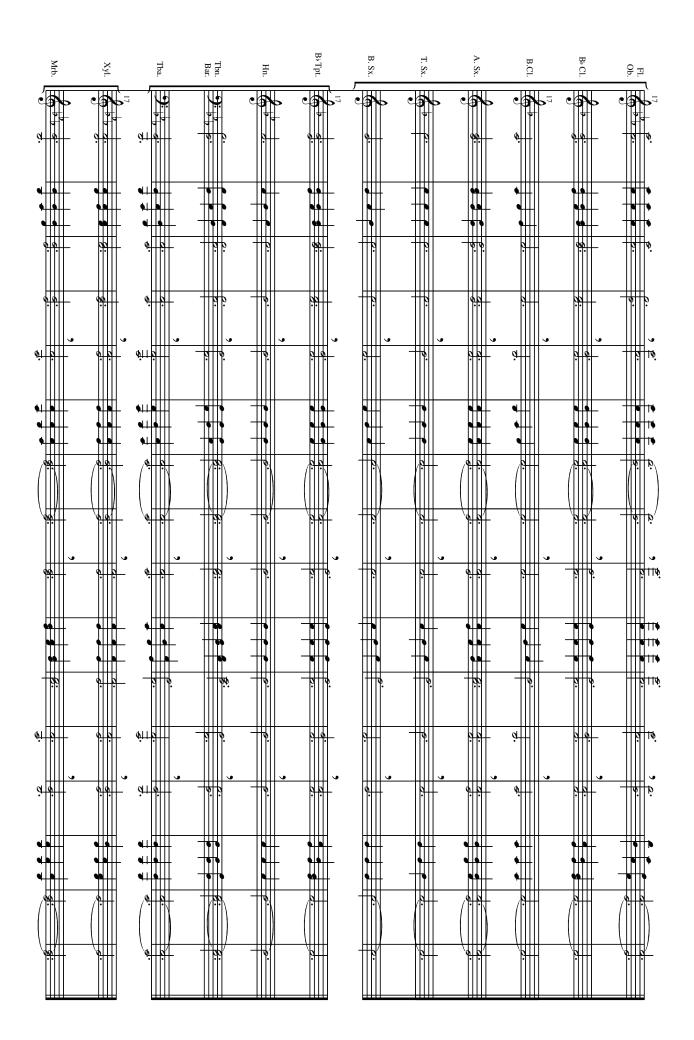
IN 12 MAJOR KEYS 2 HYMNS

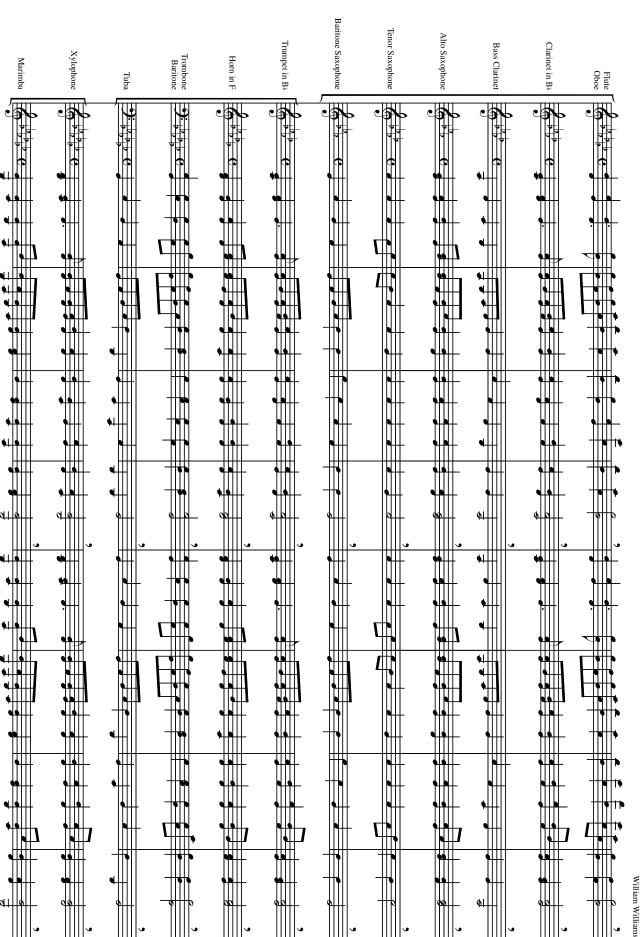
| con | conductor's sc | 's score | |
|--------------------------------------|----------------|--------------------------|------------------|
| Just A Closer Walk With Thee | С | Guide Us | Gb |
| Rhosymedre | ਸ | Sweet Hour of Prayer | В |
| Brightly Beams Our Father's Mercy Bb | Bb | Panis Angelicus | H |
| More Holiness Give Me | Eb | All Glory Laud and Honor | \triangleright |
| I Know of a Name | Ab | Breath of Life | D |
| What A Friend | Db | Nearer My God to Thee | G |

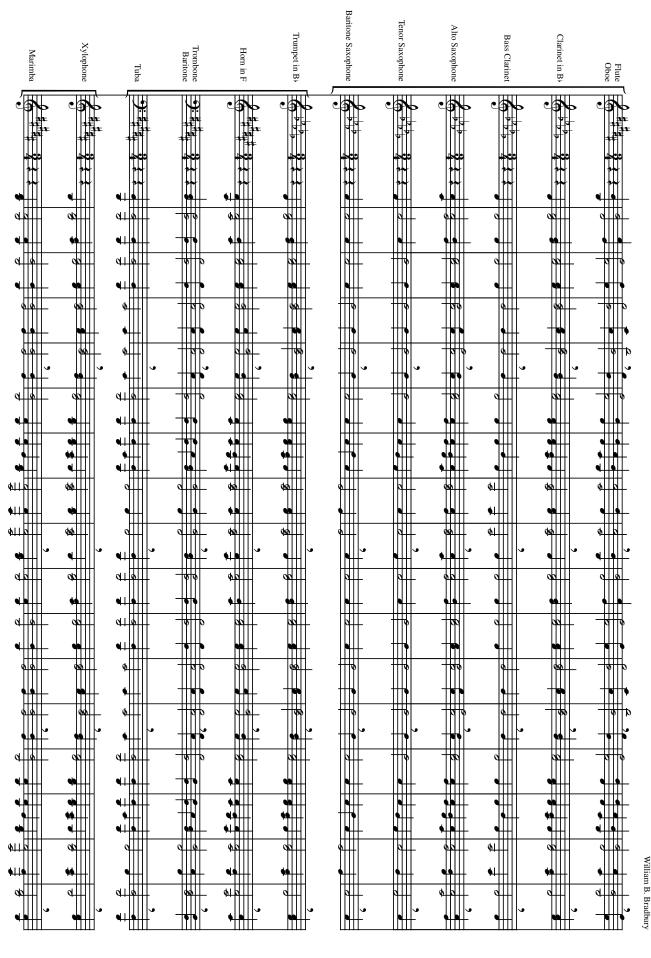
Arranged for band by Victor Russell Tarbet Neves partbooks available at bandtek.com

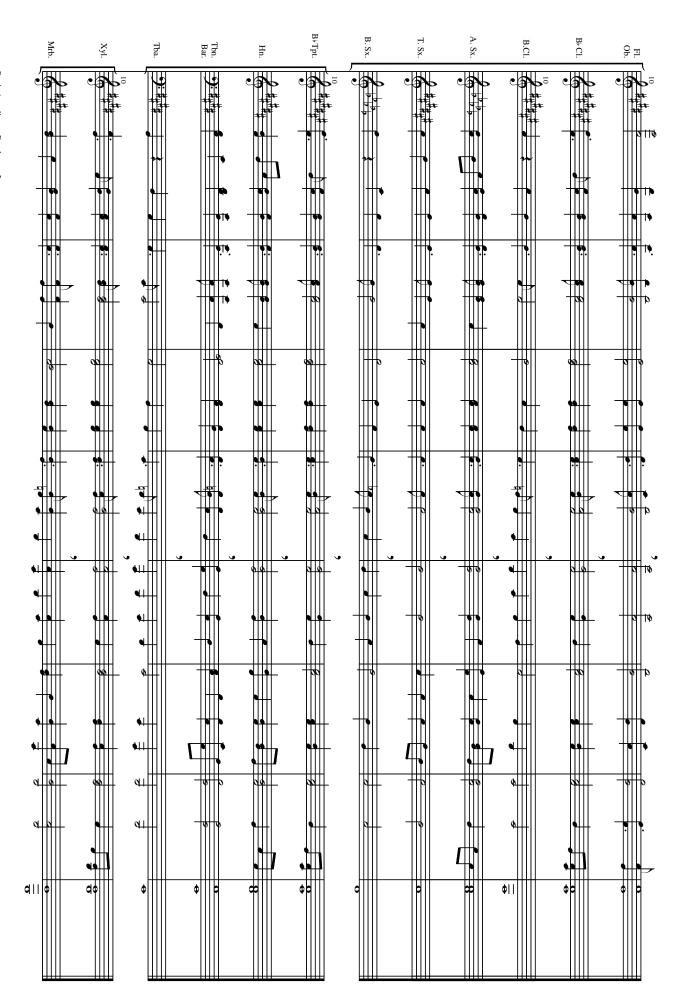
Copyright © 2006

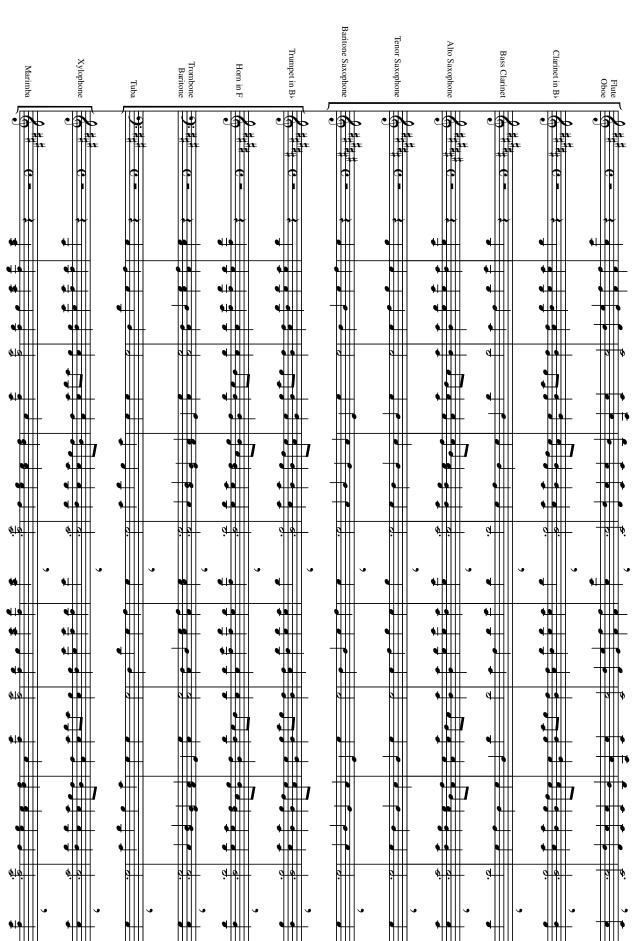












Nearer My God To Thee - Band page 2

APPENDIX F

KEYALITY RUBRIC

Keyality Rubric - Concert C - Db

Scoring Guide

- 5 = note perfect, 4 = very few mistakes, 3 = many mistakes, 2 = mistakes disrupt musical flow, 1 = wrong notes dominate

| | 5 | 4 | 3 | 2 | 1 |
|--------------------|---|---|---|---|---|
| Concert C | | | | | |
| Fluent Fingerings | | | | | |
| Personal Audiation | | | | | |
| Section Awareness | | | | | |
| Ensemble Awareness | | | | | |
| Concert F | | | | | |
| Fluent Fingerings | | | | | |
| Personal Audiation | | | | | |
| Section Awareness | | | | | |
| Ensemble Awareness | | | | | |
| Concert Bb | | | | | |
| Fluent Fingerings | | | | | |
| Personal Audiation | | | | | |
| Section Awareness | | | | | |
| Ensemble Awareness | | | | | |
| Concert Eb | | | | | |
| Fluent Fingerings | | | | | |
| Personal Audiation | | | | | |
| Section Awareness | | | | | |
| Ensemble Awareness | | | | | |
| Concert Ab | | | | | |
| Fluent Fingerings | | | | | |
| Personal Audiation | | | | | |
| Section Awareness | | | | | |
| Ensemble Awareness | | | | | |
| Concert Db | | | | | |
| Fluent Fingerings | | | | | |
| Personal Audiation | | | | | |
| Section Awareness | | | | | |
| Ensemble Awareness | | | | | |

KEY TOTALS

| С | F | Bb | Eb | Ab | Db |
|---|---|----|----|----|----|
| | | | | | |

INDICATOR TOTALS

| 11 12 10111 011 1 0 11 120 | | | |
|----------------------------|--------------------|-------------------|--------------------|
| Fingerings | Personal Audiation | Section Awareness | Ensemble Awareness |
| | | | |