Cultivating Hybridity: An Interdisciplinary Philosophy of Applied Tuba Instruction

Immanuel Claude Shuford
University of Miami, immanuel.shuford@gmail.com

Follow this and additional works at: https://scholarlyrepository.miami.edu/oa_dissertations

Recommended Citation
https://scholarlyrepository.miami.edu/oa_dissertations/1621

This Embargoed is brought to you for free and open access by the Electronic Theses and Dissertations at Scholarly Repository. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of Scholarly Repository. For more information, please contact repository.library@miami.edu.
CULTIVATING HYBRIDITY: AN INTERDISCIPLINARY PHILOSOPHY OF APPLIED TUBA INSTRUCTION

By

Immanuel Claude Shuford

A DOCTORAL ESSAY

Submitted to the Faculty of the University of Miami in partial fulfillment of the requirements for the degree of Doctor of Musical Arts

Coral Gables, Florida

May 2016
UNIVERSITY OF MIAMI

A doctoral essay submitted in partial fulfillment of the requirements for the degree of Doctor of Musical Arts

CULTIVATING HYBRIDITY: AN INTERDISCIPLINARY PHILOSOPHY OF APPLIED TUBA INSTRUCTION

Immanuel Claude Shuford

Approved:

Aaron Tindall, D.M.A.
Assistant Professor of Tuba and Euphonium

Gabriel Beavers, M.M.
Associate Professor of Bassoon

Timothy Conner, B.M.
Lecturer of Trombone

Guillermo Prado, Ph.D.
Dean of the Graduate School

Juan Chattah, Ph.D.
Assistant Professor of Music Theory and Composition
Cultivating Hybridity: An Interdisciplinary Philosophy of Applied Tuba Instruction

Abstract of a doctoral essay at the University of Miami.

Doctoral essay supervised by Professor Aaron Tindall.
No. of pages in text. (121)

Instructional materials, syllabi and scholarly documents, were evaluated using discrete comparative analysis in an attempt to develop a curricular approach that is interdisciplinary and multicultural to ensure compliance with new market demands of tuba professorship listings and performing tubists. These materials encompass the areas of applied instruction, theory instruction, curriculum development, and applied jazz instruction. The specific musical attributes addressed by this study are stylistic fluency, scalar proficiency, and music composition. It was predicted that comparing and analyzing applied tuba syllabi, applied jazz syllabi, and applied composition syllabi would reveal large scale commonalities between the three disciplines. It was concluded that modifications to the standard tuba curriculum, that reflect an intercultural and cross-curricular awareness, are possible. A proposed curriculum guide and recommendation for further study is enclosed.
TABLE OF CONTENTS

LIST OF MUSICAL EXAMPLES ................................................................. iv
LIST OF TABLES .................................................................................. v

Chapter

1 INTRODUCTION ................................................................................. 1

2 REVIEW OF RELATED LITERATURE .............................................. 14
   Applied Tuba Instruction ................................................................ 14
   Theory/Composition Instruction ..................................................... 18
   Curriculum Development and Assessment ...................................... 21

3 METHODOLOGY ............................................................................... 34
   Procedures ....................................................................................... 34
   Hypothesis ...................................................................................... 38

4 RESULTS .......................................................................................... 39
   Tuba Syllabi .................................................................................... 39
   Jazz Syllabi ..................................................................................... 43
   Composition/Music Theory Syllabi ................................................ 45
   Large Scale Commonalities ............................................................ 47
   Large Scale Differences ................................................................ 48

5 Proposed Curriculum Guide ............................................................ 49
   Scale Fluency .................................................................................. 53
   Bass Lines: Jazz and Popular Music .............................................. 77
   Creating Compositions ................................................................. 94

WORKS CITED .......................................................... 108
LIST OF MUSICAL EXAMPLES

5.1: Modified Vizzutti Buzzing Routine .................................................. 58
5.2a: 1\textsuperscript{st} Semester Major Pentatonic Scales ............................. 59
5.2b: 1\textsuperscript{st} Semester Minor Pentatonic Scales ............................ 60
5.3: 1\textsuperscript{st} Semester Major and Minor Scale Sequence ...................... 61
5.4: 1\textsuperscript{st} Semester Major and Minor Beautiful Sounds ................... 62
5.5: 2\textsuperscript{nd} Semester Blues Scales .............................................. 63
5.6: 2\textsuperscript{nd} Semester Dorian Modes of Major and Minor ................... 64
5.7: 2\textsuperscript{nd} Semester Beautiful Sounds (2\textsuperscript{nd} modes of Major and Minor) ............................... 65
5.8: 3\textsuperscript{rd} Semester Phrygian Modes of Major and Minor ................. 66
5.9: 3\textsuperscript{rd} Semester Beautiful Sounds (3\textsuperscript{rd} modes of Major and Minor) .............................................. 67
5.10: 4\textsuperscript{th} Semester Lydian Modes of Major and Minor .................... 68
5.11: 4\textsuperscript{th} Semester Beautiful Sounds (4\textsuperscript{th} modes of Major and Minor) .................................................. 69
5.12: 5\textsuperscript{th} Semester Mixolydian Modes of Major and Minor ............. 70
5.13: 5\textsuperscript{th} Semester Beautiful Sounds (5\textsuperscript{th} modes of Major and Minor) .................................................. 71
5.14: 6\textsuperscript{th} Semester Aeolian Modes of Major and Minor .................. 72
5.15: 6\textsuperscript{th} Semester Beautiful Sounds (6\textsuperscript{th} modes of Major and Minor) .................................................. 73
5.16: 7\textsuperscript{th} Semesters Locrian Modes of Major and Minor ................. 74
5.17: 7\textsuperscript{th} Semester Beautiful Sounds (7\textsuperscript{th} modes of Major and Minor) .................................................. 75
5.18: 8\textsuperscript{th} Semester Whole-Tine and Octatonic Scales .................... 76
5.19: Major and Minor ii-V-I (roots) ...................................................... 80
5.20: Major and Minor ii-V-I (root and fifth) .......................................... 81
5.21: Major and Minor ii-V-I (root, third, and fifth) .................................. 82
5.22: Major and Minor ii-V-I (root, third, fifth, and seventh) ..................... 83
5.23: Autumn Leaves Steady Eighths Bass Line ........................................ 86
5.24: Autumn Leaves Bossa Nova Bass Line .......................................... 87
5.25: Autumn Leaves Dixieland/New Orleans Street Beat Bass Line ............ 88
5.26: Autumn Leaves Ballad Style Bass Line .......................................... 89
5.27: Autumn Leaves Walking Bass Line ................................................. 90
5.28: Autumn Leaves Bebop Bass Line .................................................. 91
5.29: Transcription of Eddie Gomez’s Autumn Leaves Bass Line .................. 92
5.30: Transcription of Ron Carter’s Autumn Leaves Bass Line ..................... 93
5.31: Tuba Setting of Georgia on My Mind ............................................. 96
5.32: Tuba–Euphonium Arranged Accompaniment to Georgia on My Mind ...... 97
5.33: Tuba-Euphonium Arrangement of Non-Jazz/Pop Music ...................... 98
5.34: Re-harmonization of Autumn Leaves ............................................. 99
5.35: New Melody to Existing Jazz/Pop Song ......................................... 100
5.36: Instructive Composition Assignment - Modal Excerpts Exercise .......... 101
5.37: Instructive Composition Assignment – 8 Measure Melody ................. 102
5.38: Instructive Composition Assignment – 16 Measure Melody ................. 103
5.39: Intuitive Composition Assignment – 32 Measure Melody .................... 104
LIST OF TABLES

4.1: Tuba Syllabi Analysis ........................................................................................................... 39
4.2: Tuba Syllabi Analysis Rubric ............................................................................................. 40
4.3: Jazz Syllabi Analysis ........................................................................................................... 43
4.4: Jazz Syllabi Analysis Rubric ............................................................................................. 44
4.5: Composition/Music Theory Analysis .................................................................................. 45
4.6: Composition/Music Theory Analysis Rubric ..................................................................... 46
5.1: Undergraduate Scale Sequence ......................................................................................... 57
5.2: Jazz Song Sample List ....................................................................................................... 79
Chapter 1

Introduction

The United States is recognized as a nation that has an international, cultural impact. Musically, this can be seen in the globalization of rock and roll, jazz, and rhythm and blues. Scholars routinely document the influence of American popular music abroad and the collaborations it allows for between other countries and cultures. Interestingly, this facet of American music culture is not easily visible in the standard collegiate music curriculum. This can specifically be observed in collegiate applied tuba instruction also.

For musicians, a centered position is not always the most conducive for creativity.¹ This quote is a suitable point of origin for the purposes of this essay. Interpreting a centered position as a means of maintaining specific musical and cultural values privileges a particular population. If music is a creative medium and centrality is not conducive to creativity then perhaps it is appropriate to reassess formalized music education processes. The philosophical underpinnings of Bakhtin intimate that musicians and creativity are, if only tangentially, related. Bakhtin’s statement also reflects a position of inclusion, advising that obstinacy and stubbornness are counterproductive to the creative musician. I would like to apply Bakhtin’s philosophy to the modern tuba performer and educator.

Geoffrey Whitehead, one of the earliest published tuba curriculum authors, believes that versatility is a musician’s most attractive quality. The higher the musical ability of students in a wide variety of musical styles, the greater the possibility of

success in their chosen (career) field. This type of versatility and stylistic fluency has been valued in the current tuba audition market. Cirque du Soleil and the Walt Disneyland Resort recently held tuba auditions seeking individuals with sound technical skill, the ability to play multiple genres of music (i.e. jazz, rock, pop, etc.), and to improvise bass lines. The audition calls specifically mention that these additional skills would be considered highly favorable. Royal Caribbean Cruise Line held an application and audition process in which the ideal candidate possessed classical brass quintet experience, Dixieland and New Orleans Jazz experience, symphonic band experience, jazz band experience in the style of Miles Davis’ *Birth of the Cool*, and big band jazz experience. I recognize that these stylistic genres may not reflect the career trajectories and desires of tuba students and their instructors; however, these are some of the performance opportunities that are available.

The message found in Bakhtin’s assertion speaks to a cultural awareness that is as philosophical as it is practical. Philosophically, the postulate of the non-centered position musician implies a spectrum of knowledge and experience. When this idea is framed from a scholarly perspective it is clear to recognize the similarities between non-centrality and research. This can be found in the practices of law and medical programs in which students are required to know a wide range of information, regardless of inevitable specialties. Using this theory in the field of music would imply that a wide range of genres should be studied. Dialogues of such practices usually elicit the terms “crossover,” “hybrid” and hint at a cosmopolitan nature of musicianship and identity.

---

The practicality of Bakhtin’s message also speaks to the working musician. Performing tubists, whether contracted through large performing ensembles (i.e. “The President’s Own” Marine Band, the Cleveland Orchestra) or primarily freelance associations, must be able to perform a variety of styles to ensure and sustain employability. This can be seen in the number of Pops oriented programs that are scheduled for the country’s premiere classical ensembles. This can be also be seen in the realms of film music, and studio sessions. It stands to reason then, that the performance curriculum should reflect as many performance settings and examples as possible.

**Background**

My research begins with the notion that a variety of performance, composition, and stylistic concepts should be taught in conjunction with applied tuba. The most comprehensive approach to such a study should include a comparative analysis with several music genres and their subsequent nationalization and globalization; however, this research will mostly incorporate the areas of jazz and composition with applied tuba instruction. This eclectic teaching philosophy was developed during my undergraduate music education studies. While this position is not the dominant one among collegiate tuba programs (of which nearly all are exclusively classically oriented), I offer my ideas for consideration as an educator. It is my belief that the variety of performance, composition, and stylistic concepts should be taught from a perspective that is not entirely based on western art music.

I define the idea of hybridity as the practice of stylistic fluency. This particular fluency is not restricted to the styles found in western classical music (i.e. classical,
romantic, modern, etc.). Instead, my definition recognizes that the wealth of music history and theory resides simultaneously in the genres of classical, jazz, popular, and world music. Using my definition I would like to explore the possibilities of incorporating other styles and genres of music into the standard applied tuba curriculum. I am also interested in the cultural implications of including music into the tuba curriculum that is outside of the European cannon.

*At a basic level genre is a type of category that refers to a particular kind of music within a distinctive cultural web of production, circulation, and signification. That is to say, genre is not only in the music, but also in the minds and bodies of particular groups who share certain conventions.*³ When institutions highlight one particular set of cultural conventions there is an implicit message of value and merit as it pertains to music and the people that create that given music.

Currently, applied tuba instruction is admittedly an exclusive culture with its own particularities and subsets of population. This is true for a number of reasons. Chief among them is the fact that an overwhelming majority of applied tuba programs in the United States are situated within classical music programs. This highlights the frame and musical content that many tuba students are presented with: classical music styles, excerpts, and solo literature. While this model and scope has historical significance, modifications are in order so that current educational practices mirror the current socio-cultural and musical climate.

A new pedagogical model of applied tuba instruction is also necessary to meet the increasing diversity in professorship listings and performance opportunities. This trend

---

implies and emphasizes a dexterity that is not typical of undergraduate tuba study. This notion can also be compared to current classical pedagogy. One can argue that within the history of classical music, there is not a signature sound but a collection of individual sounds and styles. Bach does not sound like Beethoven, nor does Schoenberg remind people of Debussy. Yet, because there is a construct of classical music as defined by Western Dominant culture each composer and musical style is given value within the context of her or his genre. Subsequently, each undergraduate tuba student must demonstrate a relative understanding of the historically significant classical genres. What of the rest of music? Are we to only champion the efforts and products of European composers?

A considerable part of my performing experience is in non-classical traditions. These opportunities include the Walt Disneyland Resort, Royal Caribbean Cruise Line, as well as collaborations with B.B. King, Stevie Wonder, Esperanza Spalding, Ravi Coltrane, Kenny Burrell, Dee Dee Bridgewater and Wycliffe Gordon. These same experiences span the genres of classical, jazz, hip-hop, and popular music. I have also had success in large ensemble auditions. The sum of the skill sets used in each of the aforementioned spheres were not cultivated and emphasized during my matriculation process. Instead, the examples of non-traditional tuba performance were fueled by my individual passions and self directed study. I am curious as to the potential outcome of an educational track that at the very least incorporates the elements of stylistic fluency, improvised bass lines, and composition.

Current instructional models primarily emphasize western classical music. This type of curriculum, having its own merit, does not reflect cultural diversity. A diverse
objectives based curriculum should reflect acute instrument specialization and intercultural/multi-genre awareness. It should also encompass the broad spectrum of musical facets present in academia and popular music. A bass line composition portfolio can be used as a tool to teach and assess this knowledge base while simultaneously increasing the tubist’s stylist fluency. The result of such an applied tuba instruction model should produce adept and diverse performer-composers. An objectives based curriculum can be the beginning of applied tuba instruction reform. The most fundamental principle guiding curriculum design concerns course objectives; however, many teachers use the same curriculum and course objectives for every student year after year.4

An overwhelming majority of tuba performance opportunities are in the classical sector. Professional classical performance opportunities are restricted to military bands, chamber ensembles, solo careers, and professional orchestras. The value and deference towards these performance opportunities are reinforced with instructional models that use orchestral excerpts as the primary teaching material. Conventional music instruction appears to be similar among institutions.5 The standard applied tuba instruction model can be modified to be more culturally inclusive by including tuba performance in non-classical genres. The notion that tubas exist outside of classical repertoire is not new. Dixieland and New Orleans Jazz history include tuba as an integral member of the ensemble. Therefore, an applied tuba instruction syllabus should at the very least include this rich aspect of tuba history and performance practice.

5 Edwin E. Gordon, Possible Impossibilities in Undergraduate Music Education (Chicago: Gia, 2010), 184.
The job market for the aspiring performing musician is admittedly small. The market for the aspiring tuba player is even smaller. The ability to play various types of music (to include jazz, hip-hop and other forms of popular music) enhances the chances of gaining employment as a performer and/or educator. These employment opportunities, however, often involve drawing upon a skill set that is not traditionally cultivated in applied instruction. These skills are becoming ever more present, and attractive, in the current job market. Applied music teachers could improve music education programs if they gave as much thought to their students’ development of musicianship as they direct toward (the) acquisition of instrumental and/or vocal technique.\(^6\) Applying Gordon’s statements to tuba instruction suggests that musicianship and instrumental proficiency are not synonymous.

It seems fitting that the best response in addressing tuba performance versatility is to revitalize the applied instruction model. Students spend approximately 120 hours in lessons per undergraduate degree, 60 hours per masters and 90 hours per DMA.\(^7\) These numbers do not include the hours students spend preparing for lessons. Nevertheless, the total number of hours spent in applied instruction during a degree substantiate the notion that applied instruction is an ideal setting for an interdisciplinary approach. That is not to say that it is the only ideal setting; large ensembles rehearsal time is greater than the amount of time spent in applied instruction. How does an interdisciplinary approach differ from current practices?

A typical course of study for tuba and euphonium students throughout the years has consisted of the mastery of classical solos, wind band excerpts, and orchestral

---


\(^7\) NASM Handbook, 76.
excerpts. The diversity of performance requirements previously mentioned in recent job postings necessitates flexibility and a broader skill set than that which is provided in most colleges, universities, and conservatories. It should be the aim of a quality college tuba program to balance these foci and to promote an awareness of all the possibilities of musical careers for a college tuba graduate. Such a model should reflect acute specialization, and encompass the broad spectrum of musical facets present in academia and popular music. It makes sense that music is taught holistically.

**Problem Statement**

Tuba curricula often include the mastery of fundamentals. For the purposes of this research fundamentals are defined as a variety of the following: articulations, phrasing, major and minor scales, intonation, rhythm, tempi, range and timbre. These fundamentals are usually presented and framed within the classical context. These fundamentals are not however exclusive to classical settings. A variety of articulations, phrase, major and minor scales, intonation, rhythm, tempi, range and timbre exist in many different genres of music. Some of these non-classical genres feature an arguably more complex assortment of fundamentals. This presents a problem. A typical tuba instruction model does not include the myriad of culturally diverse musical settings that a professional performer might encounter. The development of a new curriculum will better prepare tuba students for these varying opportunities.

---


**Purpose**

The purpose of this study is to develop a new curriculum for applied tuba that seeks to include jazz and composition into applied instruction as key competency areas. These areas will be incorporated into the applied instruction syllabus via the mediums of a composition portfolio and performance adjudication. The specific questions addressed in this study are:

1. What are the common aspects of applied tuba curricula in selected U.S. universities?
2. What are common aspects of jazz curricula in selected U.S. universities?
3. What are the common aspects of applied music theory and composition curricula in selected U.S. universities?
4. What are the researched based opinions regarding curriculum development?
5. Can an applied curriculum syllabus reflect instrument proficiency and incorporate differentiating stylistic and compositional elements?

**Rationale**

The development of a new curriculum will benefit the educational offerings within applied instruction and encourage culturally literacy. The values placed upon musicianship are either concerning performance, or creativity.\(^\text{10}\) The proposed curriculum would focus on both performance and creativity. This is not a philosophy that Lucy Green believes is observed regularly. Societies and communities with the most highly

---

developed formal music education systems often appear to contain the least active music-making populations.\textsuperscript{11}

These guidelines are in agreement with the National Associations of Schools of Music philosophy of undergraduate musicianship studies and seek to enhance applied instruction.\textsuperscript{12} The proposed curriculum seeks to increase knowledge in the student and teacher population, broaden cultural literacy, and reinforce traditional American non-classical music forms. The proposed curriculum will assist in creating diverse musicians and reinforce pedagogical, musicological, and theoretical/compositional values. This philosophy is in agreement with current discourses on comprehensive musicianship and music education.

My research efforts focus primarily on cultivating a tuba curriculum that is more inclusive of jazz and composition than most existing modalities. There is a particularly homogenous nature in music schools with touted tuba-euphonium studios. This homogeneity can be found in the teaching styles and materials of instructors at various schools. Unfortunately, it seems that homogenously implicit musical values are communicated within these programs of study. These values do not reflect musical diversity outside of the classical genre.

Detailed description and analysis of this within the educational culture would entail sociological, and psychological study. To the sociologist studying art worlds, it is as clear, but no clearer than, it is to the participants in them whether particular objects are “really art” or whether they are craft or commercial work, or perhaps the expression of

\textsuperscript{11} Green, \textit{How Popular Musicians Learn a Way Ahead for Music Education}, 5.
\textsuperscript{12} NASM, 845.
folk culture, or maybe just the embodied symptoms of a lunatic. Becker’s offering provides contextual perspective as to why particular forms, or genres in this case, are studied and hailed as seminal figures. Becker simultaneously provokes discussion of the authority and agency of the adjudicating bodies.

Applied performance, musicology, and music theory/composition are vetted as the authoritative agencies of western music schools. These realms, and occasionally jazz, are usually represented in music schools via specific program/degree tracts. The case of hybridity and stylistic fluency has merit in each of the aforementioned music spheres. Creating an interdisciplinary philosophy of applied tuba instruction must then consult each of these areas individually and collectively.

**Pedagogical/Performance Rationale**

A college course of study should explore a wide variety of solo literature and musical styles. Instructors and institutions can arm students with the pre-requisite skills needed to acquire employment, even if those performing opportunities are “non-traditional.” (i.e. Disneyland Band, Cirque Du Soleil, Cruise Lines etc....) Gordon purports that music of different styles (multicultural music) cannot be taught without pragmatic performance experience. Institutions and instructors providing training and opportunities that cover a wide spectrum of musical possibilities will potentially have higher student success rates. These students are ideally more “job ready” for many career

---

performance opportunities, not just classical performance. This could be a small step towards future virtuosic generations that possess the ability and aptitude to perform in the classical, jazz, pop and world music arenas. The goal is to cultivate truly hybrid players.

**Musicological Rationale**

The inclusion of several genres of music within the applied tuba instruction framework emphasizes a broader knowledge and experience of different types of music. This enhances cultural literacy, and performance style versatility. Practical experience and knowledge of several types of music is also ideal for future educators, regardless of specialty (i.e. musicology, performance, theory, etc.). Exposure to music from different cultures also enhances the aspiring composer’s musical palette. The inclusion of many genres also strives to eliminate the socio-cultural barriers between classical, jazz, pop and “world” music.

**Theory/Compositional Rationale**

A diverse applied tuba instruction curriculum should include a wide spectrum of music theory. Adept knowledge of music theory analysis is synonymous with the following traits: attention to detail, ability to discriminate and differentiate, and the ability to duplicate or imitate. These skills are important for performers, educators, and composers. Gordon states that certain critics discredit learning theory as an old fashioned concept steeped in (the) tradition of early twentieth century thought and associated solely with conditioned response and behavioral psychology; however, modern cognitive and emotion learning theories embrace a broad view going far beyond any one school of
thought or group of persons. Theory informs performers of nuanced stylistic traits and characteristics of any given music.

Understanding theory aids the educator and student in identifying the core characteristics of a given music. Understanding the theoretical practices of many types of music helps musicians arrive at unique and individual philosophies of music (performance, education, and/or theory and composition). Working theoretical knowledge of many genres of music also allows for a path of creative composition. The addition of personal compositions into the applied instruction framework, regardless of genre or scope, adds to the voluminous compilation of music history, composition, and theory. These student compositions can potentially be used as examples of musicians to follow (whether in the academy or not).

I am not intimating that the standard or traditional music theory model of instruction is failing the applied tuba student. Instead, I am offering an idea of how applied instruction can be more interconnected across the music disciplines. I recognize that this reflects my personal values as it relates to music education. However, considering that the ability to improvise bass lines and melodies is predicated on theoretical knowledge and instrument proficiency it seems fitting that applied instruction should supplement current theory instruction models.

---

Chapter 2

Review of Related Literature

This chapter is a review of literature related to the development of an interdisciplinary curriculum of applied tuba instruction. Specific research for existing applied tuba curriculum included reviews of existing literature regarding tuba instruction/curriculum. The literature was identified by the areas of music to which they belong. The categories are: (a) professional opinions related to tuba instruction/curriculum, (b) professional opinions related to music theory/composition instruction, (c) scholarly opinions related to curriculum development and assessment.

Applied Tuba Instruction

The wealth of literature on applied tuba instruction and pedagogy has undergone great shifts since the earliest publications. A selection of that scholarship is represented here in order of more recent publications to older publications. One observation is that while each author is well intentioned, there are generative assumptions made. These assumptions include student’s background, student’s/teacher’s values, and assumed career/musical trajectories. Despite assuming presumptive positions about education, the following authors do indicate that a level of musical flexibility is desirable.

Stephen Meyer identifies varying career trajectories among students within applied instruction. This report addresses potential challenges facing the aspiring collegiate tubist. The aim of the study is to provide a proposed supplemental curriculum that aids in the preparation of a collegiate music pursuit. The target audience is middle

---

and high school band directors with “promising” students. The proposed course of study focuses on private instruction, ensemble performance/instruction and a suggested listening list. The study identifies varying career trajectories but lacks specificity in detailing the corresponding expected performance skills and competencies for the various degree programs. The proposed plan for the young tubist focuses exclusively on classical music and lacks diversity. The report makes several claims without substantial scholarly research. The majority of the article is an assumption of expected performance competency standards based on the author’s personal experience and cultural background. This study helps to identify areas of curricula development that need to be thoroughly detailed and substantiated with scholarly research. This study, published in 2009, also serves to highlight the lack of curriculum diversity within applied tuba instruction. This study features a bibliography list that might be helpful to me as it includes several other proposed curriculum guides.

Paul Carlson details helpful information in guiding prospective tubist's towards a career in a commercial brass quintet. In this study he identifies seven principles to be integrated via applied instruction: (a) description of role, (b) chord consciousness, (c) evenness of range, (d) a palette of articulations, (e) breathing efficiency, (f) diversity to perform in many commercial styles, and (g) performance consistency.\(^{18}\)

Carlson frames the “role” of a commercial tubist as being best understood through the study of other instruments.\(^{19}\) Carlson identifies the bass as a suitable instrument but neglects to include any other instrument suggestions. He also does not propose methods for achieving multi-instrument dexterity. The elements of chord consciousness and


\(^{19}\) Ibid., 20.
knowledge of various styles is addressed primarily from a jazz point of view but fails to
acknowledge other styles of music in which the same principles might be applied.
Carlson does provide suggestions for achieving technical proficiency; a variety of scale
exercises.\textsuperscript{20} While these exercises are primarily framed as a means to develop technique
they can be used to aid in the instruction of chord theory. All tonal music is comprised of
scales and chords; therefore, a comprehensive knowledge of theory should be included
into applied instruction. Giving scales great attention benefits all types of (music)
performance that a student might undertake.\textsuperscript{21}

The most significant aspect of Carlson’s work is the stress on a variety of
performance styles. It is important to become as comfortable as possible performing in as
many different styles as possible.\textsuperscript{22} Carlson identifies the implications of this philosophy
by detailing the modern settings in which is found: The Roots’ sousaphones Damon
“Tuba Gooding Jr.” Bryson, John Legend’s “Get Lifted” album, Outkast’s “Idewild”
soundtrack/album, and a live album by blues guitarist Taj Mahal featuring Howard
Johnson and his tuba ensemble, Gravity.\textsuperscript{23} These mentions indicate popular music’s
embrace of tuba and indicates that the applied curriculum should reflect the myriad of
career opportunities.

Geoffrey Whitehead’s proposed curriculum primarily reflects the teaching
practices of the tuba studio at Indiana University. The bulk of this study addresses
curriculum development, teaching styles, and the selection of repertoire. Whitehead
identifies curriculum development as an integral aspect of higher education. He further

\textsuperscript{20} Carlson, \textit{A Curriculum for Tuba Performance in a Commercial Brass Quintet}, 33.
\textsuperscript{21} Ibid., 35.
\textsuperscript{22} Ibid., 44.
\textsuperscript{23} Ibid., 46.
indicates that course objectives should be considered when designing curriculum for applied instruction, and that these objectives should not necessarily be constant across an entire studio. Many teachers use the same curriculum and course objectives for every student year after year; however, every student is different and will have different musical and educational priorities and goals… Therefore, one standard syllabi or curriculum will not be suitable for the wide range of students studying tuba at the tertiary level.\textsuperscript{24}

Whitehead acknowledges the multitude of learning types that may exist within a studio and suggests that teachers should be familiar with several teaching modalities. Many college teachers tend to over-generalize about their students, as opposed to assessing each student individually; these teachers adopt and develop one, maybe two, particular-teaching styles.\textsuperscript{25} This highlights a deficit in applied music teaching in higher education. The general implication is that the level of preparedness of applied instructors is not suitable for a diverse student population. Whitehead highlights continual professional development as a necessity for applied teachers. It is important that college faculty keep up-to-date and well informed about current developments and pedagogical thoughts in their particular field.\textsuperscript{26}

Whitehead defines the selection of repertoire as a process by which the applied instructor presents varying musical contexts. A college course of study should explore a wide variety of solo literature and musical styles; it is the function of the professor to

\textsuperscript{24} Whitehead, \textit{A College Level Tuba Curriculum: Developed Through the Study of the Teaching Techniques of William Bell, Harvey Phillips, and Daniel Perantoni at Indiana University} (Lewiston: Edwin Mellen Press, 2003), 28-29.

\textsuperscript{25} Ibid., 30.

\textsuperscript{26} Ibid., 29.
educate the student as to the musical potential of the tuba. Whitehead suggests that the primary avenues for this are faculty performances, and a library of tuba recordings. There is no mention of introducing or teaching a variety of non-traditional styles (i.e. jazz, pop etc.) via the study and performance of said style.

The *Tuba Source Book* serves best as a research guide to solo tuba repertoire. Winston Morris and Daniel Perantoni outline solo repertoire selection as the chief contributor to applied tuba instruction curriculum development. The repertoire is categorized by instrumentation: tuba and keyboard, unaccompanied tuba, tuba in a mixed ensemble (i.e. string quartet, woodwind quintet), tuba with orchestra, tuba with band, tuba and electronics, method books, and orchestral excerpts. A brief history and specific performance challenges of the aforementioned settings is given. This guide to repertoire also includes a discography.

**Theory/Composition Instruction**

The literature about theory/composition instruction used in this study is limited to the opinions that follow. These opinions strengthen the case for interdisciplinary instruction operating in tandem with conventional educational processes. The areas of specialty in this review cover classical and popular music theory instruction. I consulted both areas of scholarship so that I can best craft a philosophy and curriculum that covers a wide variety of material. I believe that this approach provides contemporary relevancy and embolden the validity of my research.

---

The teaching/learning of stylistic composition is musicological, useful for learning the mechanisms of the tonal musical language.\textsuperscript{28} Margaret Wilkins’ guidelines for composition instruction provide an opportunity to enhance applied instruction. The object of including composition on equal terms with the other areas of musical study is not necessarily to produce composers, but to produce educated musicians.\textsuperscript{29} Wilkins suggests that the educational experience of the undergraduate student should be as dynamically diverse as possible. This dynamic includes technical proficiency on the student’s instrument and yields creative output.

Wilkins’ study identifies challenges in music composition instruction and provides theories to aid in curriculum design. The issues that are addressed include what to teach, how to teach, and the benefits of composition instruction. Wilkins acknowledges that student creativity is unique and that students thrive in stimulating environments.\textsuperscript{30} The description of these environments includes the traditional, the inventive, and those that reflect a multiplicity of styles. This teaching philosophy establishes the interrelatedness of theory, musicology, and performance.

Wilkins states that there are three components to composition instruction. These elements are stimulating the student’s imagination, the student’s technical skill, and the student’s knowledge of a variety of musical contexts.\textsuperscript{31} The majority of discourse presented in this study focuses on the knowledge base and technical ability of

\textsuperscript{28} Whitehead, \textit{A College Level Tuba Curriculum: Developed Through the Study of the Teaching Techniques of William Bell, Harvey Phillips, and Daniel Perantoni at Indiana University} (Lewiston: Edwin Mellen Press, 2003), 12.
\textsuperscript{29} Whitehead, \textit{A College Level Tuba Curriculum: Developed Through the Study of the Teaching Techniques of William Bell, Harvey Phillips, and Daniel Perantoni at Indiana University} (Lewiston: Edwin Mellen Press, 2003), 8.
\textsuperscript{30} Margaret Lucy Wilkins, \textit{Creative Music Composition: The Young Composer’s Voice} (New York: Routledge, 2006), 1.
\textsuperscript{31} Wilkins, \textit{Creative Music Composition: The Young Composer’s Voice}, 2.
composition students. The in-depth study of tonality is now the realm of musicology, and essential for the performer of music from the past.\textsuperscript{32} Applying this theory to applied instruction emphasizes values that should inform performance.

Wilkins’ outline for composition instruction identifies objective, and abstract composition exercises. Each exercise is designed to cultivate a higher awareness of the elements of music that contribute to style. Wilkins identifies rhythm, melody (pitch collection), counterpoint, timbre, and texture as the indicators of style.\textsuperscript{33} Solo instrument composition reflects the synthesis of these elements of music. Writing for a solo monadic instrument is perhaps the most taxing and technically difficult compositional challenge, giving the impression of melody and harmony.\textsuperscript{34} These exercises can be recreated within applied tuba instruction.

Nancy Rosenberg asserts that student chosen works must become integral in the repertoire used in music theory education.\textsuperscript{35} Rosenberg stipulates that popular music presents opportunities for a variety of teaching, learning, and assessment. These opportunities include but are not limited to rhythmic/meter training.\textsuperscript{36} Rosenberg suggests basic procedures for integrating popular music into teaching and learning concepts related to the aspects of rhythm, harmony, and meter.\textsuperscript{37}

Heather MacLachlan makes the case for the inclusion of popular music into theory curricula. MacLachlan details the concepts that can be taught using popular music

\textsuperscript{32} Wilkins, Creative Music Composition: The Young Composer’s Voice, 5.
\textsuperscript{33} Wilkins, Creative Music Composition: The Young Composer’s Voice, 45.
\textsuperscript{34} Wilkins, Creative Music Composition: The Young Composer’s Voice, 236.
examples: diatonicism, intervallic relationships, tonic-subdominant relationships, chord inversions, nonharmonic tones (passing tones, neighbor tones, suspensions, anticipations and pedals), seventh chords, secondary dominants, the circle of fifths, modal, mixture, modulation, counterpoint, motives, and sequences. MacLachlan places emphasis on the acquisition of musical knowledge. The students will therefore be able to assimilate their new knowledge quickly, relate it to their own musical lives, and bridge the historical gap that exist between themselves and the music in which these concepts were first codified. MacLachlan outlines possible lesson plans and musical examples in which these concepts can be introduced. These plans can be modified to accommodate changes in class size, and changes in musical content.

**Curriculum Development and Assessment**

Curriculum development and assessment is a vast subject with numerous published opinions. The selected literature seeks to cover and address as many facets of music curriculum development and assessment as possible. The following opinions emphasize a variety of teaching philosophies and assessment models. The most consistent theme throughout this section is the idea that teaching and educational philosophy is an ongoing process. This singular point influences each author’s perspective on curriculum development, assessment, and teacher development as a result.

Colleen M. Conway and Thomas M. Hodgman offer research informed guidelines for teaching music in higher education. The study is divided into three sections: course planning and preparation, issues in teaching and learning, and growth in teaching practice.

---

and a future in higher education. The concept of teaching applied music is addressed specifically in chapter eight. The information found in this section includes ideas about individual instruction.

The framework of applied instruction is supported with psychological research. The simple expert-novice dyad is a complex world of human cultural evolution, including the use of language, symbol systems, tools, and many aspects of human psychology. This psychological position suggests that applied instruction is subject to the aspects of cultural interaction. The implication is that pedagogical information must be combine with a culturally diverse medium of communication. Providing clear information via syllabi, assessment strategies, and working to meet the needs of the student are important.

Conway and Hodgman also indicate that the ability to motivate students should be factored into applied instruction. There are two primary strategies discussed for motivating students: one more academically driven, and one more career oriented. Jeff Lyman, Associate Professor of Bassoon at the University of Michigan, states:

*Motivation is achieved through the presentation of an ideal (perhaps a recorded performance, a set of traditions to emulate, a personal goal to reach, a competition) or the demonstration of a need (a deadline, jury, an audition, a set of technical or musical demands.)*

Fritz Kaenzig mentions that teachers can model the idea of motivation to their students through focusing on student’s individual improvement and career goals.

---

40 Conway and Hodgman, *Teaching Music in Higher Education*, 139.
If a student hears improvement in their playing, interpretation or skills, it motivates them...I place their career goals and creative aspirations above those sometimes narrowly defined in a performance studio.42

Conway and Hodgman identify curriculum development as an extension of teaching philosophy. They categorize teaching philosophies into four categories: objectives-based approach, literature-based approach, skills-based approach, and knowledge based approach. These approaches are influenced by six factors: the specific context of the teaching and learning situation, expectations of external groups, the nature of the subject, characteristics of the learners, characteristics of the teacher, and any specific pedagogical challenges.43

Objective based approaches are described as a four-phase process. The phases are the development of objectives for the learner, the sequencing of the objectives (scope), the designation of activities to meet the objectives (lesson plans), and the evaluation or assessment of progress (tests, juries, etc.).44 Conway and Hodgman acknowledge that the objective based approach is popular. Their critique of this model is that it is too linear and neglects to appropriate teaching styles to the multidimensional classroom.

The skills based and knowledge based approaches are classified as the most restrictive. Skills based theory suggests that the evaluation of skills (singing, moving, performing, improvising, composing, and listening) is the primary influence for curriculum development. The skills-based approach does not include attitudes or preference toward music, but rather abilities of the student to interact within a specific

musical context.\textsuperscript{45} The lack of music preference indicates that the assessment of skills is not and should not be restricted to a particular genre or style of music. Knowledge based approaches usually focus on formal assessment models like quizzes and tests. Knowledge based (content) is the easiest content to assess, and so many professors fall into the trap of including more knowledge than skill due to ease in course design.\textsuperscript{46}

The literature-based approach most resembles an interdisciplinary approach to curriculum development. Conway and Hodgman describe the curriculum of applied instruction as a reflection of this philosophy via the repertoire selected. The literature based approach works well for music courses; reflecting on specific repertoire to be studied that addresses other approaches (objectives, repertoire, skill, and knowledge).\textsuperscript{47} This model includes the other models in an integrated way that gives specific purpose to the assignment of repertoire. This approach also allows for continuity of the development of concepts and ideas on a macro level.

Rodney Miller highlights the success of music education as stemming from a particular institutionalization of music. Miller identifies this phenomenon as the primary contribution to curriculum development. The process has four elements: (1) indoctrination to the literature which present and past musicians hold sacred (the very best and most compelling), (2) instruction on the procedures for learning, digesting, and producing music, (3) exposure to those who carry out the first two procedures in a professional manner, and (4) submission to rituals devised for the consummation of the

\textsuperscript{45} Conway and Hodgman, \textit{Teaching Music in Higher Education}, 15.
\textsuperscript{46} Conway and Hodgman, \textit{Teaching Music in Higher Education}, 15.
\textsuperscript{47} Conway and Hodgman, \textit{Teaching Music in Higher Education}, 15.
first three.\textsuperscript{48} Miller’s assertion is not restrictive and can be applied to applied instruction as well as other academic fields.

Miller focuses mostly on the interaction between faculty, staff and students. This relational dynamic is framed as an impetus for successful learning communities. In a university setting, the primary focus, no matter the activity, is on education.\textsuperscript{49} Miller explains that this educational philosophy is the result of framing music education within a liberal arts setting. This setting seeks to educate the student in as many different settings as there are permissible.

Edwin E. Gordon outlines theory and history as facets that should work in consort with applied instruction. Gordon suggests that applied music teachers could improve music education if they gave as much thought to their students’ development of musicianship as they do toward the acquisition of technique.\textsuperscript{50} Gordon addresses several of the variables that contribute to teaching and learning. The variables include teaching models/strategies, assessment models, the selection of repertoire, and curriculum design. Edwin E. Gordon identifies multiculturalism and diversity, within music, as facets to be incorporated in the educational process.\textsuperscript{51}

Gordon’s philosophy can be applied to the applied instructor at the collegiate level. Applying such philosophy means creating opportunities within the applied instruction framework for students to study and perform non-classical music. Gordon identifies the benefits of a broad musical vocabulary as the foundation for music literacy.

He defines music literacy as the listening, performing, improvising, reading, and

\textsuperscript{49} Miller, \textit{Institutionalizing Music}, ix.
\textsuperscript{50} Edwin E. Gordon, \textit{Possible Impossibilities in Undergraduate Music Education} (Chicago: Gia, 2010), 193.
\textsuperscript{51} Gordon, \textit{Possible Impossibilities in Undergraduate Music Education}, 141.
writing/creating of music.\textsuperscript{52} This philosophy reflects many of the national standards of the National Associations of Schools of Music.

William I. Bauer and Margaret H. Berg outline the various factors that contribute to the development of a music teacher’s educational philosophy. Undergraduate music education is described as philosophical and practical. Bauer and Berg indicate that methodology and content are primary characteristics of curriculum design and implementation.\textsuperscript{53} This explanation is framed within the context of the National Music Standards of comprehensive music instruction as it applies to collegiate ensembles, and applied instruction. The level of impact ensembles and applied instruction have on education is assessed via a questionnaire. The results of the questionnaire indicate that performance is the best way for students to develop musical understanding.\textsuperscript{54}

Martin J. Bergee’s article, \textit{Relationships Among Faculty, Peer, And Self-Evaluations Of Applied Performances}, contains a review of assessment models within undergraduate applied performance instruction. The report is part of a series that seeks to gauge the relative accuracy and consistency of faculty evaluation, peer evaluation and self-evaluation. The analysis of data correlates inter-judge reliability among faculty and peer evaluation. The analysis of the research data also details differences in the ability to self-evaluate among different performance concentrations (voice, percussion, brass etc.) The research method used is specified as a survey of faculty and students among three Midwestern universities. Quantification of performance outcomes is done in consort with the Music Educators National Conference (1958) adjudication forms for voice and

\textsuperscript{52} Gordon, \textit{Possible Impossibilities in Undergraduate Music Education}, 151.  
\textsuperscript{54} Bauer and Berg, “Influences on Instrumental Music Teaching,” 56.
corresponding instruments. The result of this study proved inconclusive. Self-evaluations were significantly lower than faculty evaluation and even lower than peer evaluation. Students’ self-evaluations reflected lower grades than their teacher’s assessment of them. This result highlights a discrepancy between student self-evaluation/assessment and faculty and peer evaluation of student achievement. This article can help in the development of a new tuba curriculum. This research identifies peer assessment as a potentially effective teaching tool. Peer assessment, within guided parameters, can help to simulate professional environments. Job interviews and audition panels are a form of peer/collection assessment. Peer assessment should not be the primary form of assessment but can be incorporated within the framework of applied instruction, specifically in the context of a performer-composer curriculum.

Darrel Walters details assessment models that aid in assessing skill and knowledge with music achievement as a model. The study is a compilation of information about measurement, evaluation, test writing, and underlying statistical tools.\textsuperscript{55} The models put forth are non-restrictive and can be applied to other disciplines. This study can be used as a means of developing assessment models that can correspond with the proposed curriculum. Walters’ study will perhaps be best served as a means of evaluating the future implantation of new curricula.

Lucy Green identifies the associations between music education, teaching strategies, curriculum content, and values with the convention of western style of music education pedagogy.\textsuperscript{56} Green’s concept of curricula development is student centered, and seeks to be culturally relevant. Music education has had relatively little to do with the

\textsuperscript{55} Darrel Walters, \textit{A Concise Guide to Assessing Skill and Knowledge with Music Achievement as a Model} (Chicago: Gia, 2010), iii.
\textsuperscript{56} Green, \textit{How Popular Musicians Learn a Way Ahead for Music Education}, 4.
development of the majority of those musicians who have produced a vast proportion of
the music which the global population listens to, dances to, identifies with and enjoys.\textsuperscript{57}
This stance is undoubtedly controversial, but provokes the discussion of relevance as it
pertains to music listening audiences. I believe the point, made at the expense of
traditional music education, is that there is a perceived distance between the classical
music population (students, teachers, performers, and/or patrons) and the non-classical
music population. While there is overlap between the populations the description of
distinctly different music cultures is the focus. Joyce stipulates that popular music
practices can be used as an additive element within the context of music education. Music
educators should examine the formal and informal learning practices, attitudes, and
values of popular musicians.\textsuperscript{58} Green’s analysis of the primary learning strategies yields
two categories: solitary learning, and group learning. Green details the music education
learning as the result or combination of motor skills and/or knowledge. The assessment of
these skills and knowledge is measured in three ways: performance, composition, and
purposive listening.\textsuperscript{59}

The Assessment of Undergraduate programs in Music (2009) by NASM is an
institutional self-evaluation guide is designed to aid in institutional self-assessment. The
assessment is framed from the perspectives of the student/learner-instructor and
institution-degree program. This report highlights institutional programs of performance,
composition, improvisation, multiculturalism, and their assessment models. NASM
indicates that this is not a substitute assessment tool for accreditation, but a guideline for
music schools.

\textsuperscript{57} Green, \textit{How Popular Musicians Learn a Way Ahead for Music Education}, 5.
\textsuperscript{58} Ibid., 17.
\textsuperscript{59} Ibid., 22.
The specific elements addressed in this report are: the size of the student population, scope of curriculum/degree, performance guidelines, composition and improvisation guidelines and interdisciplinary and intercultural guidelines. The specific performance guidelines ask the following questions: What is the primary purpose of curriculum for all undergraduate performance students vs. specific areas of specialization? What are the performance expectations of all students irrespective of specialization vs. areas of specialization? To what extent do the specific approaches to performance contribute to the development of comprehensive musicianship and abilities to relate to other disciplines? To what extent are various performance evaluations consistent with goals and objectives and the artistic and intellectual climate (all music students and specialization)?

NASM also details specific assessment questions that address composition and improvisation. What is the primary purpose for all students and those of specialization areas? What are the expectations of all students and those of specialization areas? How do composition and improvisation contribute to the development of comprehensive musicianship? What is the ability to relate composition and improvisation to other studies? How does it contribute to artistic and intellectual climate? How is it evaluated?

The multiculturalism and interdisciplinary assessment section features the least amount of questions. These questions however, are not any less important when thinking about inclusive curriculum. What opportunities are available for the study of relationship among music and other disciplines? What opportunities are available for studying

---

multicultural, cross-cultural, and intercultural aspects of music? To what extent are students encouraged or required to avail themselves of these opportunities?\(^{62}\)

The 3\(^{rd}\) International Symposium on Assessment in Music Education at the University of Bremen, Germany took place in 2013. This symposium focused on models of teaching and assessment, and featured keynote presentations from distinguished music education specialists. The inclusion of this material in my study reflects my belief for teachers to continue to seek to improve their methods of instruction. The benefit of the studies presented at the symposium are multiple: research studies within the music field that relate directly to teaching, research studies that take into account variables of population/samples (i.e. country specific, age specific, teaching model specific, etc.), and research that reflects current findings. The participating countries were Austria, Australia, Brazil, China, Germany, Italy, Kenya, Malaysia, Netherlands, New Zealand, Norway, Singapore, South Africa, Taiwan, Turkey, United Kingdom, and the USA (17 states). The symposium’s primary foci were:

1. What are the purposes of assessment in music education across diverse educational systems?
2. What strategies and techniques do practitioners use to assess student music learning across the world’s cultures and continents?
3. Which large-scale assessments of student music learning are effective?
4. In what ways does assessment improve teaching and learning most effectively?
5. What are the shared research priorities in music education?

Maud Hickey’s *Standards, assessment, and creativity in American music education: Intersection of opportunities* (15-35) provides a wealth of information regarding creativity. Hickey details past and recent discussion regarding the inclusion and assessment of creativity within U.S. music education. This discussion is facilitated, in part, with the reference to the National Arts Education Guidelines and other education/arts-education policies. Hickey includes sample creativity assignments and tasks (curricula) and assessment models to be used in music education. While these examples are designed for primary education, adaptations can be made for use in applied instruction.

Hickey recognizes that recent arts education rhetoric focuses on creative thinking and innovation. Most of the assessment efforts in music education do not address that which will likely bring acceptance or academic legitimacy: the creative thinking that makes the arts most different from the basic subjects. Hickey also believes that it is incumbent of educators to foster creativity. Educators must value creativity by demonstrating more creativity in music content, and devising ways to measure such. Hickey holds that creativity allows for the longevity of music as a creative medium. *It is imperative for the arts community to hold the creative component in the highest esteem and interweave it into the curriculum at every twist and turn so that it is not lost. The creative component is the foundation on which art exists today and will continue to exist into the future.*

---

Hickey credits the educational practices of many institutions in the United States but acknowledges room for improvement. Music educators in the U.S. have proven successful at teaching and assessing performance-type skills but there is a need to develop the musical creativity in order to nurture the *creative capital* of future thinkers, business leaders, and musicians. Hickey identifies two areas that can be problematic in education. The problems facing creativity in classrooms/teaching: not enough creative teaching and insufficient assessment tools.

Hickey identifies composition and improvisation as areas that can be used to improve instruction and assessment. Hickey also highlights that composition and improvisation are 2 of the 9 standards outlines in the U.S. National Standards for Arts Education. An assessment model is provided as a guide for teaching and assessing creativity. R. Schirrmacher’s creativity rubric:

*Demonstrates willingness to discover, experiment, and explore with a variety of media.*

*Demonstrates ways of creatively combining media, materials, and artistic junk.*

*Use of detail, decoration, and elaboration*

*Reflects originality, imagination, and creativity*

*Makes individual and personally unique artistic statements*

Hickey closes the presentation with a philosophical statement. We cannot promote what we do in the classroom as enhancing students’ creativity unless we are actively having

---

students compose and improvise, and then highlight, through various forms of assessment, the creativeness of the product.\textsuperscript{70}

\textsuperscript{70}Timothy Brophy, \textit{Music Assessment across Cultures and Continents: The Culture of Shared Practice} (Chicago: GIA Publications, 2013), 32.
Chapter 3

Methodology

The purpose of this study is to develop a new interdisciplinary curriculum for applied tuba. The interdisciplinary curriculum design will ideally include the areas of jazz/popular music, theory and composition, and performance. The specific questions addressed in this study are:

1. What are the common aspects of applied tuba curricula in selected U.S. universities?
2. What are the common aspects of applied jazz instruction in selected U.S. universities?
3. What are the common aspects of applied music theory and composition curricula in selected U.S. universities?
4. Can the most common aspects of the aforementioned curricula be combined into an applied tuba instruction syllabus?

Procedures

Survey research is the primary method of data collection used for this study. Chase H. Harrison’s outline of survey research and survey data is specifically consulted for this study. The online web address is included in the works cited section. Not all aspects of Harrison’s presentation are necessary for this study. Modifications were made accordingly.

Systematic data collection, the acquisition of fifty tuba syllabi, was the initial step in this research method. The syllabi were collected using online means of research. I was
able to locate all of the syllabi for this study via online search engines. This type of data
collection is considered random availability sampling. This does not take into account the
institutions that do not post syllabi online; however, this method serves much like a
public opinion poll does. This method removes a substantial amount of bias from the
process. Instead of focusing on the most popular schools/instructors, or the
schools/instructors of a given region, the random sampling is a litmus test of a myriad of
schools and instructors in the United States.

The syllabi selected reflect university, conservatory, and community college
programs. These programs include the University of North Texas, the University of
Central Florida, Rice University, Arizona State University, Clayton State University,
Northern Arizona University, University of Northern Iowa, University of North Carolina
at Wilmington University of Iowa, Indiana University of Pennsylvania, Jacksonville State
University, University of Memphis, Morehead State University, Stephen F. Austin State
University, Texas A&M University-Commerce, Texas Women’s University, Texas Tech
University, Illinois Valley Community College, Iowa State University, Carnegie Mellon
University, University of Mississippi, UCLA, Humboldt State University, University of
Michigan, University of Florida, Berkeley College of Music, University of Texas
Arlington, University of South Florida, Angelo State University, South Plains College,
Eastern Kentucky University, Central Michigan University, University of Wisconsin Eau
Claire, Bethune Cookman College, McLennan Community College, University of
Missouri Kansas City, Montana, Minnesota-Duluth, Laredo Community College, Florida
International University, Oral Roberts University, West Texas A&M, South Alabama,
Hinds Community College, Vandercook, University of West Florida, Coastal Bend,
Alvin Community College, University of West Georgia, and Tulsa Community College.

Analysis of the selected syllabi should reveal commonalities and dissimilarities in tuba instruction. I believe that these common and uncommon traits of syllabi will reflect the attitudes and behaviors of tuba instructors. A syllabus rubric was generated to evaluate each syllabus. The rubric is meant to be a quantitative tool to deduce qualitative conclusions about tuba instruction. The following aspects of syllabi, whether explicit/implicit or not present, were the primary variables:

- Scales
- Excerpts (Band and/or Orchestral)
- Solo Literature (to include etudes)
- Tuba Choir participation
- Creativity exercises (such as arrangements, compositions, recordings, etc.)
- Written component (i.e. Listening journals, composer reports, concert reports etc.)

This process was repeated for forty jazz and music theory/composition syllabi, twenty each respectively. Variances were made to the jazz and music theory/composition rubric to accommodate latent commonalities and differences. The selected jazz syllabi are from the following programs: University of Northern Iowa (multiple), Belmont University, University of Miami, Florida International University, George Mason University, Castleton State, George Washington University (multiple), Oregon, Richmond College, Towson University, Northern Kentucky University, Moravian (multiple), University of the Arts, San Diego State University, Tulsa Community
College, and University of Central Florida (multiple). The following aspects of jazz syllabi, whether explicit/implicit or not present, were the primary variables:

- Scales/Harmonic fluency
- Song/Tune analysis
- Transcriptions
- Compositions
- Combo participation
- Written component

The process used to analyze jazz syllabi was repeated with composition syllabi. It should be noted that the composition syllabi used reflect traditional and electronic music composition. The syllabi are from the following schools: MIT, Northern Arizona University, University of California-Irvine, New Mexico Tech, University of Central Florida, Angelo State, Florida Atlantic University, Oral Roberts University, Mississippi College, Washington State, Kutztown University of Pennsylvania, City College of San Francisco, Providence University, University of Florida, Northern State, New York University, Furman University, Ball State, and Bellevue. The modifications for the music theory/composition syllabi assessment include:

- Composition
- Analysis
- Written assignments (i.e. papers, tests, quizzes etc.)
- Seminar
- Performance
• Improvisation

Hypothesis

I hypothesize that there are recurring elements of instruction within the sampling of syllabi (tuba, jazz, and composition respectively). I also theorize that there are aspects of instruction that are common in the jazz and composition traditions that are not in the tuba syllabi. I believe that these commonalities should serve as the normative curriculum experience in higher education. I believe that the study of jazz and composition syllabi will provide a wealth of ideas regarding a new performer-composer curriculum for applied tuba.
Chapter 4

Results

Tuba Syllabi

The results of the tuba syllabi assessment prove invaluable. The table below reflects the actual date of the evaluation. Correlations between the data and educational philosophy can be made. The most common aspects of the tuba syllabi used are scales, excerpts, and solo literature. This is true of the conservatories, universities, and community colleges presented in the survey. These three pillars of tuba instruction should be reflected in the development of a new curriculum.

Table 4.1

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scales</td>
<td>35/50 = 70%</td>
</tr>
<tr>
<td>Excerpts</td>
<td>23/50 = 46%</td>
</tr>
<tr>
<td>Solo Lit.</td>
<td>44/50 = 88%</td>
</tr>
<tr>
<td>Tuba Choir</td>
<td>9/50 = 18%</td>
</tr>
<tr>
<td>Creative Writing</td>
<td>6/50 = 12%</td>
</tr>
<tr>
<td>Writing</td>
<td>10/50 = 20%</td>
</tr>
</tbody>
</table>

Of the three most common aspects of tuba curricula, scales and solo literature are the overwhelming common elements. Each of these components is reflected with greater than fifty percent prevalence. The figures that assess the other areas of tuba instruction reveal an apparent truth. Tuba instructors’ syllabi and educational models vary widely when it comes to deciding what a curriculum should possess aside from scales, solos, and excerpts. The results do, however, indicate a strong bias and predilection towards the prominence of solo literature as the primary teaching resource.
Table 4.2

<table>
<thead>
<tr>
<th>School:</th>
<th>Scales</th>
<th>Excerpts</th>
<th>Solos</th>
<th>Tuba Choir</th>
<th>Creative</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNT</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCF</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rice</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASU</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>CSU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IVCC</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>NAU</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNI</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNCW</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOWA</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>IUP</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>JSU</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Memphis</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morehead St.</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>SFA</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAMU-Comm.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TWU</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas Tech</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iowa St.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMU</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>Scales</td>
<td>Excerpts</td>
<td>Solos</td>
<td>Tuba Choir</td>
<td>Creative</td>
<td>Writing</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------</td>
<td>----------</td>
<td>-------</td>
<td>------------</td>
<td>----------</td>
<td>---------</td>
</tr>
<tr>
<td>Ole Miss</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCLA</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humboldt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>UF</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angelo St.</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Berklee</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>South Plains</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UT Arlington</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EKU</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Mich</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UWEC</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>BCC</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McLennan CC</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UMKC</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minn. Dul.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laredo CC</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FIU</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Syllabus Analysis

<table>
<thead>
<tr>
<th>School</th>
<th>Scales</th>
<th>Excerpts</th>
<th>Solos</th>
<th>Tuba Choir</th>
<th>Creative</th>
<th>Writing</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORU</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W TAMU</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S Alabama</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hinds CC</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Vandercook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UWF</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coastal Bend</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alvin CC</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UWG</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulsa CC</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Jazz Syllabi

The results of the jazz syllabi assessment are similar to the tuba syllabus assessment. The table below reflects the actual data. Correlations between the data and educational philosophy can be made. The most common aspects of the jazz syllabi used are scale/harmonic fluency, improvisation and transcriptions. A strong value of scale/harmonic fluency and improvisation is reflected in percentages, regardless of the primary instrument. These components of jazz instruction can be reflected in the development of a new curriculum.

Table 4.3

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scales/Harmony</td>
<td>20/20 = 100%</td>
<td>Improvisation</td>
<td>20/20 = 100%</td>
<td>Transcription</td>
</tr>
<tr>
<td></td>
<td>8/20 = 40%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comp./Arr.</td>
<td>3/20 = 15%</td>
<td>Combo</td>
<td>1/20 = 5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Written</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1/20 = 5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Of the three most common aspects of applied jazz curricula, scales/harmony, improvisation, and transcriptions are the major common elements. Each of these components is reflected with greater than fifty percent prevalence. The figures that assess the other areas of applied jazz instruction reveal a commonality with the previously analyzed tuba syllabi. Jazz instructors’ syllabi and educational models vary widely when it comes to deciding what a curriculum should possess aside from scales/harmony, improvisation, and transcription. The results do, however, indicate that there is a level of flexibility given to instructors that is resolved in individually unique manners; however the given instructor feels is necessary.
### Table 4.4

**Syllabus Analysis**

<table>
<thead>
<tr>
<th>School:</th>
<th>Scale &amp; Harm</th>
<th>Improv</th>
<th>Transcription</th>
<th>Comp/Arr</th>
<th>Combo</th>
<th>Written</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNI (Sax)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Belmont (Fiddle)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U of Miami (trpt)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>FIU (bass)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GMU (trombone)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Castleton St. (pno)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GWU (guitar)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Oregon (sax)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Richmond (trpt)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>GWU (bass)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Towson (trombone)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>NKU (piano)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moravian (guitar)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U of the Arts (sax)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Moravian (trpt)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>SDSU (bass)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tulsa CC (piano)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCF (bass)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNI (piano)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCF (piano)</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Composition/Music Theory Syllabi

The results of the composition syllabi assessment are similar to the tuba and jazz syllabus assessment. The table below reflects the data. Correlations between the data and educational philosophy can be made. The most common aspects of the composition syllabi used are composition, performance, and written assignments. This is true of the conservatories, universities, and community colleges presented in the survey. These three components of composition instruction reflect a prevalence of higher than fifty percent.

Table 4.5

<table>
<thead>
<tr>
<th>Composition</th>
<th>Analysis</th>
<th>Written Assignments</th>
<th>Performance</th>
<th>Seminar Participation</th>
<th>Improve</th>
</tr>
</thead>
<tbody>
<tr>
<td>20/20 = 100%</td>
<td>7/20 = 35%</td>
<td>11/20 = 55%</td>
<td>14/20 = 70%</td>
<td>7/20 = 35%</td>
<td>1/20 = 5%</td>
</tr>
</tbody>
</table>

Composition, performance, and written assignments are the major common elements among the sample syllabi. Each of these components is reflected with greater than fifty percent prevalence. The figures that assess the other areas of composition instruction reveal a commonality share with the previously analyzed tuba and jazz syllabi. Composition instructors’ syllabi and educational models vary widely when it comes to deciding what a curriculum should possess aside from compositions, performances, and written assignments. The results indicate that there is a level of flexibility given to instructors that is resolved in individually unique manners; however the given instructor feels is necessary.
Table 4.6

<table>
<thead>
<tr>
<th>School:</th>
<th>Compostion</th>
<th>Written</th>
<th>Analysis</th>
<th>Performance</th>
<th>Improv</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIT</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>NAU</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UC Irvine</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>NMT</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UCF</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angelo St.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FAU</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arkansas St.</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>ORU</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mississippi</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Wash St.</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kutztown</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCSF</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Providence</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UF</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern St.</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>NYU</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furman</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ball St.</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Bellevue</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>
Large Scale Commonalities

The analysis of the syllabi reveal that each content area (tuba performance, jazz performance, and composition) seems to be situated upon a perceived set of core values. Interestingly, each discipline contains three major areas of emphasis. These values appear at various levels of education: university, conservatory and community college programs. It is also of note that there is more preference given to individual instruction (i.e. the percentages of tuba choir, jazz combo, and composition seminar) versus group learning. Each of these content areas displays an acute lack of continuity in selecting peripheral curricula material that can supplement “the big three.” This occurrence, frequent as it is, indicates that the sample field does believe that their respective “big three” should be supplemented with additional instructional material. There is a lack of consensus on what that material should be.

There is a somewhat definitive repertoire/skill set for each discipline. In the case of tuba instruction it is the canon of solos and excerpt material. For jazz, the repertoire focuses on standards from the American song tradition, iconic jazz compositions, and legendary improvised solos. The composition community expressed in the sample pool is divided between traditional and electronic composition. Both composition communities, however, value the mastery of musical forms employed by the cannon of western classical composers. Some of these forms include sonatas, concerti, string quartets, electronic media and live sound, and unaccompanied works.
Large Scale Differences

The emphasis of communicating knowledge and learning via written assignments is extremely different between the three disciplines. Writing appears to be a point of emphasis for several of the composition syllabi, not in the tuba or jazz. Jazz syllabi appear to be far more comprehensive, in terms of scales and harmonic fluency, than tuba syllabi. Jazz syllabi encourage this fluency via the mastery of major and minor modes, as well as melodic and harmonic tendencies as typified by the genre (i.e. ii-V-I progressions in all major and minor keys, melodic formulae or “licks” etc). The most interesting difference can be observed comparing composition syllabi to jazz and tuba syllabi. A majority of the composition syllabi explicitly state that the even though certain styles and techniques may be studied, cultivation of the individual’s compositional voice is the ultimate aim. This is very different than the rhetoric used in the tuba and jazz syllabi that seeks to recreate masters of the past and present.
Chapter 5

Proposed Curriculum Guide

Art worlds typically have intimate and extensive relations with the worlds from which they try to distinguish themselves.\(^{71}\) For the purposes of this research I focused primarily on the educational matter: syllabi, course manuals etc. An overwhelming majority of tuba performance degrees awarded in United States colleges, conservatories, and universities are restricted to classical study. I believe that the discourse on non-traditional tuba education can be a polarizing topic. My experience playing jazz tuba has earned me labels like “the jazz tuba player” despite my accomplishments in the classical realm. My jazz education experience has been exclusively outside of the traditional tuba instruction model and I believe that I can help contribute substantive pedagogical material to the canon.

Why not just play and teach jazz tuba? A look at the random selected tuba syllabi reflects that the general assumption is that the tuba belongs to the classical genre, although this is not true of Dixieland Jazz. I believe the lack of jazz tuba programs, or jazz being present in traditional tuba models, reflects a specific cultural value system. The perceived threat to conventional tuba curricula could be rooted in attempts to preserve tradition and contain alterity, which results in an over homogenization of the traditional programs as well as the non-traditional. In this case, educational approaches that are not based on orchestral excerpts and solos become situated on the margins of pedagogical discourse. It is within these margins that I aim to create a curriculum.

\(^{71}\) Howard S. Becker, *Art Worlds and Collective Activity* (Berkeley: University of California, 1982), 36.
The proposed curriculum for applied tuba and euphonium seeks to supplement the current pedagogical models in place at many colleges, universities and conservatories in the United States. I have identified music theory instruction as a vehicle to aid in this endeavor. It is not my expectation that applied tuba/euphonium instructors assume an erroneous teaching responsibility. I do believe, however, that the instructor might have the opportunity to enhance his/her instructional method with the addition of a few suggestions. The foundation of this proposed curriculum is a comprehensive knowledge of scales and their applications in the context of various types of music.

The concept of scale proficiency is not one that is necessarily new in higher education. Classical performance and jazz performance programs often administer scale exams. These performance exams are designed to provide students with the opportunity to demonstrate theoretical knowledge of the scales, and relative chords usually via arpeggios, of a given key.

Currently, the most comprehensive tuba/euphonium scale book is the one authored by Milt Stevens and Brian Bowman. This publication spells the major and minor chords, ascending and descending, in bass and tenor clef. The final chapter of the book includes a scale exam designed by Brian Bowman that tests on major, harmonic, and melodic minor scales. I would suggest including: the modes of each major and minor scale, the octatonic scales, the whole-tone scale, major and minor pentatonic scales, the blues scale, as well as the diatonic chords of each given scale. This builds on the foundation provided by Stevens and Bowman and increases the depth of the exercises.

The rationale is that most music can be analyzed via description of the harmonic and melodic language used therein. Nuanced details of music analysis often have affects
on how the music is performed and received. This is true of classical, jazz, popular and world music. It is the hope that studying the various ways music is organized and composed will lead to greater transfer of music theory to music performance. Applied instructors might also consider composition as a means of adjudicating the scalar/modal proficiency of a student.

Composition is often cast as an ambitious ideal within classical music education. However, many of the jazz and creative/popular music programs within the United States require their students to become performer composers. Philosophically, I believe that all performance programs should encourage student compositions. Educationally, the act of creating/composing corresponds with the highest level of Bloom’s taxonomy. Bloom’s table highlights creation as the synthesis of recognition, analysis/differentiation and creation.

I would suggest that the composition component incorporate what I term intuitive and instructive assignments. The parameters of the instructive assignments should be provided by the instructor (i.e. compose a piece that tonicizes c locrian). This type of assignment encourages the student to use their knowledge of scalar chord theory, synthesizing these elements and creating music within restrictions. The intuitive project would ideally be more of an open assignment in which the student can choose the scales and chords used. These two assignments can have variations and modifications as to the style/genre of music, the ensemble, and the length.

The results of the syllabus survey provide clear and strong data concerning the teaching practices of undergraduate applied tuba-euphonium studios in the United States. Scales, solos and excerpts are the most common components found in syllabi. The
standard format of applied tuba instruction incorporates the assessment of student performance as a measure of knowledge and ability. Performance assessment alone does not serve my educational philosophy of a comprehensive and diverse curriculum. It is my opinion that the usually prescribed fare can be enhanced with the inclusion of a composition component. This theory is not necessarily new to education, but it is novel to applied tuba instruction literature.

Bloom’s Taxonomy of cognitive learning details a hierarchy of thinking in the education process. The progression of the order of thinking (lower to higher) is as follows: knowledge (remembering), comprehension (understanding), application (applying), analysis (analyzing), synthesis, and evaluation (creating). An overwhelming majority of the syllabi surveyed are adept in emphasizing the first three steps: knowledge/remembering, comprehension/understanding, and application. I view playing a performance instrument primarily as a demonstration of the application tier. Using Bloom’s framework for curriculum development highlights creating/evaluating as the capstone of the learning process. Musically this is done through formal analysis and/or composition. If evaluation/creating is the highest level of ordered thinking, should we not then model our applied instruction curricula accordingly? Bloom’s highest order can also be served in other ways. For example, altering original parts or learning a piece without the need of an instructor serves as student synthesis.

**Scale Fluency**

There are many published educational resources with emphasis on the major, minor, augmented and diminished modes. Several of these sources also include melodic and harmonic applications of the various modes. My scale fluency suggestion is to include all the modes of each major, minor, octatonic, and whole tone scale. The knowledge and performance of the various scales can be assessed via a scale exam. Scale exams are not uncommon in modern pedagogical models. The inclusion of all scales and their modes expands the working theoretical knowledge of the musician and her/his application of that knowledge via performance.

The ideal tuba scale book should be modeled to help students become familiar with different scales and chords. Major, minor, whole tone, octatonic, blues, and chromatic scales should be presented in each of their modes. Students should be familiar with the various modes of a given key and all of the diatonic chords native to that tonal system. This should be done for all twelve keys. There is no such tuba scale-harmony book to date.

Instructors can use scale knowledge to add relevant composition assignments to their curriculum. This can be done in programs where the primary foci are excerpts and solos through what I am terming the information-intuition practice. A student can be asked to analyze a given excerpt or solo, and its melodic/harmonic content. This exercise builds on the existing knowledge of the excerpt/solo and requires the student to engage in Bloom’s upper level of cognitive thinking: evaluation and creation. Alternatively, the instructor may ask the student to compose a short warm up study that is tailored to the specific melodic, harmonic and technique requirements of the music.
The undergraduate sequence I detail in the following pages serves three functions. The primary benefit of this sequence is a comprehensive approach to scales, featuring all the modes of major and minor scales. Additionally, the scale sequence can be incorporated into a weekly schedule for advanced players (i.e. Sunday-Ionian, Monday-Dorian, etc.). The sequence also includes major pentatonic, minor pentatonic, blues, wholetone, and octatonic scales. The second primary function is that these exercises are designed to be performed and adjudicated individually and collectively. This was motivated by the contingent of syllabi that emphasized either tuba-euphonium ensemble or group warm up participation.

My model encourages linear scale proficiency on the individual level, and provides harmonic and intonation challenges on the group level. For example, if a first semester freshmen, sophomore, junior and senior perform the Beautiful Sound exercises they by default play all the diatonic seventh chords of major and minor key areas as an ensemble.\(^73\) The third function is to provide the undergraduate student with a knowledge foundation, theoretical and practical, that can be drawn from for the senior composition project. This ungraded project is intended to be an open ended assignment in which the student uses any combination of scales and harmonies studied in lessons to compose a solo that will be on their senior recital.

All exercises should be performed in all 12 keys, with a metronome (preferably at 80) and tuner at mezzo forte to reinforce the concepts of playing in time and in tune. Instructors can adjust tempi and dynamics at their discretion according to the ability level of the student. This concept is influenced by *Know Before You Blow: Modes for*\(^\)  

Trombone. This concept can and should be applied to a tuba player’s regular routine to encourage harmonic and scalar fluency. I have applied this modal approach to the Beautiful Sounds exercise from The Brass Gym: A Comprehensive Daily Workout for Brass Players. My version of Beautiful Sounds exhausts the modes of major, natural minor, harmonic minor, and melodic minor. Stretching and breathing exercises should be incorporated in the routine. Instructors and students can find a number of suitable exercise in The Breathing Gym.

Additionally, I have adapted a published mouthpiece warm up routine. This buzzing routine is an adaptation of the Allen Vizzutti warm up and includes minor, augmented and diminished chords. I have been using this routine for over a year. The practice of developing and maintaining an efficient and healthy buzz will enhance tone, intonation, flexibility, and embouchure control. It should be noted however that efficient and healthy form are paramount. That is to say that the process is more important than immediate results. Students should only perform the buzzing exercise to the their individual limits of range and embouchure strength.

The buzzing routine printed is my adaptation of Vizzutti’s warm up. I first developed this routine while working on a cruise ship. The lack of practice space necessitated that I develop some method of warming up without an instrument. I suggest performing this at 80 beats per minute at a mezzo forte dynamic. I suggest performing this exercise at the piano with the mouthpiece in the non-dominant hand of the student.

---

74 Emile De Cosmo, Laura De Cosmo, and Chris Tedesco. Know Before You Blow: Modes for Trombone. (Danvers, MA: Santorella Publications, 2010.)
75 Sam Pilafian and Patrick Sheridan. The Brass Gym: A Comprehensive Daily Workout for Brass Players. (Fort Wayne, IN: Focus on Excellence, 2005.)
For best results, I suggest using a clear plastic mouthpiece or a mouthpiece rim visualizer and performing this in a mirror. This allows the student and teacher the ability to observe the form and structure of the embouchure of the student, the visual of the facial musculature when buzzing/playing. The student should only perform the exercise as low as she/he can comfortably play, gradually increasing range as the muscles strengthen. Beginning players can perform the repeat sections by half valving, with the mouthpiece in the instrument, then playing the notes.
<table>
<thead>
<tr>
<th>1st Semester:</th>
<th>2nd Semester:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Major and minor pentatonic</td>
<td>• Blues scale</td>
</tr>
<tr>
<td>• Major and minor scales</td>
<td>• Major and minor modes (Dorian)</td>
</tr>
<tr>
<td>• Beautiful sounds (major and minor)</td>
<td>• Beautiful Sounds (based on Dorian and 2\textsuperscript{nd} modes of minor)</td>
</tr>
<tr>
<td>3\textsuperscript{rd} Semester:</td>
<td>4\textsuperscript{th} Semester:</td>
</tr>
<tr>
<td>• Major modes (Phrygian)</td>
<td>• Major modes (Lydian)</td>
</tr>
<tr>
<td>• Minor modes (3\textsuperscript{rd} mode)</td>
<td>• Minor modes (4\textsuperscript{th} mode)</td>
</tr>
<tr>
<td>• Beautiful sounds (based on 3\textsuperscript{rd} modes of major and minor)</td>
<td>• Beautiful sounds (based on 4\textsuperscript{th} modes of major and minor)</td>
</tr>
<tr>
<td>5\textsuperscript{th} Semester:</td>
<td>6\textsuperscript{th} Semester:</td>
</tr>
<tr>
<td>• Major modes (Mixolydian)</td>
<td>• Major modes (Aeolian)</td>
</tr>
<tr>
<td>• Minor modes (5\textsuperscript{th} mode)</td>
<td>• Minor modes (6\textsuperscript{th} mode)</td>
</tr>
<tr>
<td>• Beautiful sounds (based on 5\textsuperscript{th} modes of major and minor)</td>
<td>• Beautiful sounds (based on 6\textsuperscript{th} modes of major and minor)</td>
</tr>
<tr>
<td>7\textsuperscript{th} Semester:</td>
<td>8\textsuperscript{th} Semester:</td>
</tr>
<tr>
<td>• Major modes (Locrian)</td>
<td>• Wholetone</td>
</tr>
<tr>
<td>• Minor modes (7\textsuperscript{th} mode)</td>
<td>• Octatonic</td>
</tr>
<tr>
<td>• Beautiful sounds (based on 7\textsuperscript{th} modes of major and minor)</td>
<td>• Composition Project</td>
</tr>
</tbody>
</table>
Musical Example 5.1

**Tuba Warm-Ups**

*Buzz 1st time, Play 2nd time*
Musical Example 5.2a: 1st Semester Major Pentatonic Scale Sequence

Major Pentatonic
(to be practiced with a variety of articulations)
Musical Example 5.2b: 1st Semester Minor Pentatonic Scale Sequence

Minor Pentatonic
(to be practiced with a variety of articulations)
Musical Example 5.3: 1st Semester Major and Minor Scale Sequence

Major and Minor Scales

Tuba

[Musical notation for Major scale, Natural Minor scale, Harmonic Minor scale, and Melodic Minor scale]

Tuba
Musical Example 5.4: 1st Semester Major and Minor Beautiful Sounds

Beautiful Sounds
(1st modes of major and nat/harm/mel minor)

Ionian

Tuba

5 1st mode of natural minor

Tuba

9 1st mode of harmonic minor

Tuba

13 1st mode of melodic minor (without raised 6th)

Tuba

21

Tuba

25

Tuba

29
Musical Example 5.5: 2nd Semester Blues Scales

Blues Scales

Tuba

5

9

13

17

21

25

29
Musical Example 5.6: 2nd Semester Dorian Modes of Major and Minor

Dorian major and minor modes

Tuba

Major

Natural Minor

Harmonic Minor

Melodic Minor
Musical Example 5.7: 2nd Semester Beautiful Sounds (2nd modes of Major and minor)

Beautiful Sounds
(2nd modes of major and nat/harm/mel minor)

Tuba

5 2nd mode of natural minor

Tuba

9 2nd mode of harmonic minor

Tuba

13 2nd mode of melodic minor

Tuba

21

Tuba

25

Tuba

29
Musical example 5.8: 3rd Semester Phrygian Modes of Major and Minor

Phrygian major and minor modes

Tuba Major

Tuba Minor

Tuba Harmonic Minor

Tuba Melodic Minor

Tuba
Musical Example 5.9: 3rd Semester Beautiful Sounds (3rd modes of Major and minor)

Beautiful Sounds
(3rd modes of major and nat/harm/mel minor)

Phrygian
Tuba

3rd mode of natural minor
Tuba

3rd mode of harmonic minor
Tuba

3rd mode of melodic minor
Tuba

Tuba
Musical Example 5.10: 4th Semester Lydian Modes of Major and Minor

Lydian major and minor modes

Tuba

Major

Tuba

Minor

Harmonic Minor

Melodic Minor

Tuba

Tuba

Tuba

Tuba
Musical Example 5.11: 4th Semester Beautiful Sounds (4th modes of Major and minor)

Beautiful Sounds
(4th modes of major and nat/harm/mel minor)

Lydian

4th mode of natural minor

4th mode of harmonic minor

4th mode of melodic minor

Tuba
Mixolydian major and minor modes

Musical 5.12: 5th Semester Mixolydian Modes of Major and Minor

Tuba Major

Tuba Minor

Tuba Harmonic Minor

Tuba Melodic Minor

Tuba
Musical Example 5.13: 5th Semester Beautiful Sounds (5th modes of Major and Minor)

Beautiful Sounds
(5th of major and nat/harm/mel minor)

Mixolydian

5th mode of natural minor

5th mode of harmonic minor

5th mode of melodic minor

Tuba
Musical Example 5.14: 6th Semester Aeolian Modes of Major and Minor

Aeolian Major and Minor Scales

Major

5

Natural Minor

9

Harmonic Minor

13

Melodic Minor

17

Tuba

21

Tuba

25

Tuba

29
Musical Example 5.15: 6th Semester Beautiful Sounds (6th modes of Major and Minor)

Beautiful Sounds
(6th of major and nat/harm/mel minor)

Aeolian
Tuba

6th mode of natural minor
Tuba

6th mode of harmonic minor
Tuba

6th mode of melodic minor
Tuba
Musical Example 5.16: 7th Semester Locrian Modes of Major and Minor

Locrian
Major and Minor Scales

Tuba

Locrian Major and Minor Scales

Tuba

Locrian Natural Minor

Tuba

Locrian Harmonic Minor

Tuba

Locrian Melodic Minor

Tuba
Beautiful Sounds
(7th of major and nat/harm/mel minor)

Locrian

7th mode of natural minor

7th mode of harmonic minor

7th mode of melodic minor
Musical Example 5.18: 8th Semester Whole-Tone and Octatonic Scales

Octatonic and Whole-Tone

Tuba

Octatonic, 0-1

Tuba

5

Tuba

9

Tuba

13

Tuba

17

Tuba

21

Tuba

25

Tuba

29
Bass Lines: Jazz and Popular Music

The harmonic building blocks of many standard jazz and popular music songs is the relationship and progression of the ii, V and I/i chords. Pop music features the occurrence of these chords with the addition of the iv or IV chord, and the vi or VI chord. Applied tuba instructors can assign tasks of composing bass lines to the popular music progressions like those found at http://www.hooktheory.com/theorytab/common-chord-progressions. The construction of bass lines to popular jazz tunes serves the same function.

Constructing bass lines, whether composed or improvised, draws upon the knowledge of harmony and harmonic tendencies as well as scale/modal fluency. Instructors should guide their students to begin with key chord tones. These would be the roots and fifths of chords. Thirds and sevenths can be added once roots and fifths are fluent. I have composed a bass lines routine but encourage students to arrange their own bass line exercise, choosing a different note choice/ordering than the one provided. A satisfactory exercise should progress through all major and minor key areas.

After teaching students about the usual functions of chords and their relationships in popular music and jazz, instructors can assign bass line composition assignments that build on existing knowledge. The bass line examples that follow are presented in increasing difficulty. I have included a sample list of songs of various jazz and popular music styles that can serve as a foundation for instructors to build and add to. I would recommend at least 3 selections per semester. This limited number represents a fraction of the time that is customarily devoted to private instruction and personal practice. This suggestion also creates an inherently generous 4-week learning schedule. During each
four-week interval I would divide bass line instruction according to stylistic genres, with increasing difficulty. This progression of instruction helps the student to build on the harmonic language of a piece (i.e. learning the roots of all the chords first before progressing to roots, thirds, fifths and sevenths) while simultaneously reinforcing stylistic fluency across many genres of music. The parameters of the bass line composition assignments and the transcription should be set to include at least one time through the entire form, or one solo. In most cases, this amounts to a 32 bar song form.

- Week 1: Bass Line assigned (i.e. ballad/rock/Dixie etc.)
- Week 2: Melody
- Week 3: Bass & Melody
- Week 4: Melody, Bass & Improvisation (transcription due)

These components can be included into the fabric of a 50-minute lesson. The additional component of transcription should be assigned during week one and submitted at the end of the tune-unit during week four. Transcription assignments serve the same functions and purposes of traditional ear training dictations, whether harmonic or melodic. Using some time from every lesson enhancing stylistic awareness seems small but it serves as a point of departure for revitalizing instruction and enhancing a cross curricular educational philosophy.
### Table 5.2: Jazz Song Sample List

Sample list of jazz tunes to practice bass lines includes:

- **Dixieland/Blues**
  - When the Saints Go Marching In
  - Basin Street Blues
  - Tin Roof Blues
  - Ain’t Misbehavin

- **Standards**
  - Rhythm Changes
  - A Train
  - Autumn Leaves
  - All the thing You Are

- **Latin**
  - St. Thomas
  - Blues Bossa
  - Recordame
  - Girl From Impanema

- **Funk**
  - Cissy Strut
  - Chameleon
  - Road Island Red
  - Rebop

- **Ballads**
  - Georgia on my Mind
  - My Funny Valentine
  - Round Midnight
  - My One and Only Love

- **Bebop**
  - Billie’s Bounce
  - Donna Lee
  - Anthropology
  - Confirmation

- **Modal**
  - So What
  - Maiden Voyage
  - Footprints
  - Impressions
Musical Example 5.19: Major and Minor ii-V-I (roots)

ii-V major and minor  
just roots

\[ \text{D min} \quad \text{G7} \quad \text{C} \quad \text{B min} \quad \text{E7} \quad \text{A} \]

\[ \text{Tuba} \]

\[ \text{B} b \text{min} \quad \text{E} b \text{7} \quad \text{A} b \quad \text{A} \text{min} \quad \text{D} 7 \quad \text{G} \]

\[ \text{Tuba} \]

\[ \text{F} \text{min} \quad \text{B} b \text{7} \quad \text{E} b \quad \text{F} b \text{min} \quad \text{B} 7 \quad \text{E} \]

\[ \text{Tuba} \]

\[ \text{E} \text{min} \quad \text{A} 7 \quad \text{D} \quad \text{G} \text{min} \quad \text{C} 7 \quad \text{F} \text{min} \]

\[ \text{Tuba} \]

\[ \text{E} b \text{min} \quad \text{A} b 7 \quad \text{D} b \quad \text{A} b \text{min} \quad \text{D} b 7 \quad \text{G} b \]

\[ \text{Tuba} \]

\[ \text{C} \text{min} \quad \text{F} 7 \quad \text{B} b \quad \text{C} b \text{min} \quad \text{F} b 7 \quad \text{B} \]

\[ \text{Tuba} \]

\[ \text{D} \text{min} \quad \text{G} 7 \quad \text{C} \text{min} 7 \quad \text{B} \text{min} \quad \text{E} 7 \quad \text{A} \text{min} 7 \]

\[ \text{Tuba} \]

\[ \text{B} b \text{min} \quad \text{E} b 7 \quad \text{A} b \text{min} 7 \quad \text{A} \text{min} \quad \text{D} 7 \quad \text{G} \text{min} 7 \]
Musical Example 5.20: Major and Minor ii-V-I (root and fifth)

ii-V major and minor
roots and fifths

<table>
<thead>
<tr>
<th>Tuba</th>
<th>D min</th>
<th>G7</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>B min</td>
<td>E7</td>
<td>A</td>
</tr>
<tr>
<td>7</td>
<td>Bb min</td>
<td>E♭7</td>
<td>A♭</td>
</tr>
<tr>
<td>10</td>
<td>A min</td>
<td>D7</td>
<td>G</td>
</tr>
<tr>
<td>13</td>
<td>F min</td>
<td>B♭7</td>
<td>E♭</td>
</tr>
<tr>
<td>16</td>
<td>F♯ min</td>
<td>B7</td>
<td>E</td>
</tr>
<tr>
<td>19</td>
<td>E min</td>
<td>A7</td>
<td>D</td>
</tr>
<tr>
<td>22</td>
<td>G min</td>
<td>C7</td>
<td>F min</td>
</tr>
</tbody>
</table>
Musical Example 5.21: Major and Minor ii-V-I (root, third, and fifth)

ii-V major and minor roots, thirds, and fifths

\[
\begin{align*}
\text{Tuba} & : & \text{D min} & & \text{G7} & & \text{C} \\
\text{Tuba} & : & \text{B min} & & \text{E7} & & \text{A} \\
\text{Tuba} & : & \text{Bb min} & & \text{E57} & & \text{A>7} \\
\text{Tuba} & : & \text{A min} & & \text{D7} & & \text{G} \\
\text{Tuba} & : & \text{F min} & & \text{Bb7} & & \text{E5>7} \\
\text{Tuba} & : & \text{F# min} & & \text{B7} & & \text{E} \\
\text{Tuba} & : & \text{E min} & & \text{A7} & & \text{D} \\
\text{Tuba} & : & \text{G min} & & \text{C7} & & \text{F min}
\end{align*}
\]
Musical Example 5.22: Major and Minor ii-V-I (root, third, fifth, and seventh)

ii-V major and minor
roots, thirds, fifths, and sevenths

Tuba

\[ \text{D min} \] \hspace{1cm} \text{G7} \hspace{1cm} \text{C maj7} \]

Tuba

\[ \text{B min} \] \hspace{1cm} \text{E7} \hspace{1cm} \text{A maj7} \]

Tuba

\[ \text{Bb min} \] \hspace{1cm} \text{Ed7} \hspace{1cm} \text{Ab maj7} \]

Tuba

\[ \text{A min} \] \hspace{1cm} \text{D7} \hspace{1cm} \text{G maj7} \]

Tuba

\[ \text{F min} \] \hspace{1cm} \text{Bb7} \hspace{1cm} \text{Eb maj7} \]

Tuba

\[ \text{Gb min} \] \hspace{1cm} \text{B7} \hspace{1cm} \text{E maj7} \]

Tuba

\[ \text{E min} \] \hspace{1cm} \text{A7} \hspace{1cm} \text{D maj7} \]

Tuba

\[ \text{G min} \] \hspace{1cm} \text{C7} \hspace{1cm} \text{F maj7} \]
General Style Guidelines/ Bass Line Style Guidelines

There is no substitute for listening to a volume of representative music. This is true of all music genres. The more a student is exposed to a particular style and/or composer, the more likely he or she is able to identify distinguishing characteristics. I was not familiar with standard orchestral tuba excerpts, soloists, or solo literature prior to my undergraduate career. I was advised by my teacher to immerse myself as much as possible in this new culture. Students and instructors can use Mark Gridley’s description of jazz styles as an introduction to jazz culture/history, and to identify typical bass functions. Bass lines can be analyzed, composed, and improvised using these guidelines.

The bass line examples that are presented are a product of hours of listening and playing, and are informed by Gridley’s scholarship. Rock and jazz-rock fusion is distinctively different from the previously mentioned styles of bass playing. Rock and funk music typically have: less complexity, less ornamentation, and a more pronounced repetition of bass figures. Afro-Cuban music and Latin Jazz show more extensive repetition of rhythms. This usually entails syncopation and frequent use of the roots and fifths of the chords. The following examples are arranged in a progressive manner. That is to say that the bass lines increase in difficulty as the styles change.

In early New Orleans/Dixieland jazz the tuba, bass sax, or string bass frequently played on only the first and third of every four beats (known as two-beat style). The two-beat example, 5.25, resembles modern interpretations of the older two beat style. The swing era of jazz is recognized as a departure from early jazz for several reasons. The

---

79 Gridley, 343
80 Ibid., 70.
role of the bassist changes from two-beat to playing on every beat, walking style. This style is marked by the quarter shaping of the bass, making frequent use of chord-scale tones. Bassist Walter Page, of the Count Basie Band, contributes that the bass should: provide a supple walking sound, strong articulation, each beat should sound evenly, and the bass’ sound should blend well with the rhythm section.

The bebop era of jazz is marked by enhanced harmonic and melodic material, virtuosity, and agility. Musicians of this era exemplified theoretical and technical proficiency in their compositions and performances. Jimmy Blanton typifies bop bassists with his tone quality, agility, unrelenting drive, and imagination. As bebop switched to hard bop, the bassist was responsible for a continuous harmonic compliment to melodies and improvised solos. The two approaches to bop are combined in example 5.28.

The concept of ballad accompaniment is similar to the fundamentals of walking style bass lines. The approach to ballad style playing can be best described as a compliment to the ballad’s melody. The use of scale-wise voice leading resembles slow, pretty melodies. Example 5.26 highlights the rhythmic tendencies common to ballad playing, and makes use of passing and neighbor tones (diatonic and chromatic). The transcriptions in Example 5.29 and 5.30 reveal the combination of stylistic tendencies used by bassists to construct bass lines.

---

82 Gridley. 123.
83 Gridley. 144
84 Gridley. 207.
85 Gridley. 241.
Musical Example 5.23: Steady Eighths

- Rock/Pop (steady eighths)
  - Root based
  - Rhythmically consistent

**Autumn Leaves**

Rock: Steady Eighths  
Joseph Kosma

```
<table>
<thead>
<tr>
<th>CMIN7</th>
<th>F7</th>
<th>BMAJ7</th>
<th>EMAJ7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>AMIN7b5</td>
<td>D7</td>
<td>GMIN</td>
</tr>
<tr>
<td>9</td>
<td>AMIN7b5</td>
<td>D7</td>
<td>GMIN</td>
</tr>
<tr>
<td>13</td>
<td>CMIN7</td>
<td>F7</td>
<td>BMAJ7</td>
</tr>
<tr>
<td>Tuba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>AMIN7b5</td>
<td>D7</td>
<td>GMIN</td>
</tr>
<tr>
<td>21</td>
<td>AMIN7b5</td>
<td>D7</td>
<td>GMIN</td>
</tr>
</tbody>
</table>
```
Musical Example 5.24: Bossa Nova

- Bossa Nova
  - Root and fifth based
  - Rhythmically consistent
  - Octave displacement is customary

*Autumn Leaves* by Joseph Kosma

- Tuba
  - \( C_{\text{min}}^7 \)  \( F^7 \)  \( B^7_{\text{maj}} \)  \( E^7_{\text{maj}} \)  
  - \( A_{\text{min}}^7 \)  \( D^7 \)  \( G_{\text{min}} \)  
  - \( C_{\text{min}}^7 \)  \( F^7 \)  \( B^7_{\text{maj}} \)  \( E^7_{\text{maj}} \)  
  - \( A_{\text{min}}^7 \)  \( D^7 \)  \( G_{\text{min}} \)  
  - \( A_{\text{min}}^7 \)  \( D^7 \)  \( G_{\text{min}} \)  
  - \( A_{\text{min}}^7 \)  \( D^7 \)  \( G_{\text{min}} \)
Musical Example 5.25: Dixieland/New Orleans Street Beat

- Dixieland/New Orleans Street Beat
  - Triad based
  - Syncopated rhythm
Musical Example 5.26: Ballad Style

- Ballad
  - Inclusion of passing tones (chromatic and diatonic)
  - Not Swung
  - Rhythmically emphasizes beats 1, 3, and 4

Autumn Leaves
Ballad Style
Joseph Kosma

Tuba

5

9

13

17

21
Musical Example 5.27: Walking Bass

AUTUMN LEAVES

JOSEPH KOSMA

Cmin7  F7  Bmaj7  E7maj7

Tuba

Amin7  D7  Gmin

Tuba

Cmin7  F7  Bmaj7  E7maj7

Tuba

Amin7  D7  Gmin

Tuba

Amin7  D7  Gmin

Tuba

Amin7  D7  Gmin

Tuba

Amin7  D7  Gmin

Tuba
Musical Example 5.28: BeBop

- Scalar/modal based
  - Passing tones
  - Neighbor notes
- Contrapuntal

**Autumn Leaves**

_Bebop Eighths_  
Joseph Kosma

Tuba

- C\textsuperscript{min} \textsuperscript{7}  
- F\textsuperscript{7}  
- B\textsuperscript{3} maj\textsuperscript{7}  
- E\textsuperscript{5} maj\textsuperscript{7}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- C\textsuperscript{min} \textsuperscript{7}  
- F\textsuperscript{7}  
- B\textsuperscript{3} maj\textsuperscript{7}  
- E\textsuperscript{5} maj\textsuperscript{7}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba

- A\textsuperscript{min} \textsuperscript{7}\textsuperscript{5}  
- D\textsuperscript{7}  
- G\textsuperscript{min}  

Tuba
Musical Example 5.29: Transcription Eddie Gomez, bass (Bill Evans’ *Autumn Leaves*, 1980)
Musical Example 5.30: Transcription Ron Carter, bass (Miles Davis’ *Live in Berlin*, 1964)
Creating Compositions

Ideally, the bass line composition and improvisation assignments can serve as a gateway to composition. This can be done via instruction or intuitively. Instructively, teachers can assign any mode of any key for a student to compose a melody and/or harmonic progression. The instructor can then provide parameters for the composition: duration of time, style, and/or ensemble size. This can be done using any of the progressions referenced earlier at http://www.hooktheory.com or using standard jazz and popular music standards. This activity serves two functions. The first is to allow the student to synthesize information and demonstrate that knowledge through intentioned composition. The second function is one of a contributive nature as it relates to growing repertoire.

Applied instruction should be taught in conjunction with music theory and musicology. The history and theory of music does not cease to exist once a student enters her or his private instructors studio. In fact, many of my former teachers frequently incorporated relevant aspects of theory and/or musicology to bolster their lesson plans. Composition projects were the most useful tool in understanding the harmonic, melodic, and phrasing decisions of any particular artist or stylistic period. The bass line construction and performance exercises are used as a vehicle to composition. Through these projects, students have hopefully begun to synthesize information in a creative means.
Instructive composition and arranging assignments

• Arranging
  o tuba-euphonium accompaniment for a standard jazz/popular song
  o arrange any classical solo or ensemble work

• Re-harmonization of excerpts/solos and jazz/popular songs
  o Use existing melodies but choose new chords
  o give analytical explanation for chord choices
    ▪ i.e. Autumn Leaves Re-harmonization
    ▪ Re-harmonization analysis

• Re-melodicize excerpts/solos and jazz/popular songs
  o Use existing rhythms but choose new melodic choices
  o Give analytical explanation for melodic choices

• Compose a melody without accompaniment
  o 8, 16, and/or 32 bars
  o use a given mode/modal system
  o not stylistically restrictive

Intuition based composition

• Compose a melody with or without accompaniment
  o Not stylistically restrictive
  o At least 32 measures
Musical Example 5.31: Tuba Setting of Jazz Standard

Georgia On My Mind

Hoagy Carmichael

Tuba

\[ \begin{array}{cccc}
F_{maj}^7 & E_{min}^{75} & A^7 & D_{min}^7 \\
A_{min}^7 & D^7 & G_{min}^7 & C^7 \\
D_{min}^7 & A^7 & D_{min}^7 & B^b_{min}^7 \\
F_{maj}^7 & E_{min}^{75} & A^7 & D_{min}^7 & G_{min}^7 & C^7 \\
A_{min}^7 & D^7 & G_{min}^7 & C^7 \\
A_{min}^7 & D^7 & G_{min}^7 & C^7 \\
A_{min}^7 & D^7 & G_{min}^7 & C^7 \\
A_{min}^7 & D^7 & G_{min}^7 & C^7 \\
\end{array} \]
Musical Example 5.32: Tuba-Euphonium Accompaniment Arrangement of Jazz Standard

GEORGIA ON MY MIND

H. Carmichael
Shuford

Tuba

Georgia on my Mind

H. Carmichael
Shuford
Musical Example 5.33: Tuba Euphonium Arrangement of Non-Jazz/Pop Music

Oh Lord, Hear My Prayer

Moses Hogan
Arr. Immanuel Shuford

Oh Lord, Hear My Prayer

Score

Euphonium 1

Euphonium 2

Tuba

Bass Tuba

5

rit.

a tempo

rit.

m a tempo

rit.

m a tempo

mp

mf
Autumn Leaves

Musical Example 5.34: Re-harmonization of Jazz Standard

Joseph Kosma

Autumn Leaves

Reharmonization

Tuba

Dmin7  Eb7(11)  Bbmaj7  Cmin11

F7

Dmin7  Eb7(11)  Bbmaj7  Cmin11

F7  D7  Gmaj7

Bbmaj7  Amaj7(b5)  Gmin7  C13

F7  G7(11)

Cmin7  F7  Gmin7  C9

F7  Bbmaj7  Eb7  A7

Tuba

F7  G7(11)  C9

Tuba

F7  Bbmaj7  Eb7  A7

Tuba

F7  G7(11)  C9

Tuba

F7  Bbmaj7  Eb7  A7

Tuba
Musical Example 5.35: New Melody to Existing Jazz/Pop Song

**AUTUMN LEAVES**

**New Melody**

Joseph Kosma

**Copyright**

Autumn Leaves

Joseph Kosma

Copyright
Musical Example 5.36: Modal Excerpts

Overture to Die Meistersinger
first 5 measures

Wagner

Tuba

Original in C major (ionian)

Tuba

C dorian

Tuba

C phrygian

Tuba

C lydian

Tuba

C mixolydian

Tuba

C aeolian

Tuba

C locrian
Musical Example 5.37

8 Measure
C Locrian Melody

Immanuel Shuford
Musial Example 5.38

16 Measure Melody
6th mode of F Harmonic Minor

Immanuel Shuford
Musical Example 5.39: 32 Measure Intuitive Composition

Echoes

1. Shuffle ("Our Love")

"Doo Wop" Shuffle $q = 144$

Copyright Immanuel Shuford 2015
Why does this matter?

The curriculum I am proposing focuses on the application of musical knowledge. It is a proposed philosophy that supports interdisciplinary studies. This interdisciplinary approach also provides additional pedagogical material that has been held as traditional in the composition and jazz areas respectively. My philosophy acknowledges the vastness that is music: a multiplicity of styles, various genres, and diverse skills sets unique to each. This position does not privilege one culture or tradition over another, but instead seeks to regard the cultural landscape of music as more than classical. The benefit of added teaching material increases the opportunities to evaluate student learning and teaching effectiveness.

This curriculum approach also emphasizes culturally inclusive music literacy. The act of inclusion promotes diverse learning environments. These environments have the potential to reach a wider, and potentially more diverse, group of students. The term diverse is used in this context as an acknowledgement that members of western dominant society maintain the majority of both performing and teaching tuba positions. This observation can also be made in the student populations of touted universities and conservatories. There is a legitimate danger in limiting the target student/teacher population to a specific class. There are opportunities for emotionally and culturally charged interactions among teachers and students that do not necessarily reflect educational or musical discourse.

Music is often mentioned as a universal medium of communication however the performing constituency is usually far more homogenous. This begs philosophical questions as it relates to education. Is the world of tuba education intentionally exclusive
in terms of student populations? If so, what are the researched based opinions regarding developing and maintaining such an educational environment? When teachers encounter students with different musical values and goals how do they address that via instruction? How are teachers addressing the increased diversity of skill sets that are being requested of certain auditioning and employing agencies? Do teachers regard non-traditional performance opportunities as inferior? Is tuba education striving for innovative and progressive teaching and performing, or simply the maintenance of the status quo?

Departures from traditional tuba instruction should not be interpreted as acts of disrespect. I am a product of the traditional instruction pedagogy. However, adherence to a tradition that is culturally informed and biased can be disrespectful to the various cultures of potential (and current) students and educators. This process has the potential to create tension inside music schools and private teaching studios. It also speaks to greater socio-political issues in communities of non-dominant western culture populations. Systematic exclusionary practices, whether intentional or not, reinforce hegemonic attitudes regarding diasporic cultures.

My point of emphasis is the learning process, and the increase in knowledge of students. I want to help cultivate hybrid tuba players that are well versed in a variety of styles. I arrived at my diverse skill set as a result of self-directed curiosity that led to independent study, and a result I have been able to take advantage of opportunities (teaching and performance related) that not all tuba players can. I am aware, however, that some institutions are run more like for-profit businesses. These institutions value the products of students and teachers over their knowledge bases. I believe that this curriculum approach adds strength to the degree, which helps to strengthen the products
and representations of music schools and private studios. I am convinced that the benefits of an enriched education are more important than preserving any singular musical tradition.
Works Cited


http://psr.iq.harvard.edu/files/psr/files/HowtoFrameandExplain_0.pdf?m=1357530492.


Lindsay, Gary. *Jazz Arranging Techniques: From Quartet to Big Band*. Miami, FL: Staff Art, 2005.


**Tuba Syllabi Sources**

Griffin, David C. “Applied Brass.”


Morse, Edward. “Applied Trombone/Euphonium/Tuba Syllabus.”

Knox, Craig. “Tuba Literature and Repertoire Syllabus.”
http://music.cmu.edu/media/W1siZiIsIjIwMTMvMDgvMTgyMjJfMTlfMzlhMjcwX01hamb9yX1N0dWRpb19UdWJhX0tub3gucGRmIl1d/Major_Studio_Tuba-Knox.pdf?sha=c3a57029. (Accessed April 4, 2016).
Sisk, Robin. “Applied Tuba and Euphonium.”

Swoboda, Deanna. “Tuba/Euphonium Syllabus.”

Groover, Bert. “Applied Tuba.”

Switzer, Linda. “Applied Tuba.”
http://www.coastalbend.edu/uploadedFiles/CBC/Content/Programs_of_Study/Academic/Fine_Arts/Music/RevMUSIC

Willett, James. “Applied Tuba/Euphonium.”
pdf&usg=AFQjCNEyTSnxCZPI1Qh0cUBKZZokYQCOmg&sig2=6KleNYspZ6UB4B6Pvmacyg. (Accessed April 4, 2016).

Bertolet, Jay. “Applied Tuba/Euphonium.”
u.edu/cwp/wp-content/uploads/sites/7/2013/08/principal-applied-tuba-mvb-1315-
syllabus.pdf&usg=AFQjCNHNbMgF2e1i1DPar7AgnkwbDU7J9A&sig2=NdZlgyBahIneYE4S8pQHxg. (Accessed April 4, 2016).

Jenkins, James E. “Tuba/Euphonium Syllabus.”
vA5AQFggcMAA&url=http://legacy.arts.ufl.edu/music/trombone/Resources_files/Tuba%20Syllabus%20UF%20Fall%202009.pdf&usg=AFQjCNGchtdocs467gpl80iBZ6JMMBcL8lig&sig2=EvHUoUVn4ro3oe9bB3zAAw. (Accessed April 4, 2016).


Sande, Kevin. “Applied Tuba/Euphonium.”


Eaton, Daniel. “Applied Tuba Study.”

Stein, Thomas. “Applied Tuba/Euphonium.”

Kirby, Benedict. “Applied Tuba Study.”


Little, Donald. “Applied Tuba.”

Funderburk, Jeffrey. “Tuba/Euphonium Syllabus.”

Everett, Micah. “Low Brass Syllabus.”


Salas, J.D. “Tuba/Euphonium Syllabus.”

Jones, Ed. “Applied Tuba Syllabus.”


Young, Michael. “Applied Low brass Syllabus.” https://docs.google.com/viewer?a=v&pid=sites&srcid=dmFuZGVyY29vay5LZH188dmNtLXN5bGxhYml8Z3g6NDcxOTMyNDg5YjU1MWM3Ng. (Accessed April 4, 2016).


**Jazz Syllabi Sources**


Drexler, Richard. “Jazz Bass.”


Ousley, Jamie. “Jazz Bass.”

Zuniga, Rodolfo. “Jazz Drums.”

Waters, Harry. “Syllabus with Curriculum Benchmarks.”

Burney, Herman. “Jazz Bass.”

Albertson, John. “Jazz Guitar.”

Smyser, Pete. “Guitar and Jazz Guitar.”

Gaumer, Alan. “Jazz Trumpet Syllabus.”

Merz, Christopher. “Jazz Sax Syllabus.”

Washut, Robert. “Jazz Piano Syllabus.”


Davison, Michael. “Jazz Trumpet Syllabus.”


Koppeis, Joshua. “Jazz Trombone Syllabus.”

Barham, Phil. “Jazz Sax.”

Sager, David. “Jazz/Commercial Trombone Syllabus.”

Curtis, Carl B. “Jazz Piano.”
https://bb.tulsacc.edu/bbcswebdav/institution/Syllabus/archives/201510/Southeast/Perfor
Danielsson, Per. “Jazz Piano.”

Linch, Brian. “Jazz Trumpet Syllabus.” http://brianlynchjazz.com/2013/08/syllabus-for-

http://www.uarts.edu/sites/default/files/downloadable-

Music Composition/Theory Syllabi Sources
Emmons, Stephen. “Composition Syllabus.”

Crist, Timothy. “Applied Composition Syllabus.”

Kothman, Keith. “Music Composition Syllabus.”
http://teachingmusic.keithkothman.com/wp-

Cobb, Brian. “Music Composition Applied.”
https://www.bellevuecollege.edu/artshum/materials/music/Cobb/winter2010/196/music19

Anderson, Thad. “Music Composition Syllabus.”

Mauleon-Santana, Rebeca. “Composition Syllabus.”

Wilt, Kevin. “Applied Composition Syllabus.”
=8&ved=0ahUKEwjXqPR7PXLAhVCQiYKHeZqBYkQFggcMAA&url=https://www.fau.edu/academic/registrar/UUPCinfo/UUPCFeb14-
14/MUC3231syl.doc&usg=AFQjCNEZVZbmPznStmiCsbjAU9LkJLPfOw&sig2=95L9
y2CeijnFihQlQN-MEw. (Accessed April 4, 2016).

Koppelman, Daniel. “Music Composition Syllabus.”

Metclaf, John. “Music Composition and Arranging Syllabus.”


Knupp, Robert. “Music Composition Syllabus.”

Hoffman, Elizabeth and Jamie Oliver La Rosa. “Music Composition Syllabus Techniques.”

Rumery, Kenneth R. “Music Composition Syllabus.”

Wieland, William. “Music Composition Syllabus.”

Hatley, Jerry. “Music Composition Syllabus.”

Sunabacka, Karen. “Music Composition and Arranging Syllabus.”

Dobrian, Christopher. UC Irvine “Music Composition Syllabus.”