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**A Class Piano Course of Study for Music Industry Majors Based on  
Popular Music and Jazz**

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**A Class Piano Course of Study for Music Industry Majors Based on  
Popular Music and Jazz**

by

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## **Dedication**

This work is dedicated to the legacy of Charlie Banacos, the “Yoda” of jazz education, who lives on in my playing, my teaching, and my heart, along with the countless other lives he touched. And this work is dedicated to my wife and two sons. Through seven years you have endured a sometimes absent and often exhausted partner and Daddy. I hope that the fruits of this work demonstrate that your support was worth it, our eye-popping debt is worth it, and that persevering to the end goal of a major project is worth it. I love each of you dearly, always, with all my heart.

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# **A Class Piano Course of Study for Music Industry Majors Based on Popular Music and Jazz**

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Tens of thousands of music students enroll in group piano classes each year in colleges and conservatories in the United States. Degree programs related to Music Industry are attracting increasingly diverse student populations and in turn are requiring curricular and instructional modifications that better accommodate the needs of these students. The basis of this dissertation is the development of a series of contemporary class piano workbooks that focus on contemporary popular music and jazz in ways that optimize student learning, combining wide-ranging repertoire with assignments that encourage independent application of knowledge and skills. The workbooks illuminate how the piano is used in professional performance and recording; develop skills that can translate directly into professional music settings; and afford students opportunities to understand, learn, and play music that friends, family, and students themselves know and enjoy.

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## Definition of Terms

**Class Piano:** The term “class piano” represents a classroom scenario in which multiple students study music on the piano under the guidance of one teacher. The term is used synonymously in related literature with “piano class,” “keyboard class,” and “group piano.” The terms “piano lab” and “keyboard lab” generally refer to the physical space of the classroom, but have also been used to signify the concept of “class piano.”

**Grand Staff:** Piano music is commonly notated on the “grand staff,” connecting both the treble and bass clefs. This allows for the left hand and right hand notes to be represented simultaneously but in separate physical spaces.

**Groove:** The term “groove” refers to the rhythm of a given passage or piece—for example, “Let’s play in a half-time funk groove.” The term “groove” is also commonly used as a qualitative descriptor of the rhythm character of a passage or piece—for example, “That beat really grooves.”

**Harmony:** The term “harmony” represents the musical effects produced by combinations of notes and their relationship to both one another and to the tonality, or key, of the passage or piece.

**Left Hand and Right Hand:** The workbooks herein refer to the pianist’s left hand with the abbreviation “LH,” and the right hand with “RH.”

**Realizations of Figured Bass:** Figured bass is a symbol system originally used in the Baroque era of music (generally considered to encompass the 17<sup>th</sup> century through the middle half of the 18<sup>th</sup> century). The numerical symbols in figured bass notation represent the intervallic relationship (i.e. distance) between the lowest note (i.e. the “bass note”) and the other notes of the chord. To “realize figured bass” is to create an appropriate harmonic accompaniment from figured bass symbols.

**Voicings:** Chords can be played in a variety of formations, or shapes. Each variation can be referred to as a “chord voicing,” or simply, a “voicing.”

## Preface

My first experiences teaching class piano for college students were at The University of Texas at Austin (UT Austin), where I taught class piano for non-music majors throughout my graduate teaching assistantship. After my fourth year at Texas, I was hired by the University of Illinois at Chicago (UIC) to teach four sections of class piano for music majors—two first-year, and two second-year classes per semester. The following summer, I accepted a position at the University of Colorado Denver (CU Denver) as the head of their piano program, where I continue to teach multiple sections of class piano (including first- and second-year and non-majors) and oversee eight piano faculty teaching 16 sections of class piano; at CU Denver I also teach private piano lessons and the Piano Trio Ensemble. My experiences over the past six years have led me to question the efficacy of what seems to be typical class piano pedagogy for non-traditional music students.

An increasing number of colleges are embracing Music Industry Studies, including degree programs in Music Business, Recording Arts, Singer-Songwriter, Electronic Music, and Popular Music. Over 50 colleges now offer some version of a Music Industry studies degree, and most of them require class piano. Urban campuses, with or without Music Industry Studies degrees, often serve students with non-traditional music backgrounds and career ambitions. This changing student landscape has and will

continue to alter the composition of class piano populations and increase the challenges of teaching piano classes effectively.

My experience and studies in the field of music education, together with my extensive background in music performance, have inspired me to apply known principles of effective music teaching and human learning to craft a contemporary curriculum for class piano that aims to meet the needs of non-traditional class piano populations and that focuses on jazz and popular music.

It's a fascinating time in the United States, a time of substantial cultural reframing and contention. The study of the piano could well be a case study for this rethinking of what it means to be an American with an education. (Elissa Milne, 2012)

### **WHAT IS THE POINT OF CLASS PIANO?**

Some teachers and students might argue that the point is self-evident in that class piano courses are intended to develop keyboard competencies. Yet, after one year of class piano, many students are unable to demonstrate the kinds of keyboard skills that they value. On my first day of teaching the second-year class piano section at UIC, I asked students to play a song for me, anything they had learned in the first-year class. The initial reaction to my question was stunned silence, and after some prodding, only 2 of the 15 students played a song from beginning to end. One of the two actually played “the knuckle song” on the black keys.

I experienced much the same story the following year with my students at CU Denver. Some students could play one piece from the book they had used in the previous

year, or something they had attempted to learn from a YouTube tutorial. There were a few songwriters who could play simple songs, and a few students who had taken private piano lessons who could perform a full piece from beginning to end. But the majority of the class was unable to play a piece that was meaningful to them.

At UIC and CU Denver, almost all the second-year students could play several scales and play a I-V<sup>7</sup>-I progression in C with their left hands, but there was a disconnect between the repertoire that students wanted to play and the technical exercises that had dominated their piano study.

What was the point of the more than 60 classes these students had attended if they were largely unable to produce any satisfying music on the instrument? The students had been taught to play from method books that cover fundamental piano skills quite apart from authentic performance contexts. They had not been taught to play contemporary popular music. They primarily performed somewhat contrived pieces and exercises that demonstrated specific techniques, with little or no emphasis on repertoire that students would want to develop, retain, and perform for others.

Almost any method book available today can be used to develop a foundation of essential piano skills, but because there are few curricular resources that provide a contemporary approach to piano class instruction that is focused on jazz and popular music (and perhaps because copyright laws present impediments to providing popular music to students), making class piano instruction culturally relevant and intrinsically meaningful for students is a challenge.

Readers should be aware that the workbooks herein contain numerous copyrighted materials. I am in the process of securing the proper licensing for commercial use. I currently print and use these workbooks in my classes at CU Denver for purely educational purposes. Any reprinting and reuse of the musical examples is not advised.

### **VARIABILITY IN STUDENT POPULATIONS**

My non-music major classes at UT Austin were representative of the wide array of students who enroll in class piano. Some students had studied piano for years, even participated in competitions as children; others had played other instruments or had sung in choirs; still others had never touched an instrument nor had they ever imagined themselves studying music formally. Planning and teaching a performance-based course with such a wide variety of students enrolled was extremely challenging for me as a new teacher. What was easy for one student was nearly impossible for another. One student's essential repetitions induced mind-numbing boredom for another. One student's inspiring challenge elicited overwhelming discouragement for another.

My classes at UIC were surprisingly similar. All my students at UIC were music majors who had had some level of experience and a sincere ambition related to music. Yet the variations in experience and aptitude were large. One student was a guitarist-singer-songwriter with almost no background in piano; another had taken classical piano lessons as a child and demonstrated good technique but had no knowledge of music

theory; another was a 30-year-old jazz saxophonist who had a storehouse of music theory knowledge but struggled with fundamental piano technique. And so on and so on.

At CU Denver, populations in class piano are diverse as well. This is largely due to the four-pronged focus of our Music and Entertainment Industry Studies department, which includes Recording Arts, Music Business, Performance, and Singer-Songwriter majors. All majors except for piano performance are required to enroll in class piano. Any given Piano I class may include students who have barely touched an instrument and aspire to a career in artist management, students who work in recording studios and intuitively use miniature keyboards to create electronic music tracks, students who study jazz guitar and have solid theory knowledge but little motivation to develop piano skills, and students who are aspiring singer-songwriters with strong motivation to develop piano skills. The wide disparities among students' personal goals, tastes, and levels of motivation and experience make teaching piano to groups of students in organized classes especially challenging.

One faculty member (whose anonymity I am maintaining in this document) with 16 years teaching experience at CU Denver described the piano classes for me in an email in the Spring of 2013:

I can tell you without hesitation that the only phrase to describe it is “highly unpredictable.” You may have a surprisingly fast-moving class or you may find you have the most remedial class you have ever experienced. You just never know what you will get.

Last semester's Piano 1 vs. this semester's Piano 1 is a prime example. Last semester 7 out of the 12 students came in already playing (rock piano, chords, could read or figure out both clefs etc.), 4 of the other 5 moved along pretty quickly to catch up. I was able to cover the expected outcomes that I was

given for Piano 1, and even go a little farther [sic]. Nice. This semester—on the other hand—only one person had ever seen bass clef and only two guys knew where to find middle C. 6 of the 11 this year had no idea how to find notes on the keyboard, 3 didn't know what a flat or sharp did. Only the drummer could play an accurate rhythm. No one could make a chord even after the second explanation. It took 3 explanations before they got it. One kid even tried to play a scale with his hand palm-up--using the back of his fingers. (Personal communication, April 11, 2013)

Instructors faced with teaching situations this diverse and unpredictable may not find a methodology or book that can suitably address all students' backgrounds and professional goals. Impressive teachers like the individual quoted here employ all available resources to accomplish meaningful goals with the students they are charged to teach.

So I did what I always do: I dug in deeply, brought in supplemental material, scheduled individual meetings, posted recordings of the songs on Blackboard, did duets of the sight-reading book through the headphones (they love that), pointed to YouTube videos for them to watch, demonstrated every technique that I explained and of course spent tons of time going from piano to piano making corrections. We're making progress in there, but it is hard won and slow-going this semester. (Personal communication, April 11, 2013)

Although most students in class piano do not aspire to become performing pianists, piano study is invariably focused on the development of skill and the application of knowledge on the instrument. Which skills and repertoire represent the most relevant goals for the musical lives of non-career piano students? And how can a teacher effectively facilitate skill development and knowledge application for 15 or more diverse students simultaneously?

The music industry is changing, college music student populations are changing, and curricula must change as well. Students deserve to be taught content that is meaningful to their musical lives, whether in large lectures, private lessons, or electronic piano labs. My goal in this document is to present a curriculum for piano study that is well-suited to the career goals of aspiring 21<sup>st</sup>-century musicians, providing students with essential skills that will contribute to their professional lives in music.

# **Chapter One:**

## **Embracing the Music Industry and Popular Music**

### **HISTORICAL CONTEXT**

Since the 1967 Tanglewood Symposium, music educators in the United States have been publicly committed to including diverse genres of music, including popular music and jazz, in school music curricula. The Tanglewood Symposium was both a reflection of the United States' social movements of the 1960s—including school reform, civil rights, and the dawning of a new age of technology—and a refutation of the recommendations of the Yale Seminar of 1963, at which musicologists, performers, and composers gave recommendations for improvements to music education without the input of music educators. The Tanglewood Symposium included music educators, business and industry leaders, and government representatives, as well as philosophers, scientists, theologians, social scientists, and various professional musicians. (Mark, 1999)

The Tanglewood Declaration asserted:

Educators must accept the responsibility for developing opportunities which meet man's individual needs and the needs of a society plagued by the consequences of changing values, alienation, hostility between generations, racial and international tensions, and the challenges of a new leisure. . . . Music of all periods, styles, forms, and cultures belongs in the curriculum. The musical repertory should be expanded to involve music of our time in its rich variety, including currently popular teenage music. . . . Greater emphasis should be placed on helping the individual student to fulfill his needs, goals and potentials. (Choate [Ed.], 1968, p. 139)

These statements set the stage for a new and ongoing examination of how music education can meet the needs of a diverse student body. Following the Tanglewood Symposium, the Music Educators National Conference (MENC) initiated its own "Goals and Objectives Project," with a director, a steering committee, and eighteen

subcommittees. (MENC is now NAFME—the National Association for Music Education.) The ripples of the work undertaken by these committees continue to influence the direction of music education today. Priority objectives included developing programs “directed toward the needs of citizens in a pluralist society,” “that correlate performing, creating, and listening to music and encompass a diversity of musical behaviors,” programs that teach “music of all periods, styles, forms and cultures,” and that identify “musical behaviors relevant to the needs of their students” (Mark, 1999). A participant at the Tanglewood Symposium, David McAllester, also articulated the argument for the power of relevance inherent in the teaching of popular music: “An analysis of rhythm, cadence, fugue, or variation, when made with music that our students instantly respond to, ensures that it is an analysis they will be interested in and will remember” (McAllester, 1968, pp. 97-98).

In the decades following Tanglewood, music educators worked to keep music education alive in public schools as the field faced budget cuts. Nationally, as curricular priorities shifted to science, technology, engineering, and math (the so-called STEM subjects), music educators issued a variety of publications and declarations in order to influence educational policies to include and strengthen the arts. In 1974, the National Commission on Instruction published the first of two editions of *The School Music Program: Description and Standards*, which became a widely used tool for music education advocates. In 1988, MENC and the American Council for the Arts collaborated to form the National Coalition for Education in the Arts, which “successfully advocated for the inclusion of arts education in the *Goals 2000: Educate America Act* (Public Law 103-227) of 1994.” In response to the mandate of the *Goals 2000 Act*, MENC created a new set of “National Standards for Arts Education” (Mark, 1999; *National Standards*, 1994).

In an attempt to update the vision for music education, honoring the legacy of the

Tanglewood Symposium, June Hinckley, the president of MENC, together with a variety of influential music educators, designed the Housewright Symposium on the Future of Music Education. In 1999, committee members authored papers that addressed fundamental questions for the field such as “Why Do Humans Value Music,” “Why Study Music,” “How Can All People Continue To Be Involved In Meaningful Music Participation,” and “How Will Societal and Technological Changes Affect The Teaching Of Music?” Then, at the Symposium itself, a variety of professionals from related fields (e.g., Warrick Carter, director of Disney Entertainment Arts, and Richard Bell, executive director of Young Audiences) presented responses to those papers.

The resulting discussions culminated in the Housewright Declaration, articulating 12 agreements to guide the development of music education. Among these was, “All music has a place in the curriculum. Not only does the Western art tradition need to be preserved and disseminated, music educators also need to be aware of other music that people experience and be able to integrate it into the classroom music instruction” (“Vision 2020,” 1999). Participants in the Housewright Symposium articulated a vision for music education that includes teaching contemporary and popular styles of music. In particular, participants argued for an increasingly learner-centered pedagogy. For example, Yarbrough (1999) wrote, “. . .we must become accountable for making music an important part of every person’s life. We should maximize our efforts to involve all people in our communities in meaningful, functional music listening and performing” (p. 7). Rather than “fighting to save the same approaches and content,” Yarbrough said, “this approach to accountability will involve. . .studying the preferences, experiences, and needs of the communities we serve” (Yarbrough, 1999, p. 7). The echoes of Tanglewood are loud and clear throughout the publications from the Housewright Symposium. And since then, music educators in the U.S. have made more organized strides toward incorporating popular music into curricula.

In 2002, MENC published *The Guide to Teaching with Popular Music*. Lesson plans were designed to meet the National Standards for Music Education. The Music Teachers National Association (MTNA) now has a Pop/Jazz track at their annual conference. At the 2013 MTNA conference, for example, Pedagogy Saturday featured a full slate of presentations on popular and jazz piano teaching (Pedagogy Saturday, 2012). After the conference, piano teacher and blogger Elissa Milne (2013), described her experience at the 2013 MTNA Conference as “being in the middle of a tsunami of professional change: all the presenters were saying ‘you don’t have to do things the way you’ve always done them’ . . .”

### **ARGUING FOR AND AGAINST POPULAR MUSIC EDUCATION**

Although there have been many scholarly accounts of the positive effects of curricular updates and experiments using popular music (e.g., Allsup, 2003; Dunbar-Hall & Wemyss, 2000; Isbell, 2007; Kuzmich, 1991; MacCluskey, 1979; O’Brien, 1982; Ponick, 2000; Seifried, 2006), debate has continued about the role of popular music in formal music education. In the United States, more so than in the United Kingdom, Australia, or Scandinavia, the debate still centers around the legitimacy of teaching popular music (Mantie, 2013). Some teachers have remained unconvinced of the value of teaching popular music; some do not want to spend time learning how to teach a new style; and some have held negative attitudes toward popular music (Cutietta, 1991, 2007; Fowler, 1970; MacCluskey, 1979; Springer & Gooding, 2013).

Robert Cutietta, the dean of the University of Southern California’s Thornton School of Music, and a Housewright committee member, has been arguing the case for legitimizing the study of popular music for more than two decades. In a 1991 article, Cutietta wrote:

We, as a profession, are wasting a great deal of time arguing whether pop music is ‘as good’ musically as other musical forms. In any such debate, pop music will

always lose. This is not because it isn't as good as other kinds of music, but because the criteria for judging were established by those involved in other types of music in order to judge those other types of music (p. 26).

Musicologist Lucy Green and music educator Robert Woody have both voiced concerns about the authentic presentation of popular music. “Although there is new content in the music classroom, the teaching strategies mitigate against its authenticity. The musics in that sense exist inside the classroom as shadows of their ‘real’ form” (Green, 2005, p. 89). Woody (2007) suggests that “popular music may best be thought of as music of another culture” (p. 33). It is inappropriate, Woody says, for teachers to assess popular music by the same value system as the one they apply to Western art music traditions.

The prioritization of Western art music within educational institutions, from schools to universities, is being challenged, and the growing incorporation of popular music into educational programs is indicative of how educators are attempting to address the diverse ways in which individuals experience and engage with music in their everyday lives (Leonard, Strachan, Green, and Levy, 2003, p. 312).

Woody (2007) asserts that the authentic process of learning popular music “provides greater student autonomy, opportunity for individualized learning through creativity and personal expression, group support, and social benefits. This rich process can produce high student motivation, which in turn increases the likelihood that learning will continue and endure” (p. 35). Campbell and Hebert (2000) refute common arguments against the use of popular music and conclude that “popular music may be among the most powerful discourses available to students as a means by which to construct personal identity and interpret social experience” (p. 19).

During the 1990s, this debate over the legitimacy of popular music in academia was raging in the Back Bay—the cultural and academic epicenter of Boston. Within a few square miles, New England Conservatory, Boston Conservatory, Berklee College of Music, Northeastern University, Boston University, and others coexist with venues such

as Symphony Hall, Jordan Hall, and the Berklee Performance Center. Berklee's motto, "nothing conservatory about it," raised eyebrows when I was a student there in the late 1990s (Small, 2014). In 2006, Berklee's publicity materials were revised to include a mature mission statement that reads: "Founded on jazz and popular music rooted in the African cultural diaspora, our comprehensive curriculum is distinctly contemporary in its content and approach, and embraces the principal musical movements of our time" (Berklee College of Music Mission Brochure, 2014). This statement continues to highlight the difference between a "distinctly contemporary" curriculum and other schools' more traditional curricular models. Berklee's attendance has grown from approximately 3,000 in 1999 to 4,402 in 2014 (Berklee College of Music Facts and Statistics, 2014). And the growth of popular music and music industry studies, including recording arts and music business programs, has not been limited to Berklee.

#### **CLASS PIANO REQUIREMENTS IN MUSIC DEGREES RELATED TO MUSIC INDUSTRY AND POPULAR MUSIC**

In preparing this document, I have examined dozens of state university and private college programs, narrowing my searches to include only programs that have substantial curricular opportunities in music business, live sound or studio engineering, and songwriting or popular music studies. These fields are distinct from more traditional areas of study such as pedagogy, performance, composition, and jazz.

The organization of college music school programs varies widely. There are traditional music programs that have expanded to include music business, like those at Arizona State University and Colorado State University; there are programs that include both business and some variation on recording arts, like those at Drexel University, Indiana University, Johns Hopkins University, Loyola University New Orleans, Middle Tennessee State University, New York University, University of Louisiana at Lafayette, and The University of Texas at Austin (UT Austin); there are programs that have

dedicated immense resources to build significant industry-related programs alongside their more traditional counterparts, like those at Belmont University, the University of Miami, and the University of Southern California (USC); and there are programs dedicated entirely to music industry fields and contemporary music, like those at the Berklee College of Music, CU Denver's Music and Entertainment Industry Studies department, and McNally Smith College of Music. Beyond these examples are a handful of music industry programs that have very limited music curriculum requirements, such as American University, Full Sail University, the International Academy of Design and Technology, and the Conservatory of Recording Arts & Sciences.

I gathered information from websites of universities and personal correspondences with faculty and found many variations among curricular requirements, particularly in the area of class piano. There seems to be little unanimity with regard to curriculum content for students enrolled in non-traditional music degree programs.

For instance, some of the programs I reviewed have no class piano requirements. This appears to be one approach for music business programs that are geared more toward liberal arts and entrepreneurship or management than toward music. Arizona State University, for example, requires no class piano for students in the Arts Entrepreneurship program, but requires four semesters of traditional class piano, or equivalent proficiency, for all B.A. in Music degrees. Similarly, Belmont University requires no class piano for students in the College of Entertainment and Music Business, but requires four semesters of traditional class piano for all music majors, including those majoring in Commercial Music.

Other programs have made adjustments to their class piano offerings to align with career needs of student populations. This appears to happen more when schools offer widely varying degree programs in music education, music therapy, popular music performance, and jazz studies. At Colorado State University, for example, all music

majors must pass a traditional piano proficiency before taking upper division classes, but Music Therapy majors also take a semester of Piano Skills for Music Therapy, Music Education majors take one semester of Piano Skills for Music Educators, and Jazz Studies majors take one semester of Jazz Piano Class. USC offers a popular-music-focused piano class and UT Austin offers a jazz-focused piano class.

Programs that offer class piano instruction that departs from traditional approaches, like Berklee, CU Denver, and McNally Smith, vary in terms of their expected competencies and instructional materials. There appears to be no agreed-upon approach to class piano for students enrolled in programs related to music industry and popular music.

#### **PROFESSIONAL RELEVANCE**

Secondary education and higher education institutions are increasingly embracing the study of popular music and music industry. In turn, college music student populations are changing, in terms of both the skills they enter with and the skills they need to develop to support their professional work in music. As curricular offerings and student populations shift, so must teachers' skill sets and the textbooks they use.

The National Association of Schools of Music (NASM) guidelines from 2011-12 state that, "irrespective of their area of specialization, students must acquire the common body of knowledge and skills. . .that constitutes a basic foundation for work and continuing growth as a music professional. . ." (National Association of Schools of Music, p. 99). Determining what actually constitutes a basic professional foundation in music studies programs that vary from the traditional pathways offered by music schools means evaluating (and *reevaluating*) the "common body of knowledge and skill" that is provided through classes like group piano.

My examination of the college programs cited above revealed the lack of a uniform approach to Music Industry Studies and limited inclusion of popular music in

piano curricula. This may be expected in a field as broadly defined as “Music Industry Studies.” Technology (e.g., recording arts, live sound, electronic music), business (e.g., management, entrepreneurship, publishing), and various aspects of commercial music (e.g., film scoring, songwriting, popular music performance) are the primary sub-fields that are often grouped under the umbrella of Music Industry Studies. Excellence in each of these fields requires a wide range of skills, and it would be impossible to create a one-size-fits-all class piano curriculum for Music Industry Studies. Each university, college, department, and piano class instructor must grapple with how best to serve the needs of their student populations. The core argument in this document is not that all college music majors should study popular music or jazz, but that class piano curricula should be maximally relevant to the student populations they serve.

## **Chapter Two:**

### **A Brief Overview of Class Piano in Higher Education**

#### **HISTORICAL CONTEXT**

In 1934, Columbia University Teachers College became the first school to offer college credit for group piano instruction (Tsai, 2007). Calvin Bernard Cady, a Columbia University Teachers College faculty member in the later half of the 19<sup>th</sup> century, laid the framework for a longstanding pedagogical paradigm for class piano instruction. Cady believed that class piano was an ideal vehicle for teaching general musicianship skills, such as theoretical understanding, analysis, and application (Tsai, 2007). A flurry of studies (e.g., Curt, 1970; Diehl, 1980; Martinez, 1975; Rogers, 1974; Wig & Boyle, 1982) reinforced Cady's claims that class piano is an effective vehicle for teaching not only piano skills, but music theory and other fundamental music skills. Rogers (1974) compared the test scores of children in private and group instruction. The children, ages 7 to 9, who took group lessons scored higher on all five variables—aural discrimination, knowledge of musical symbols, sight-reading, transposition, and improvisation. Diehl (1980), like Rogers, found that children who studied in group piano performed just as well or better than those in individual instruction. Williams (2000) points to specific advantages of group instruction: increased exposure to instruction (e.g., two hours per week as opposed to 30 minutes in a typical college music program), and group dynamics such as safety in numbers, peer influence, and modeling as a motivator.

When group piano instruction has been used to supplement general music instruction, it has resulted in distinct improvements over general music class with no instruments. Martinez (1975) instituted a piano curriculum for improving reading skills. Martinez implemented the keyboard instruction program for nine weeks during a semester of a general music class. The use of pianos in general music classes

significantly improved music reading. Curt (1970) compared middle school general music classes with and without keyboard instruction. Students with keyboard instruction scored significantly higher on both musicality and cognitive tests. In a similar experiment, Wig and Boyle (1982) found that middle school students who took general music classes with keyboards rather than with no instruments scored significantly better in achievement test scores, and had more positive attitudes toward musical skill acquisition, as well as more creativity.

In the following decades, piano classes became a staple of college music programs, especially public institutions (Skroch, 1991). It is likely that multiple forces influenced this growth—including the effectiveness of piano class pedagogy; the development of a lucrative piano textbook industry, both for publishers and instructors; and the influence of NASM's accreditation requirements for general musicianship that class piano curricula address. In 1991, Skroch surveyed NASM member colleges to gather information regarding their class piano offerings. Of 310 respondents, 287 offered piano classes (p. 58).

The growth of class piano offerings in college music programs has been accompanied by the growth of Piano Pedagogy graduate degree programs. A large body of research in piano pedagogy has resulted, including over 400 studies from 1979-2008, many of which have focused on college student populations (Meichang, 2010).

Between 1979 and 2008, 66 of 407 studies involved the development of new methods, curricula, repertoire, or computer-based tools (Meichang, 2010), reflecting an interest in advancing various aspects of the discipline. Skroch (1991) found that many class piano teachers who lacked explicit instruction in how to teach in a class setting developed their own methods, some of which were designed to address the specific needs of student populations (e.g., Graff, 1984; Williams, 2000).

## **TECHNOLOGY IN PIANO CLASSES**

In 1956, Ball State University opened the first electronic piano lab. The use of headphones allowed for more varied and individualized approaches to class piano instruction. With a few exceptions (e.g., Stanford University), most piano classes today use electronic keyboard labs. Chin's 2002 survey of class piano teachers found that 299 out of 304 respondents (98.36%) used electronic keyboard labs. Over the course of the 1980s and 1990s, Musical Instrument Digital Interface (MIDI) technology expanded the pedagogical possibilities for piano class instructors, making piano labs capable of utilizing sequencing software and other multimedia instructional materials, but many piano teachers struggled with how to integrate new technologies (Skroch, 1991). Meichang's (2010) literature review shows that in the 21<sup>st</sup> century researchers have increasingly focused on creating and examining methods that integrate technology (e.g., Brook, 2007; Duvall, 2008; Riley-Butler, 2001; Santella, 2000).

Commonly used method books now incorporate MIDI technology and online resources. For example, *PianoLab* (Lindeman, 2006) contains a CD with prerecorded play-along materials, as well as exercises, repertoire, and various other resources online; *Alfred's Group Piano for Adults* (Lancaster & Renfrow, 2008) comes with a CD-ROM loaded with audio and MIDI accompaniments; and *Piano for the Developing Musician* (Hilley & Olson, 2006) uses an online server to connect students to tutorials and MIDI accompaniment files. The *eNovativePiano* method, which I discuss in further detail later in this document, is entirely online, complete with downloadable notation, audio files, and instructional videos (Garcia, 2009).

## **PURPOSES OF CLASS PIANO**

Most college music programs have traditionally required class piano under the assumption that keyboard competency is a universally valued skill for all aspects of professional music practice. NASM (2012) guidelines state that "all professional

baccalaureate degrees in music” should gain keyboard competency as part of their “common body of knowledge and skill” (p. 101). NASM recommends that general musicianship studies (including class piano) offer students:

- (1) conceptual understanding of musical components and processes;
- (2) continued practice in creating, interpreting, presenting, analyzing, and evaluating music;
- (3) increased understanding of musical achievements from various analytical, historical, and cultural perspectives;
- (4) enhanced capacities to integrate musical knowledge and skills; and
- (5) a set of capabilities for independent work in the music professions.

(National Association of Schools of Music, 2012, p. 87)

Depending on teachers’ backgrounds and philosophies, institutional expectations, and students’ degree programs and majors, the expressed purpose of piano class has been articulated in ways that reflect a curricular value, a utilitarian value, and a social and personal value. Each instructor, Williams says, must “determine what the real purpose of class piano is as it relates to their [*sic*] individual program” (Williams, 2000, p. 59). One argument at the core of this treatise is that teachers and administrators must ultimately align the expressed values of their institutions with the needs of their students to determine the appropriate emphases of their piano class curricula.

### **Piano Class as a Part of a Musicianship Curriculum**

Various writers have argued that one of the values of group piano instruction is its curricular alignment with theory and ear training (Arrau, 1983; Dominick, 1956; Lusted, 1984; Trantham, 1966), and have studied interrelationships among piano, theory, and ear training classes (Bogard, 1983; Frazier, 1977). Robert Pace (1951), a leading figure in the growth of class piano in the second half on the 20<sup>th</sup> century, argued that class piano instruction enhances the development of a variety of functional skills.

Today, commonly used method books often highlight the curricular purpose of class piano study. In *Alfred's Group Piano for Adults*, Lancaster and Renfrow (2008) state that “most music educators agree that the piano is indispensable for all musicians. Piano study helps students gain a better understanding of music theory as theoretical concepts are applied to the keyboard” (p. 3). Hilley (2006) calls *Piano for the Developing Musician 6* “the only text strictly focused on the music major who must pass a piano proficiency before graduating. . . . I have designed this single volume to fill the needs of a four-semester curriculum and coordinate with your theory curriculum” (p. xviii). Lindeman’s *PianoLab* (2008) is focused less explicitly on curricular goals, but still emphasizes the combination of “keyboard skills and musical understandings. . . . Reading notes and playing scales and chord progressions are not enough. You must also develop an understanding of how music is put together, how it ‘works,’ and how rhythm, melody, and harmony interrelate to form musical compositions” (Lindeman, 2008, p. xv).

Understanding music theory as it applies on the keyboard, often tied directly to institutional theory curricula, continues to be a major thrust behind piano class study at the college level. For example, at Belmont University, Daniel Landes has written five levels of a book titled, *Class Piano Resource Materials*, which he says “are designed to prepare the student to pass a piano proficiency examination” (Landes, 2011, p. iii). Landes says, “it is assumed that secondary piano classes are required in conjunction with the various theory classes” (Landes, 2011, p. iii).

In her dissertation, Amoriello (2010) examined the relationships between student and teacher experience and instructional expectations and approaches at Teachers College of Columbia University. Amoriello found that students felt anxious about passing the piano proficiency exam and about being able to master the expected content in four semesters. Amoriello observed that students expressed an appreciation for increased flexibility and encouragement from the instructor (p. 19-20). In her observations of five

teachers in the piano class setting, Amoriello found that all of the teachers maintained a “particular sensitivity” to the “pressures of the piano proficiency exam” (p. 89).

### **The Development of Career-Relevant Piano Skills**

Maris (2000) contends that teachers must be selective and teach skills that students will find useful in the future. She says that class piano should “. . .help students prepare for The Future—*their* future. . .” (Maris, p. 33). However, what defines useful skills varies widely among degrees in music, from composition to education, therapy to theory, jazz studies, music business, recording arts, and popular music studies. As colleges become more responsive to the professional opportunities and challenges facing modern music students and graduates, the curricular landscape is in some ways slowly shifting toward programs that more closely match the professional skills that various sub-disciplines require.

In the second half of the 20<sup>th</sup> century the utilitarian argument for class piano was made repeatedly to emphasize the skills needed by music educators. Bastien (1973) asserted that “the ability to sight-read, score-read, harmonize, transpose, and improvise will best serve the practical needs of choir and instrumental directors and general music teachers” (p. 285). Buchanan (1964) argued that class piano teachers should emphasize functional skills (e.g., sight-reading and accompanying) over technique (e.g., scales) and repertoire.

Graff (1984) and Chin (2002) surveyed piano class instructors regarding their instructional priorities. Respondents in both surveys prioritized sight-reading, harmonization, playing chord progressions, and accompanying techniques as skills that would be most important to students in the future.

March (1988) found that the vast majority of public school music teachers in Oregon used the piano extensively in their classrooms, and Tollefson’s (2005) survey of almost 900 music educators nationwide revealed 90% of respondents used the piano in

their classrooms to accompany melodies, harmonize melodies, transpose parts, play multiple staves simultaneously, play piano repertoire, and improvise at the piano.

Though the skills developed in class piano often have professional applications, Buchanan (1964) found that 64% of band and orchestral directors felt inadequately prepared by their college piano training (p. 134). Haack (1995) suggested that students were not being prepared with skills that would enable them to function at the keyboard in their professional lives. And Chin (2002) also reported that “students who graduated from class piano did not feel competent in performing functionally at the keyboard” (p. 9).

### **Socially and Personally Meaningful Applications of Piano Skills**

Increased empathy, focus, and motivation can be enhanced in piano class settings. Early advocates for class piano such as Pace (1951) and Chronister (1976) argue that piano class students are motivated to stay on task and to practice in order to perform successfully in the presence of peers. Williams (2000) asserted that when students perform “with their classmates listening, students develop confidence in the ability to play for others” (p. 19), and that “students develop a concern for others who are having difficulties, offer advice on what has worked for them, and are happy when their peers overcome problems” (p. 18).

Robert Pace and Anne Gipson have both argued the case for class piano having personal and social value: “a positive and constructive spirit of cooperation,” Pace said, “from which students derive rewards both from helping others succeed and from feeling their own musical growth” (Pace, 1978, p. 5). More recently, Gipson (2009) articulated the social and personal value of piano study:

Regardless of a student’s level of piano skill or rate of progress, music study can foster the ability to create artistic and emotional beauty. Through improvisation and creative activities, students can learn to think inventively and creatively. The study of a musical score can help students detect patterns, think more globally and synthesize individual elements into a big picture. Learning to interpret and communicate the emotional content or character of a piece can tap into a student’s

ability to empathize and to be sensitive to human interaction. Through the study and performance of music, all students can find joy in one's self and develop the ability to elicit that joy in others. Above all, music can serve as an inspiration for individuals to find meaning and purpose in their own life. (Gipson, 2009, p. 53)

Piano classes that emphasize the role of developing musical understanding over the development of functional performance skills may fail to successfully engage students in learning. With this in mind, some piano class teachers have focused on developing instructional approaches that foster a sense of personal meaning and motivation. Gipson (2005) remarked that some students complete class piano requirements, but “find little musical enjoyment or satisfaction in the process. . .” (p. 18).

Group piano teachers across the country bemoan the struggle to motivate these students throughout their semesters of piano study. The goal for many students is simply to finish the required coursework as soon as possible and pass the piano proficiency exam, if one is required (Gipson, 2005, p. 18).

Parente (2011) examined the motivational challenge facing class piano students, and designed an instructional approach based on Fitts and Posner's “phases of learning” concept and Csikszentmihalyi's model of “flow.” By having students divide their practice into increasingly difficult segments and strive for mastery on each segment, Parente sought to enable students to “1) gain a fuller sense of ownership in the process of learning.... 2) increase their skill level more rapidly.... and 3) be more likely to enter into the flow state” (p. 32). Parente argued that “part of the mission of music educators is to inspire students to enjoy not only the music that they ultimately produce, but also the process of developing the proficiency required...to produce this music” (p. 221). Parente's approach seeks to inspire students to recognize the personal value of learning, and to enjoy learning music on the piano.

## **Chapter Three:**

### **A Brief Overview of Traditional Method Books**

With the growth of class piano offerings and piano pedagogy degree programs on the college level, the market for class piano method books is significant. Today, the vast majority of college music programs offer class piano in their core music curriculum. There are approximately 647 college music programs accredited by the NASM (National Association of Schools of Music, 2014), employing hundreds of class piano teachers and enrolling thousands of students in class piano courses. Publishing companies do not typically provide sales data to the public, but enrollment in class piano suggests that tens of thousands of method books are sold every year to colleges for use in piano classes.

It appears that the vast majority of NASM-accredited schools offer class piano. And most schools that offer class piano have multiple sections each semester, with as many as 15 or more students in each class. In addition, many secondary schools, elementary schools, community-based music schools, and private instructors also use piano texts designed for class instruction.

#### **CONTENT IN TRADITIONAL METHOD BOOKS**

The following list shows just a few examples of commonly used piano class method books that have continued to issue revised editions well into the 21<sup>st</sup> century:

- Lancaster and Renfrow's *Alfred's Group Piano for Adults*, and *Basic Adult Piano*;
- Lindeman's *Piano Lab: An Introduction to Class Piano*;
- Mach's *Contemporary Class Piano*; and
- Hilley and Freeman Olson's *Piano for the Developing Musician*.

Most commonly used piano class method books are quite similar in terms of content and sequence. Williams (2000) reviewed textbooks by Mach, Lindeman, Hilley and Freeman Olson, and Lancaster and Renfrow, as well as Lyke, Caramia, Alexander, and Elliston's *Keyboard Musicianship: Piano for Adults*, and Clark, Goss, and Grove's *Keyboard Musicianship for the Adult Beginner*. Williams identified the following common elements in the textbooks reviewed:

- Introductory chapter that presents basic musical information;
  - Emphasis on five-finger patterns in the beginning of study;
  - Early emphasis on intervals;
  - Harmonization of folk melodies and lead sheet harmonization;
  - Scale playing;
  - Transposition activities;
  - Improvisation activities;
  - Similar types of repertoire, including folk melodies and early to intermediate classical piano literature.
- (Williams, 2000, p. 60)

The books are sequenced in ways that develop skills and techniques such as block chord progression studies based on realizations of figured bass or I, IV, V<sup>7</sup> inversions; harmonizations of simple melodies (often folk songs) using the right hand to play the melody and the left hand to play chord progressions using inverted triads; and major and harmonic minor scales with both hands.

These typical elements have become a kind of canon, or tradition, for class piano

pedagogy. They represent the backbone of most college-level piano proficiency requirements, and they correlate well with traditional harmony and music theory studies, which tend to emphasize figured bass for harmonic analysis, the use of harmonic minor scales, and repertoire dating from the Baroque period up through the first half of the 20<sup>th</sup> century. In the section that follows I provide examples of the content that is typical of traditional class piano pedagogy.

### Traditional Chord Progressions

Progressions like the ones shown in Figure 3.1 reflect the goal of developing an understanding of chords and their function (Landes, 2011, p. 54).

In Landes’s piano class workbook, for example, students play cadences in “block chords” in all 12 keys, with both hands. These cadences form the basis of traditional piano chord progressions and correspond to piano proficiency exam requirements at Belmont University.

The image shows a musical score for two systems of chords. The first system is for C Major and the second is for a minor. Each system contains five chords with their Roman numeral symbols below them. The C Major system shows I, IV, I, V<sup>7</sup>, and I. The a minor system shows i, iv, i, V<sup>7</sup>, and i. Fingerings are indicated by numbers 1-5 above or below the notes.

Figure 3.1: Traditional Chord Progression

### Realizations of Figured Bass

Translating Roman numeral analyses with figured bass notation into left hand accompaniments of right hand melodies is also intended to develop a deeper understanding of music theory. Realizing figured bass is taught in traditional music theory curricula, and learning to apply it on the keyboard is a logical extension. For students who will continue on to perform in Baroque ensembles or traditional church music settings, this skill may hold a functional value in professional practice as well.

Various iterations of the harmonization exercise below (Lancaster & Renfrow, 2008, p. 32) can be found throughout every traditional piano class workbook that I have encountered.

**Harmonization**

Harmonize each melody that follows in two ways:

- Using the bottom note of each triad and inversion.
- Using the indicated triads and inversions.

**2-15**  
Allegretto  
*mp*



▶ Transpose to C minor.

Figure 3.2: Realization of Figured Bass

### Slash Chord Symbols and Figured Bass

Traditional methods typically demonstrate a relationship between figured bass notation and slash chord symbols. In Figure 3.3 below (Lancaster & Renfrow, 2008, p. 3), the chord symbols in the “Key of E Harmonic Minor” example are intended to represent inversions. For instance, C/E should be spelled (from left to right on the piano) E-G-C.

**Improvisation from Chord Symbols**

Improvise a RH melody for each of the chord progressions below while the LH plays the bottom note of the indicated chords. Begin and end each phrase with the given notes. You can use the suggested rhythm for your improvisation or create your own rhythm to complement the accompaniment. Notate your favorite improvisation.

**2-18**  
Key of F Major

1. *mf* I I<sub>6</sub> IV V

5 IV I<sub>4</sub> V I

Improvise a RH melody for the chord progression below while the LH plays the indicated triads and their inversions. Begin and end each phrase with the given notes. Notate your favorite improvisation.

**2-19**  
Key of E Harmonic Minor

2. *mf* Em C/E B/D# Em

5 Em Am/E B/D# Em

Figure 3.3: Slash Chords and Figured Bass, ex. 1

Hilley and Freeman Olsen (2006, p. 387) present slash chord symbols as they are typically seen in contemporary popular and jazz music. The slash, in this case, does not indicate a particular inversion of the chord per se, but rather that the chord is being played over a bass note other than its root. For instance, in “America, the Beautiful,” the F<sup>7</sup>/C in measure 2 does not require the chord to be spelled (from left to right) C-Eb-F-A. It could be spelled that way, or it could just as well be spelled Eb-F-A-C, as long as the

left hand plays C. Hilley and Freeman Olsen also present figured bass notation with Roman numerals, as seen below in “Eddie’s Tune.”

**America, the Beautiful**

SAMUEL A. WARD

6. Accompany in keyboard style.

**Eddie’s Tune**

MARTHA HILLEY

*Stirringly*

Figure 3.4: Slash Chords and Figured Bass, ex. 2

### Left Hand Harmonizations with Right Hand Melodies

A common assignment in traditional method books is to construct a left hand accompaniment to support a right hand melody. In Figure 3.5 (Lindeman, 2007, p. 187), the intended harmonization is notated completely, whereas in Figure 3.6 (Landes, 2011, p. 53), students are expected to identify the key and create an appropriate left hand accompaniment based on the given roman numerals. This necessitates developing the

technical ability in the right hand to execute melodies, in the left hand to execute chords and inversions and related accompaniment techniques, and the cognitive ability to simultaneously perform both.

*Tante Minna*  
(harmonized)

Example: C major (I = C–E–G, V7 = G–B–D–F) German Folk Melody

The musical score for 'Tante Minna' is presented in a grand staff format. The right hand (treble clef) contains the melody, which is a German folk melody. The left hand (bass clef) provides harmonic support with chords labeled I, V7, and I. The key signature is C major and the time signature is 2/4. The melody consists of a sequence of eighth and quarter notes. Two specific notes in the melody are circled and labeled 'nonchord tone'. The left hand chords are labeled I, I, V7, I, I, I, I, V7, I.

Figure 3.5: Left Hand Harmonization, ex. 1

The musical score for 'Left Hand Harmonization, ex. 2' consists of two staves. The top staff is in G major and the bottom staff is in C major. The top staff has chords labeled I, I, I, I, V, V7, I, I. The bottom staff has chords labeled I, I, I, I, V7/V, V7/V, V, V7.

Figure 3.6: Left Hand Harmonization, ex. 2

### Repertoire: Western Art Music And American Folk And Songbook Tunes

Repertoire in traditional method books are written mostly in Western art music and folk music styles, including some songs from the great American songbook (i.e., popular songs—primarily show tunes—from the first half of the 20<sup>th</sup> century). References to any music written beyond 1950, not including pieces written for class piano textbooks by class piano teachers, are few and far between. For instance, Landes' *Class Piano Resource Materials, Level Four*, has 29 pieces in its repertoire and all except a ragtime piece by Scott Joplin and a boogie-woogie composed by the author are in Western art music styles or are chorales, hymns, and patriotic songs. Likewise, *Alfred's Group Piano*

for Adults, Book 2, contains 44 solo repertoire pieces, all of which are in Western art music styles except for the Harold Arlen standard, “Somewhere Over the Rainbow,” and “Maple Leaf Rag” by Scott Joplin. Harmonization repertoire in *Group Piano for Adults* contains more folk music, holiday music, and popular hymns, but nothing representative of music written later than 1950. *Piano for the Developing Musician, 6*, also has a handful of popular music examples—all from the first half of the 20<sup>th</sup> century—such as “Take Me Out to the Ballgame,” “Little Brown Jug,” and “Hello Ma Baby.”

Figures 3.7 (Lindeman, 2008, p. 56), 3.8 (p. 57), and 3.9 (p. 156) below show examples from Lindeman’s *PianoLab*—a hymn, “Shall We Gather at the River”; folk melodies; and an American popular songbook classic, “Hello Ma Baby.”

Student, Piano 1  
Brightly

*Shall We Gather at the River\** Robert Lowry (United States, 1826–1899)

\*Piano 2 is on p. 134 and CD track 35.

Figure 3.7: Repertoire, Hymn

Little River

Flowing

German Folk Melody

C (I) G (V) C

1

Jim-Along Josie

Cheerfully

American Folk Melody

G (I) D (V) G D G

5

Figure 3.8: Repertoire, Folk Melodies

In this ensemble piece you'll find the syncopated pattern you performed in the Rhythm Exercise on page 155. An expanded position will be required for this popular ragtime song.

41  
Piano 1

*Hello! Ma' Baby*

Joseph E. Howard (United States, 1878–1961)  
Ida Emerson (United States, late 19th–20th c.)

*Lively*

The musical score for Piano 1 is written in 4/4 time with a key signature of one flat (B-flat). It consists of three systems of music. The first system (measures 1-5) features a melody with triplet and four-note patterns. The lyrics are: "Hel-lo! Ma'ba-by, Hel-lo! Ma'hon-ey. Hel-lo! My rag-time gal. Send me a kiss by". The second system (measures 6-10) continues the melody with lyrics: "wire, Ba-by, my heart's on fire! If you re-fuse me, Hon-ey, you'll lose me,". The third system (measures 11-15) concludes the piece with lyrics: "Then you'll be left a-lone, oh! ba-by, Tel-e-phone and tell me you're my own..". Fingerings and accents are indicated throughout the score.

42  
Piano 2

*Lively*

The musical score for Piano 2 is written in 4/4 time with a key signature of one flat (B-flat). It consists of two systems of music. The first system (measures 1-8) features a syncopated bass line with a strong rhythmic pattern. The lyrics are: "Hel-lo! Ma'ba-by, Hel-lo! Ma'hon-ey. Hel-lo! My rag-time gal. Send me a kiss by". The second system (measures 9-15) continues the bass line with lyrics: "wire, Ba-by, my heart's on fire! If you re-fuse me, Hon-ey, you'll lose me,". The piece concludes with the lyrics: "Then you'll be left a-lone, oh! ba-by, Tel-e-phone and tell me you're my own..". Fingerings and accents are indicated throughout the score.

Figure 3.9: Repertoire, Great American Songbook

## **Scales and Technique Requirements**

Traditional method books and college-level class piano programs often define extensive scale and technique competencies. For example, *Alfred's Group Piano for Adults, Book 2* (2008), begins each section with two-handed major and harmonic minor scales and major and minor arpeggios. *PianoLab* (2008) also contains two-handed scales, in both contrary and parallel motion.

For the most part, scales and technical exercises like arpeggios are indicative of the role of piano class in developing deeper understanding of music theory. I describe below some of the piano proficiency requirements related to this goal as they are outlined at Belmont University, Indiana University, and Columbia University's Teachers College.

Belmont University's piano proficiency includes "all major and harmonic minor scales up and down 2 octaves with correct fingering and in a steady tempo," as well as melodic minor scales in C minor, D minor, E minor, G minor, and A minor (Class Piano Resource Center, 2003). Indiana University's proficiency includes "scales, arpeggios, blocked and broken chords (from memory, with both hands simultaneously in 16th notes at least 60 to the quarter)" (Indiana University Keyboard Proficiency, 2013).

Amoriello (2010) shared the piano proficiency requirements from the Columbia University Teachers College:

### **Requirements for All Students**

#### **Repertoire:**

Two compositions from contrasting style periods (Baroque, Classical, Romantic, Impressionistic, 20<sup>th</sup> or 21<sup>st</sup> century)

#### **Keyboard Skills:**

All major and harmonic minor scales, ascending and descending, hands alone

Play four melodies (provided days prior to the examination) with left-hand accompaniments, using I, IV, and V<sup>7</sup> harmonies, with or without chord symbols

Transpose each of the four melodies and accompaniments up or down a half or

whole step

Play a four-part open score (provided days prior to the examination)

Play "Happy Birthday" in F or G Major

Harmonize and transpose a simple melody at sight (students may use blocked chords)

### **Additional Piano Proficiency Examination Requirements by Major**

Bachelor of Arts in Music: One additional repertoire composition

Bachelor of Music in Music Education: Play "The Star-Spangled Banner" in A-flat Major; "America the Beautiful" in C Major; and "America" in F Major

Bachelor of Music in Music Theater: Play two prepared vocal accompaniments with a singer (one must be from a music theater work); play a lead sheet accompaniment (provided days prior to the examination)

Bachelor of Music in Sacred Music: Play "America the Beautiful" in C Major and "America" in F Major; play a hymn (provided days prior to the examination)

Bachelor of Music in Theory/Composition: Play an orchestral/instrumental score (provided days prior to the examination)

Bachelor of Music in Voice Performance: Play two vocal accompaniments with a singer”

(Amoriello, 2010, p. 207)

### **SUMMARIZING CRITIQUES OF TRADITIONAL METHODS**

Graff (1984) examined 13 commonly used piano method books (30 years prior to the writing of this document, it should be noted) and found widespread inconsistency in content and presentation of the functional skills deemed necessary by public school music teachers. Graff also suggests that because many piano class teachers are primarily applied piano teachers, they may not be prepared to address the differing priorities of piano performance majors who are future music teachers. According to Graff, music education majors should not be focusing on the least important skills for music teachers, such as playing piano literature, memorization, and realization of figured bass (Graff, 1984,

p.106).

Williams (2000) identified the following weaknesses of conventional approaches: 1) the pace of sight-reading is too fast; 2) there is a lack of emphasis on kinesthetic and aural development; and 3) there is too much emphasis on theory, score reading, composition, and accompanying. Williams suggested that some instructional goals might be too advanced for novice pianists, noting that it is “appropriate to ask how competent an intermediate piano student would be at skills such as transposition, improvisation, and score reading. Is valuable time being spent on skills that belong to a higher level of playing?” (p. 59).

Amoriello (2010) examined the role of the piano proficiency exam and raised questions regarding its efficacy. For some students, the exam provided a seemingly necessary extrinsic motivator to practice, but for others the exam was a catalyst for cynicism or anxiety. “A central problem seems to be a disparity between individual musical goals and proficiency exam content, compounded by the institutional obligation to meet this requirement” (Amoriello, 2010, p. 168).

## **Chapter Four:**

### **A Brief Overview of Non-Traditional Methods**

The outcomes that are defined in traditional methods focus primarily on the development of musical understanding, aligning with music theory instruction, and secondarily on the development of skills that will be useful in teaching and various social contexts. In contrast are methods that emphasize the development of keyboard performance skills.

#### **ALTERNATIVES TO TRADITIONAL METHODS IN HIGHER EDUCATION**

Graff (1984) remarked that common class piano texts do not always reflect the instructional priorities expressed by music teachers. She surveyed music educators and examined the relationship between piano skills required for effective public school music teaching and piano skills included in commonly used piano method books. Influenced by her survey results, Graff created a class piano textbook to specifically serve the needs of Music Education majors. Graff makes the argument that “piano classes for music education majors should emphasize the skills professionals in the field identify as most necessary” and “. . . a moderate amount of preparation in other skills also used by music teachers” (p. iv). Piano class materials “should pertain to actual teaching situations,” Graff says. Graff acknowledges the role of class piano as a means to “reinforce concepts traditionally taught in other music classes. . .” (p. iv).

Williams (2000) constructed “an alternative class piano textbook based on selected Suzuki principles.” Williams designed a Suzuki-based piano method that stresses the importance of automatic and efficient movements in scale fingering and chord progressions, repetition of repertoire, group practice, and an “understanding of basic motor skills” and “actual coordination skills” (p. 127).

Suzuki teachers believe that early mastery of the ability to maintain a legato Aberti left hand accompaniment against a melody with repeated notes is a fundamental key to avoiding coordination problems. As a result, developing fluency in that style of playing is the goal of the first semester of this proposed text. (p. 128)

Rather than being concerned that their music sounds too simple or has a childish title, adult students in a Suzuki-based method are taught to prize the learning process as much as the music they are making. (p. 121)

Coordinator of Keyboard at the University of Louisiana at Lafayette, Susanna Garcia has helped develop a multimedia piano instructional method titled, *eNovative Piano*. On eNovativePiano.com, students are presented with instructional videos, play-along audio files, lessons plans, flash cards, notated piano music, various assignments, interactive message boards, and personalized accounts with practice logs. The site is constructed to be simultaneously easy to navigate and content-rich. The site claims (justifiably) to be “the premiere multimedia online resource for piano instruction.” Garcia explains the genesis of eNovativePiano.com:

In spite of 50 years of collective teaching experience, we were still dissatisfied with the level of our students' accomplishment in group piano. For one, they did not have a high degree of physical comfort—they lacked true coordination and were tense in their wrists and hands. In addition, they simply did not retain and transfer the information they were taught. They appeared to lack motivation and never seemed to practice enough. "Something was wrong and we had to fix it!"

We tried to better understand our students' needs and even reassessed our own teaching styles. This journey was revealing and rewarding to us as teachers. In fact, it was life-altering.

The result was a complete overhaul of our approach. We began to create new teaching materials that reflected our students' preference for visual and audio formats and exploited their comfort with the internet. We adopted a pacing and sequence that was more realistic and included more reinforcement. We took advantage of videos to give a special focus toward acquiring physical skills at the piano. (Garcia, 2012)

The *eNovativePiano* curriculum and website includes important advancements in curriculum and instructional practice. The pedagogical approach of *eNovativePiano* is non-traditional in the sense that it does not prioritize scales or left hand I-V<sup>7</sup> progressions,

but rather attempts to create a holistic curriculum that begins lessons with a musical concept, drills related techniques and varying aural contexts, and applies the acquired knowledge and skill in related repertoire and performance contexts. The content does, however, retain much of traditional piano class material, such as figured bass analysis of inversions, early right hand melodic technique, and the vast majority of repertoire composed in styles that reflect the Western art music canon. *eNovativePiano* teaches popular music as a “special topic.”

Summer is a great time to focus on popular music with your students. Not only are the skills associated with this important musical skills, your students will really enjoy adding to their repertoire in this way. Playing popular music requires good aural, theoretical, and pianistic skills in addition to the understanding of varied musical styles.

– Pop music will:

satisfy your students' desire for the contemporary music that they are interested in;

improve their sense of pulse and continuity;

improve their coordination;

solidify their knowledge of chords, progressions and cadences and other theory skills;

improve their aural skills;

allow them to play in different styles;

improve their musical memory.

(Garcia, 2012)

## **OTHER RELEVANT ALTERNATIVE PIANO METHODS**

In 2014, there are a variety of piano instructional methods that focus on more commercial styles and techniques. The scope of this document does not allow for a thorough review of such methods. But the following methods warrant acknowledgement because of specific parallels to the method I developed of functional performance skills and socially and personally meaningful applications of those skills: YouTube instructional videos, GarageBand instructional videos, and Will Barrow’s *Learn and Master Piano*.

## **Learn & Master Piano with Will Barrow**

*Learn & Master Piano* is a multimedia piano method created by Will Barrow (Barrow, 2009), who uses a variety of music styles to present a chord-focused approach. *Learn & Master Piano* focuses primarily on popular and jazz music repertoire throughout, including contemporary chord theory and accompaniment techniques with a few supplementary folk, church, and Western art music examples. Barrow teaches major triads taught in similar-shaped groups (C/F/G, A/D/E, Ab/Db/Eb, Gb/Bb/B). He and other professional musicians pre-recorded supplementary play-along tracks—high quality studio recordings that are musically satisfying to play with. Barrow’s method includes well-produced instructional videos, shot from multiple angles with high quality cameras. While the content of *Learn & Master Piano* is applicable to much of contemporary popular music, the most recent repertoire examples are Van Morrison’s “Moondance” (1970) and Preston and Fisher’s “You Are So Beautiful” (1973). Barrow, a Nashville-based musician, teaches harmonic analysis with the “Nashville number system” in which Arabic numerals are used rather than Roman numerals.

## **GarageBand**

*GarageBand*, the user-friendly music production software that comes automatically loaded on nearly every Mac computer (and is purchasable as an App for mobile devices), now comes with a piano instructional series of videos and play along tracks. *GarageBand* has an “Intro to Piano” lesson, a “Basic Piano” series of eight lessons, a “Classical Piano” series of four lessons, and a “Pop Piano” series of six lessons. *GarageBand* also has a series of “Artist Lessons,” in which various performing artists play and teach basic versions of their songs. The “Artist Lessons” series of eight videos includes John Legend teaching “Ordinary People,” Ben Folds teaching “Zak and Sara,” and Sara Bareilles teaching “Love Song” (GarageBand, 2012). The *GarageBand* lessons focus primarily on popular-and-jazz-music-focused repertoire, along with

contemporary chord theory and accompaniment techniques. The chordal curriculum teaches major triads in similar-shaped groups (e.g., C/F/G); triad inversions are used to minimize hand movement between chords; and slash chords are taught rather than figured bass.

### **YouTube Instructional Videos**

The history of American folk music—from blues to bluegrass to jazz and rock’n’roll—is steeped in a chord-focused methodology. Today on YouTube, chord-focused piano instructional videos attract thousands, even millions of views. Amateurs and professionals alike can post videos for anyone to see. A niche for piano instructional videos has developed, in which pianists shoot video (typically from an overhead or an over-the-shoulder position) and comment in real time on their performances. Each of these YouTube channels uses some sort of stationary overhead video camera, with the exception of *OnlinePianist*, which uses a “piano roll” style MIDI-visualizer, and an interactive keyboard graphic that is activated by MIDI input. The channel, *PianoKeyz*, combines overhead video and MIDI-triggered note name visuals.

The following list contains examples of the various styles of pop and jazz-related online piano tutorials found on [www.youtube.com](http://www.youtube.com) at the time of this writing. Each of these YouTube channels runs its own website as well.

Jazz Hero, <http://www.youtube.com/user/jazztutorial>

- Website: [www.jazzherobooks.com](http://www.jazzherobooks.com)
- Started YouTube channel in 2010
- Over 750,000 views
- Jazz styles
- Stationary overhead video

DRo Music, <http://www.youtube.com/user/DRoMusic>

- Website: [www.dromusicshed.com](http://www.dromusicshed.com)
- Started YouTube channel in 2010
- Over 1 million views

- Gospel piano and organ styles
- Stationary overhead video, superimposed note names in text for organ, MIDI keyboard visualizer for keyboard lessons

Piano Couture, <http://www.youtube.com/user/pianocouturetube>

- Website: [www.piano-couture.com](http://www.piano-couture.com)
- Started YouTube channel in 2012
- Over 1.4 million views
- Pop, Hip-Hop styles
- Stationary overhead video, MIDI keyboard visualizer and superimposed visuals of chord symbols with keyboard visuals of notes

Bill Hilton, <http://www.youtube.com/user/billhiltonbiz>

- Website: [www.jamcast.co.uk](http://www.jamcast.co.uk)
- Started YouTube channel in 2009
- Over 2.7 million views
- Jazz and Blues styles
- Stationary overhead video

Piano Drew, <http://www.youtube.com/user/pianodrew>

- Website: <http://angelouccello.jimdo.com>
- Started YouTube channel in 2008
- Over 4.2 million views
- Pop styles
- Stationary overhead video, minimal superimposed text

Starling Sounds, <http://www.youtube.com/user/StarlingSounds>

- Website: [www.smoothchords.com](http://www.smoothchords.com)
- Started YouTube channel in 2007
- Over 10 million views
- Gospel and Pop styles
- Stationary overhead video

OnlinePianist, <http://www.youtube.com/user/OnlinePianist>

- Website: [www.onlinepianist.com](http://www.onlinepianist.com)
- Started YouTube channel in 2012
- Over 13 million views
- Pop styles
- Apple App that uses MIDI with interactive graphic representation of the keyboard and of “piano roll”-style symbols.

Dudu Yzhaki, <http://www.youtube.com/user/dududavid>

- Website: [www.piano-play-it.com](http://www.piano-play-it.com)

- Started YouTube channel in 2008
- Over 15 million views
- Pop styles
- Stationary overhead video, superimposed text

Joe Raciti, <http://www.youtube.com/user/jraciti1>

- Website: [www.joeraciti.com](http://www.joeraciti.com)
- Started YouTube channel in 2009
- Over 22 million views
- Pop styles and popular Western art music (e.g., Moonlight Sonata)
- Stationary overhead video, superimposed text

PianoKeyz, <http://www.youtube.com/user/gotitans999>

- Website: [www.playpianoking.com](http://www.playpianoking.com)
- Started YouTube channel in 2005
- Over 75 million views
- Pop styles and popular Western art music (e.g., Canon in D)
- Stationary overhead video, MIDI-triggered note name visuals

These sites have received nearly 150 million views, evidence of widespread interest in learning popular-and-jazz-related piano music. The majority of content on these sites is designed to teach the rote execution of repertoire, while including supplementary music theory as it pertains to the repertoire being taught. The curricular approach, instrumental proficiency, and authenticity of performed repertoire vary widely among the instructors on these sites. Undoubtedly, online videos appear to be one of the most popular delivery methods for contemporary piano instruction.

## **Chapter Five:**

### **Guiding Principles for Constructing Rewarding Learning Experiences**

What each student brings to class in terms of skills, knowledge, personal background, and attitudes influences what is possible on any given day. And yet, as human beings, we have certain common hardwiring in our bodies and brains that enables us to come together in groups and progress toward similar goals, developing similar skills. Our collective understanding of human learning is ever-evolving as researchers continue to examine the behaviors of teachers and learners. In this chapter, I outline principles that guide my curricular and instructional decisions. The importance of these principles in influencing my thinking reflects my own knowledge of research in human learning and behavior and my experiences as both a learner and teacher.

#### **EXCELLENT MODELING**

Modeling offers a template for success and can inspire students' efforts to learn (Haston, 2007; Henley, 2001). Dickey (1992) reviewed research on modeling in music education and concluded that teacher demonstration-student imitation is a highly effective teaching strategy, given that the modeling is accurate. Students learn from the teacher modeling both correct and incorrect ways of playing. Both teacher models and recorded models are actually more effective than verbal description, Dickey concluded.

Modeling is a type of scaffolding, a support structure that provides a framework within which students develop their own skills. Excellent modeling means not only playing repertoire convincingly, but demonstrating what a student is doing, both correctly and incorrectly, to help focus attention on important features of behavior that are in need of refinement or modification. Duke and Simmons (2006) observed three renowned artist-teachers and noted that "in all instances in which the teachers demonstrate, whether

singing, gesturing, or playing, they embody the expressive elements of the music while executing the example nearly flawlessly. The teachers often juxtapose a remarkably faithful imitation of the student's performance with their intended model of the performance goal" (p. 15).

Two instructional elements in particular help to facilitate effective modeling in my piano class. The first is in-class individual attention. Students often need to see a hand on the piano in front of them doing what they are supposed to be doing. It is often the case that once they see it, they can much more easily do it. The second element is the availability of video tutorials. Videos offer students images of hands on the piano that are readily accessible from almost anywhere. Students can bring a phone, tablet, or laptop into a practice room, and they can pause a video at any given moment, and rewind or fast forward as needed. Whether during a class, lesson, or on video, a visual model provides both a clarification of intended goals for learning and the inspiration of successful performance.

A personal anecdote: In the first semester of my doctoral studies in Music and Human Learning, I was given a full teaching assistantship, in which I taught two 3-credit piano classes for non-majors. I continued this for four years, and by the third year, I left almost every class with a smile. But the first semester was a trial by fire that exposed my every weakness as a teacher, and broke me down emotionally. I sought guidance from my advisor, and his direction surprised me. He asked me if I had played for the class yet. I said, "No, no, I don't want to show off, or make them feel bad..." He proceeded to enthusiastically encourage me to play for the students and "blow their minds," promising that my doing so would change completely the class decorum and their attitude toward me.

When I began the period by offering to play the piano for them at my next class, the students were excited. I played John Coltrane's "Giant Steps," and they applauded.

Then I offered to play a pop song by ear. In each class, someone brought forward a song (on their phone or mobile mp3 player), and I listened for a minute or so and then played the song on the piano. This inspired even more reaction from the class.

Perhaps just as important as my demonstration of keyboard skills was the fact that I could play music that the students themselves cared about. Playing “Giant Steps” was impressive, but students were clearly excited when I played the music that was on their own mobile devices.

### **MEANINGFUL CONTENT**

When students are given the opportunity to play music that they already know and enjoy, their engagement is understandably enhanced. “Goals must reflect not only the ideas and ideals of the teacher, but also those of the students, students' families, their school, and their community” (Abrahams, 2005, p. 67). According to Green (2005), musical meaningfulness can be understood in a variety of ways, such as the “inherent” meanings of music as related to other music, or the “delineated” meanings of music as related to non-musical variables (e.g., personal experiences and social contexts). Green contends, “in making music, students have a direct effect upon inherent meanings, indeed bring them into being, and are thus able to imbue the music with a delineated content of their own” (p. 91). It is an undeniably powerful experience for students to engage creatively with what they learn in class and to express music in a personally meaningful way.

Since the mid-1900s educators and scholars have offered strong arguments for the prioritization of meaningful learning. Personal interest has been shown to increase the likelihood of students remembering material as well as sustaining engagement over time (Harackiewicz et al., 2000). Half a century ago, Jerome Bruner wrote that “The most important thing about memory is not storage of past experience, but rather the retrieval of what is relevant in some usable form” (Bruner, 1964, p.2). Bruner explored the

importance of relevance throughout his career.

Music skills have real-world value. When put to good use, music skills open the floor for connection to others through jamming, singing, listening, dancing, and discussing, and humans thrive on connection and a sense of belonging (Maslow, 1973). And that is a big part of why meaningful repertoire choices are so important.

To return to my personal experiences as a young teacher: Toward the end of the first semester of my teaching assistantship, there were still students with little if any motivation to learn the piano. With only a few weeks remaining, I was unsure if I would be able to inspire these students to care much at all. But the final song I chose for the class to learn, R. Kelly's "I Believe I Can Fly," did in fact inspire students who had previously shown little interest. When I played the recording of the song in class, I turned up the audio system and played along with the record. Students in the back of the room who had skirted along through the semester began to stir and smile. At the second verse, one student stood up, waving his hat in his hand, and singing with wild abandon along with the record. It was like a scene from an African-American gospel church. R. Kelly had tapped into these students' enthusiasm for music like nothing else we had learned that semester.

Not every student actually learned to play "I Believe I Can Fly" proficiently, but they all tried. I learned a lesson that transformed the content of my piano classes from that day forward: The way into students' hearts is through music they love.

These experiences led me to change how I began the second semester. I realized I could teach half steps by teaching Justin Timberlake's hit dance record, "Sexyback." In my first classes, I taught my students to play a half step (with both hands), and situated their fingers on low A's, and then pumped up the volume on the stereo and played "Sexyback." And the room exploded with enthusiasm. Athletes stood up and hollered, and other students bobbed their heads and smiled all the more so when they realized that

in one short lesson they were accurately playing one of their favorite records.

### **MANAGEABLE DIRECTIVES**

In order for students to succeed, they need more than a good model and motivation. They need to be able to do it. Beginning in infancy, humans learn better if they have both the ability and the opportunity to successfully perform tasks after they observe them (Hayne, et al., 2003). Distilling musical goals into manageable tasks seems to be a universal characteristic of effective teachers (e.g., Duke & Buckner, 2009, Gholson, 1998; Taylor, 2006).

Given the fact that the likelihood of a student accomplishing a performance goal has as much to do with the nature and timing of the goals themselves as it has to do with individual students' ability and effort, it is clear that skillful teachers can determine the probability of successful student accomplishment moment to moment through strategic goal setting. (Duke & Buckner, p. 34)

The dynamic of a diverse classroom in terms of proclivity and ambition makes this a much more difficult pedagogical task than it may appear on the surface. The reality is that in any given class, the pace of instruction will be at some points either too slow for some or too fast for others. Teachers must find the appropriate level of difficulty so that students are both challenged and successful.

Williams (2000) says that it is the "Suzuki teacher's responsibility is to know how to break the music into small enough steps that students will be able to experience success along the way" (p. 122). This responsibility is not just one that Suzuki teachers embrace, of course. When Duke and Simmons (2006) studied three artist-teachers, they produced a list of 19 common elements in their lessons, the first of which is: "The repertoire assigned to students is well within their technical capabilities; no student is struggling with the notes of the piece" (p. 11). In his article, *Beautiful Teaching*, Duke reiterates: "Students learn to play beautifully by playing beautifully often, and students can only play beautifully if the repertoire they perform is well within their technical

capabilities” (Duke, 2006, p. 24).

Nearly a century ago, Lev Vygotsky studied the learning process of children in Russia. When his theories of cognitive development were finally translated and published in English beginning in the 1960s, they had an indelible influence on educational philosophy and practices. One of Vygotsky’s most influential concepts is the Zone of Proximal Development (ZPD), which offers a model for assessing the appropriate challenge for any given student. Vygotsky (1962) theorized that learners actually develop within a range of experience that is challenging but achievable with some help.

In schools, it is the teacher’s job to assess the abilities of their students, and tailor the content of their lessons so that the students, with minimal assistance, can accomplish something new. Teachers may use various means to offer assistance for students, providing support, or scaffolding, that renders difficult tasks initially more manageable. Breaking up complex skills into component parts that are practiced in isolation often allows students to conquer a series of smaller tasks without being overwhelmed by the end goal. Once students are successful, scaffolding can be faded as new skills are acquired. “At its core, the scaffolding construct is indicative of a process whereby a learner is supported in various ways so that he or she can function independently when the support is removed” (Puntambekar & Hubscher, 2005, p. 8). The strategic sequencing of proximal learning goals is one of the keys to managing the level of challenge in a diverse classroom. Even with repertoire as simple as “Sexyback,” sequencing tasks that are arranged in a hierarchy of difficulty enables me to get every student to become engaged in a surmountable challenge.

Keeping the least-able students in mind, I begin with students playing single notes with one hand. We add the second hand. Then octaves in one hand. Then octaves in both hands. We play slowly, and then we increase the tempo, until we can play with the recording. Then we turn off the recording and keep the syncopated rhythm in tempo.

Then we transpose to other keys. Not all students can execute all of these steps. As the difficulty increases, I walk around the room and assess which students are able to continue. If they are struggling, I direct them to only use one hand, or play single notes instead of octaves. I assign them the appropriate level of difficulty for each student, with the appropriate scaffolding in place. In this way, the entire class is playing the same repertoire at the same time, successfully.

One controversial strategy for ensuring student success in a classroom is to “steer from the caboose”—to tailor student tasks to the level of the least proficient performers in the class. Duke and Benson (2004) studied four class piano teachers implementing this teaching strategy. The four teachers were skeptical at the outset.

One of the most often heard concerns expressed by teachers is that altering the sequence of instruction by performing simplified versions of performance tasks necessarily decreases student interest and leads to boredom and frustration among the more able students in a class. (Duke & Benson, 2004, p. 47)

However, results showed that more advanced students were not negatively affected by the “caboose”-led strategy. In fact, students expressed an appreciation for extra repetitions.

Some teachers may feel that the extent to which students perceive a class to be “positive” is proportional to the rate of positive feedback from the teacher. But a more meaningful indicator of students' perceptions is students' recognition of their ability to successfully perform the tasks assigned by the teacher moment to moment. If this is true, then teachers will create more positive classes by structuring sequences of performance trials in ways that accommodate the skills of even the least able students, so that all students may participate successfully. (Duke and Benson, 2004, p. 47)

Making directives manageable is crucial to facilitating success for students. By “steering from the caboose,” all students are likely to experience successful learning. Although many students harbor the erroneous misperception that doing something successfully once equals having learned it, the nature of automaticity reveals that effective learning requires multiple correct repetitions.

## **EFFECTIVE PRACTICE TO AUTOMATICITY**

Automaticity, for those who develop it, allows for the execution of skills quickly, under pressure, and while simultaneously processing other information. When students understand the nature of automaticity, they understand the key to effective practice. Once a skill has become automatized, executing it requires little conscious attention. A learner can then proceed to the subsequent challenge(s), shedding scaffolding and moving forward with increasing self-efficacy.

The research of Schiffrin and Schneider (1977) contributed a great deal to our understanding of “controlled” and “automatic” processes by demonstrating that an increased load on subjects’ short-term memory negatively affected their ability to perform tasks. Forty years later, Fidlou (2011) examined the cognitive processes of jazz improvisers and found that skilled improvisers maintained the ability to direct their attention elsewhere while simultaneously executing novel solos—evidence of well-developed automatic cognitive processes. “The skill these expert improvisers bring to their performance is founded upon their capacity to be flexible in both actions and attention. . .” (Fidlou, 2011, p. 124).

University of Chicago psychology professor Sian Beilock has devised many experiments that examine automatic and controlled processes (e.g., Beilock, Carr, McMahan, & Starkes, 2002; Beilock, Wierenga, & Carr, 2002; Beilock & Gonzo, 2008). In her 2004 examination of novice and expert golfers putting, she explains, “novice performance is supported by unintegrated task control structures held in working memory and attended in step-by-step fashion. Expert performance is thought to occur more automatically, largely controlled by procedures that run outside of working memory during execution” (Beilock, et al., 2004, p. 373). By subjecting expert golfers to conditions in which they had to pay close attention to their execution, Beilock actually disrupted their performance. When the same expert golfers were instructed to putt as

quickly as possible (maximum time of 3 seconds), they performed significantly better. The opposite was true for novice golfers, who performed better with explicit instructions on how to execute a putt, and worse under time pressure. Beilock's research reveals that experts who have developed automaticity in their actions are disadvantaged when they try to consciously process what has been long-practiced over time. Non-conscious motor control understandably allows attention to be focused on other relevant features of behavior that facilitate more effective performance.

Everyone experiences automaticity, whether we are conscious of it or not. As I type these words, my fingers find the keys in rapid succession. I do not hesitate to consider where letters or punctuation marks are on the keyboard. But I can remember when I was 12 years old and I barely could type a word. In 1988, household personal computers were a relatively new phenomenon, and I learned to type on my mother's Tandy computer with a program called "Typing Tutor." I watched my mother learn to type with curiosity, but I had little confidence that I could do it. My mother encouraged me to try, and I remember being confounded by the order of the letters on the keyboard. But the program was elegantly designed, and my fingers were forced to begin with my left hand on a-s-d-f and right hand on j-k-l-;. The constraints on my fingers made it relatively easy to complete the games. Before I knew it, typing was fun. And without ever feeling frustrated or confused, I became a highly proficient typist. I can think of this sentence in my head and type it out in just a few seconds. That ability is thanks to Typing Tutor's keen exploitation of my brain's ability to turn controlled processes into automatic processes. Watching my father try to type—a man who almost never touched the old Tandy or any other computer until he was nearly 60 years old—is a study in the opposite phenomenon. He must deliberately seek out each letter of each word, and the process—the epitome of controlled processing—is excruciating for him.

In my piano classes, as students develop fundamental skills, I intermittently test

their automaticity. “Play it with your eyes closed.” “Take your hands off the keyboard. Think about dinner. Now when I count you in, open your eyes and play it again, perfectly.” In the context of complex skill development like learning the piano, the ongoing process of automatizing skills is imperative so that students can progress to the next levels of complexity.

Practicing to automaticity is useful not just for making progress; it is integral to developing independence. And independence, as much as anything, is the real goal of class piano. Given the diverse populations of learners in Music Industry Studies programs, cultivating students’ abilities to independently choose, learn, compose, and perform music is more important than having them conform to a common standard.

Excellent modeling gives students a concrete vision of the end goal, meaningful content activates their motivation, manageable tasks make it possible for students to succeed, and practice to automaticity produces the ability to perform under pressure and to expand a storehouse of skills without becoming overwhelmed. Yet if students learn and perform only in response to the direction of their teachers, the ultimate goal of a class is unrealized. All education should strive to develop student autonomy.

## **AUTONOMY**

Autonomy is a perceived internal locus of causality—that an individual has personal agency and the capacity to affect her environment. An important outcome for piano class students is to develop the independence to use the piano effectively in professional or social contexts of their choosing. Within a piano class, autonomy may be facilitated by a choice of repertoire, a choice of difficulty level, or a choice of technique.

Edward Deci and Richard Ryan have been at the forefront of developmental psychology for three decades, and have created what they call Self-Determination Theory (SDT). Their research has been cited to support not only pedagogical practices, but also parenting methods, management strategies, psychotherapeutic approaches, and social

theories. “Teachers who are autonomy supportive (in contrast to controlling) catalyze in their students greater intrinsic motivation, curiosity, and desire for challenge” (Deci & Ryan, 2000, p. 71). Deci and Ryan’s Cognitive Evaluation Theory (CET) is a “subtheory” within SDT, and an outgrowth of their early research (e.g., Ryan, 1982) on intrinsic motivation. Deci and Ryan have shown that feelings of competence enhance intrinsic motivation only if they are accompanied by a sense of autonomy.

Although there are competing views about sources of motivation and their effects on behavior (e.g., Cameron & Pierce, 1994; Eisenberg & Cameron, 1996), Deci and Ryan (Deci, et al., 1999) argue that extrinsic motivators do in fact undermine intrinsic motivation. “Our early investigations focused on the social conditions that enhance versus diminish a very positive feature of human nature, namely, the natural activity and curiosity referred to as intrinsic motivation. We found that conditions supportive of autonomy and competence reliably facilitated this vital expression of the human growth tendency. . .” (Deci & Ryan, 2000, p. 76). With this in mind, it is imperative that an effective teaching method—for any class—contains numerous opportunities for students to make choices about what they do, and to act as independently as they are able as often as possible.

“The ultimate goal is independence; students must learn to function on their own, functionally and artistically at the keyboard” (Amoriello, 2010, p. 91). Autonomous students can learn repertoire on their own. They can transfer skills to new contexts, and they can intelligently evaluate and analyze their own skills and those of others.

Autonomy, like any other skill, must be practiced. And virtually any skill can be transferred, varied, expanded, or used creatively. In class piano, students can be provided frequent opportunities to experience autonomy and choice making. For students who are not ready to act effectively without explicit direction, the presence of a choice—of repertoire, or keys, or technique—offers an opportunity to independently direct aspects of

one's own learning.

Supporting autonomy necessitates some level of individualization in the classroom. As I discussed regarding manageable tasks, by stratifying the complexity and scaffolding in a lesson, an entire class can practice repeatedly and simultaneously, each at his own appropriate level of challenge. This is more easily said than done, requiring ongoing assessment of students' abilities, and significant flexibility in lesson plans.

### **FLEXIBILITY AND FEEDBACK**

One aspect of the teacher's role is to provide feedback—"yes, that's it," "no, that is not right," "your left thumb is on the wrong note," "your right hand should be up an octave." Yet, students must be taught to be attentive to the details of their practice. Lesson plans must be flexible enough to enable students to work independently intermittently so the teacher can give enough individual attention to ensure that most students are working effectively, and for teachers to shift the pacing or content of lessons as they deem necessary to accommodate the needs of their students. "Flexibility allows for individualized, student-centered instruction through the proper revisiting or strengthening of aspects when needs arise" (Riggs, 2006, p. 187).

The goal of teaching cannot be to get everyone to do exactly the same thing at the same level. While some students will improve more than others over the course of a semester, all students are bound to a large degree by the constraints of their past experiences and inherent capabilities. In non-traditional music school settings in particular, many students come with very little prior musical training. Whether in a class for non-music majors, or a class with music business majors mixed with recording arts and performance majors, the variation in student background is wide enough that any expectation of a homogenous learning experience must be discarded.

Assessing students' capabilities requires the facilitation of feedback loops. For example, a teacher directs a student to act, and the student's actions offer feedback to a

teacher—whether the student is capable of fulfilling that directive or not. What the teacher directs the student to do next can and most often will determine student success or failure.

Excellent teachers do, in fact, control the rate and proportion of positive and negative feedback communicated to students by selecting and ordering performance tasks in such a way as to increase the likelihood that students will be successful. The feedback students receive comes not only in the form of verbalizations and nonverbal communication from the teacher, but also, and perhaps more importantly, in the form of accomplishment or failure to achieve the proximal goals defined by the teacher. (Duke, 2000, p. 16)

Students may not be vigilant about paying attention to the feedback garnered from their own performance. To this end, a common question that I ask students in my classes is, “Can you tell me what’s wrong with what you just played?” Students have to be taught the ability to clearly perceive musical details—both successes and failures.

Many secondary piano students demonstrate deficiencies in the areas of practicing and listening. Students need to understand what needs improvement in their playing and how that can be achieved. . . . The ability to formulate constructive criticism. . . fosters independence in the pursuit of proficiency. (Amoriello, 2010, p. 120)

If students understand and practice for automaticity, then a teacher can offer students choices about what they work on independently. Within the motivating context of autonomous practice, students can then adjust their practice toward the end goal of automaticity. This in turn guides students’ ability to obtain accurate feedback from their own performances. Can they do it with their eyes closed? Have they done it three times in a row perfectly, and relaxed? Can they drop their hands, think of something else, and then play it correctly?

When teachers attend to students’ needs and pace, and work to facilitate their success, teachers make adjustments on the go—faster, slower, more, less, scrap this song, simplify that exercise. The greater the diversity of backgrounds in a class, the more flexibility is required to teach effectively. This is challenging, but also exciting.

Flexibility begets spontaneity, and spontaneity is fun.

Teaching class piano in a diverse environment requires refined teaching skills and curricular resources that foster students' motivation, systematic skill development, and creative knowledge application. The piano method I present in this document is an attempt to produce such a resource, grounded in principles of effective human learning. The method can be applied in all populations that will benefit from studying contemporary popular-and-jazz-related styles. The method is designed to offer a high level of flexibility. Different students will complete activities at different levels of complexity, in different keys, or in different ways. But all students should perform with accuracy and confidence, whatever their levels of technical capacity.

Method books cannot, of course, assess a student's performance or offer accurate feedback. Each teacher must develop her own ways of assessing and offering feedback, her own ways of making sure repertoire is relevant and manageable for unique groups of students, and her own ways of guiding students to understand and practice with the goal of automaticity, and with a sense of autonomy. Based on my own experience, and current understandings of human learning, it is my contention that a contemporary popular-and-jazz-music-focused approach offers the best chance of creating those conditions in which non-traditional class piano students can learn and thrive.

## **Chapter Six:**

### **The Purpose of My Method and Instructional Outcomes**

As I described in the previous chapter, piano class instruction serves multiple purposes. It is believed that, by applying music knowledge at the keyboard, students further develop the skills taught in general musicianship classes like Music Theory and Ear Training. Skills in accompanying and sight-reading are often applicable in professional settings for graduates who go on to teach, perform, and compose music, and for those who engage in informal music-making in social settings (e.g., playing “Happy Birthday” at a family gathering). As is the case for much of music performance instruction, the skills gained in piano class can provide a lifelong vehicle for individuals’ creativity, and increase their self-efficacy and motivation in music.

#### **PREPARATION FOR PROFESSIONAL LIVES IN MUSIC**

Musicians’ work lives are multifaceted and include teaching, performing, internships, and in some cases other work that is unrelated to music to help make ends meet. With relatively few stable full-time contractual positions in the music industry (other than those related to teaching), graduates must combine dedication, creativity, and an entrepreneurial spirit to carve their own professional niche. Graduates of my current institution, CU Denver, exemplify this trend. Their careers include components such as teaching at a local School of Rock, running a music publishing company, interning at recording studios, building their own recording studios, touring with The Fray, Devotchka, and The Epilogues, managing local bands, working as artist and repertoire (A&R) representatives for record labels, directing church music programs, and working with non-profit organizations to support music-making with urban youth.

CU Denver’s Music and Entertainment Industry Studies department offers

undergraduate degrees with emphases in Recording Arts, Music Business, Singer/Songwriter, and Performance. When establishing instructional outcomes for students, I considered the long-term vision of what the students might actually do with the skills they develop in class. I envisioned instructional outcomes that would be applicable in professional settings for each area of emphasis and then designed course objectives that would support those outcomes. I describe the expectations for each degree emphasis below.

### **Recording Arts**

Recording Arts majors typically follow career paths that include

- live sound set-up and engineering;
- “roadie” work (e.g., touring and setting up equipment for live shows);
- instrument tech (e.g., setting up guitar/keyboard/drum/bass rigs for touring musicians, repairing or altering setups);
- studio engineering;
- editing, mixing, mastering;
- and producing.

Some Recording Arts majors are not highly skilled instrumentalists, whereas others are strong performers who also aspire to run live sound, record in studios, or use mobile recording technology. The best producers are often great performers as well, whose musical skills and taste give them the ability to guide other artists or bands to strategically refine their sounds and songs.

### **Music Business**

Music Business majors typically follow career paths that include

- administrative positions at record labels or studios;

- artist management;
- road manager work;
- booking venues and tours;
- various entrepreneurial or organizational ventures such as opening venues and starting festivals;
- promotion and press work; and
- grant-writing and other fundraising.

At CU Denver, some Music Business students choose the “audition track,” in which they receive two years of private instruction in performance and complete other performance class requirements. Audition-track Music Business students are likely to participate in touring bands or be developing as solo artists while pursuing their academic studies.

Music Business students who do not specialize in instrumental music are the least likely to have extensive music training or ambition. Performance-oriented goals are often seen as peripheral to their career goals. Yet, many artists appreciate working with managers, agents, and others who understand the nature of the music and the work required to develop instrumental skill and to produce high quality recordings and live performances. Music Business majors who possess a discerning perception of musical quality are more likely to make informed decisions in their roles as professionals.

### **Singer/Songwriter**

Singer/Songwriter majors typically follow career paths that include

- performing in coffee shops, festivals, and establishing niche audiences by playing local venues and expanding to regional tours to develop a “following”;
- working as sidemen with or as opening acts for other artists;
- forming bands or making solo recordings;

- getting radio play and media coverage or social media buzz;
- getting signed by a record label;
- participating in competitions; and
- getting songs “picked up” by established artists.

Developing singer/songwriters are often more focused on their singing and lyric writing than on the details of the musical content of their songs. The piano is a powerful compositional tool, and can be highly beneficial for songwriters to refine and expand their musical concept and compositional style. In the course of breaking down the techniques and harmonies used in a variety of repertoire, songwriters gain insight into how music is constructed.

### **Performance**

Performance majors typically follow career paths that include

- playing in ensembles or bands;
- playing solo;
- teaching private lessons;
- entering competitions;
- forming bands or making solo recordings;
- getting radio play and media coverage or social media buzz;
- getting signed to a record label, or working independently;
- establishing themselves in a local music scene;
- playing clubs and/or weddings; and
- touring (often with a band), playing clubs and festivals and expanding their fan base.

Regardless of how they operate to earn a living, and regardless of whether their

music is simple or complex, performers need highly refined skills. The analytical processes engaged in the context of a contemporary piano class often clarify structural aspects of music that further refine music making. For non-pianists, the piano may more often be used as a compositional tool.

### **COMPONENTS OF A CURRICULUM FOR A DIVERSE POPULATION OF LEARNERS**

Popular music and jazz provide a core of content around which to build a piano class curriculum. I describe below three components of the curriculum that I created that serve as an organizing structure for the classes involved.

#### **Performing**

The contexts within which class piano students might perform in their lives beyond school range from casual living-room song-playing to high-level studio production or professional live performance. All students who enroll in piano class will have opportunities to play for their own enjoyment or in informal social settings, of course. And those who aspire to make the piano a part of their professional performing lives leave with a foundation of skills that include not only technique at the keyboard, but also the confidence that comes from playing for classmates and others throughout the course of the curriculum.

#### **Musical Understanding**

Understanding fundamental structures of music is a core feature of informed musicianship. After two years of piano class, students' perceptions of music grow in sophistication and depth, more clearly recognizing the techniques employed by artists and producers. Students also become more savvy performers, writers, and consumers, and pass on their perspectives through their personal circles of influence. A deeper musical understanding may also facilitate skillful teaching.

## **Effective Learning**

Gaining some measure of control over one's own learning process is empowering. The design of the curriculum I created for this project guides students through experiences that embody principles of effective learning. Students receive concrete instruction that shows them not only what to practice, but how to practice. Fundamental principles of effective learning include: practicing to automaticity; breaking down large tasks into manageable components; expanding fundamental skills by adding complexity and by thinking strategically; and, reflecting critically and creating intentionally. These can be applied in any learning situation.

## **GENERAL PIANO CLASS OUTCOMES**

With input from my colleagues at CU Denver, I developed a set of general outcomes that are applicable to all four levels of piano class. The outcomes are designed so that students and classes may proceed at a pace that is suited to their experiences and capabilities, and are defined in a way that makes it possible for every outcome to be accomplished by every learner. This latter design feature is accomplished by defining outcomes in terms of the nature of skills and not in terms of task difficulty.

- 1) Demonstrate a fundamentally sound understanding of and approach to the keyboard, including piano geography, hand position and fingering, relaxed posture, and appropriate pedaling.
- 2) Identify and apply elements of melody, harmony, rhythm, song form, and style, in analyses, compositions, exercises, and arrangements.
- 3) Perform piano music that is notated in different forms, including grand staff music and lead sheets with chord symbols.
- 4) Transfer acquired skills to various keys (i.e., transpose) and performance contexts (e.g., solo piano, accompaniment, ensemble).
- 5) Demonstrate expressive piano performance—through dynamic and rhythmic

inflection and stylistically appropriate phrasing, articulations, tempo, and rhythmic feel.

6) Sight-read a variety of music, including lead sheets with chord symbols, and notation in treble and bass clef, at a level of difficulty matched to individual students' levels of proficiency.

7) Use the keyboard workstation to create demo recordings of original compositions and to complete projects with LogicPro software.

8) Apply effective practice techniques to attain appropriate levels of mastery over course material.

#### **PIANO CLASS OUTCOMES FOR EACH SEMESTER OF THE COURSE**

In the sections that follow I describe how students demonstrate proficiency in each level of piano class. Outcomes are assessed through the fulfillment of specific assignments and outcomes assessment tests. All students should be able to successfully experience each outcome because the complexity or scope of the various tasks are adjusted to accommodate the needs and preferences of individual students.

Most of these outcomes reflect goals related to performance and musical understanding, whereas goals related to effective learning are transmitted more implicitly within course materials and classroom teaching. Technology-related goals are demonstrated in various assignments throughout the semester, as well as being an implicit aspect of the assessments that are completed in LogicPro.

## **Piano I**

### ***Description***

Piano I is designed for all music majors (except piano performance majors) and is intended to develop fundamental keyboard skills including sight-reading, transposition, and composition. Students also learn to use recording/sequencing software (LogicPro) in conjunction with the keyboard as a MIDI controller. Students learn music from chord symbols and from grand-staff piano notation, as they study and apply melodic, harmonic, and rhythmic concepts in a variety of musical contexts. Students learn guiding principles for effective practicing and receive both group and individualized instruction. Students perform regularly, self-evaluate, and reflect upon their progress. Piano I repertoire focuses primarily on popular styles of the 20<sup>th</sup> and 21<sup>st</sup> centuries, including folk songs, classic “oldies,” and contemporary hit songs.

### ***Piano I Outcomes***

#### **FUNDAMENTALS**

- Play with relaxed wrists, appropriately curved fingers, and easeful upright posture.
- Correctly associate written notation and verbal instructions with the location and movement of hands in different directions (e.g., right and left, up and down) on the keyboard.
- Organize and practice triads in four “shape groups”—C/F/G, A/D/E, Ab/Db/Eb, Bb/B/F#—based on the root position major triad shapes.

#### **KNOWLEDGE, SKILL, AND REPERTOIRE**

- Play major and minor triads in root position in all keys.
- Play major and minor triads in all inversions in multiple keys.
- Play diatonic triads in multiple major and minor keys.
- Minimize hand motion in chord progressions through the use of inversions.
- Harmonize, or “voice,” melodies through the use of inversions.

- Analyze and practice typical chord progressions from popular music, such as I – V – vi – IV, V – vi – IV – I, and IV – I – V – vi.
- Perform and compose diatonic (e.g., I – vi – IV – V) chord progressions.
- Perform and compose chord progressions using major and minor triads, power chords and slash chords.
- Play major scales in all 12 keys—RH, one octave up and down.
- Prepare and perform music from piano notation, Roman numeral analysis, and lead sheets with chord symbols.
- Perform using various RH comping [see p. 119 for a definition of the term “comping”] techniques, such as “chunking,” broken chords, and arpeggios; and LH techniques such as simple bass lines, independent bass lines, alternating bass lines, arpeggios, and 1-5-8 patterns.
- Perform in social settings, both inside and outside of class.

#### MUSICALITY

- Perform with expressive articulation and phrasing, and appropriate stylistic interpretations, including varied dynamics and effective use of the sustain pedal.

#### SIGHT-READING

- Sight-read excerpts of folk songs, popular hit songs, and other repertoire using Roman numerals, lead sheets with chord symbols, and notation in treble and bass clefs.

#### KEYBOARD WORKSTATION

- Use LogicPro software to create recordings of original compositions, and to complete projects with play-along tracks.

*Excerpts from Piano I Outcomes Assessment Test*

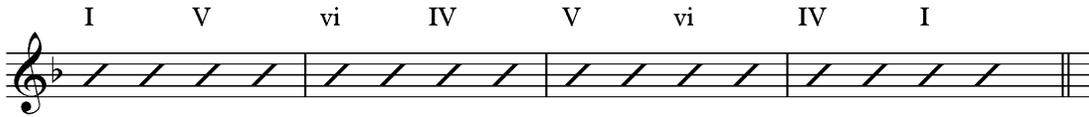
The Piano I Assessment Test covers fundamental skills learned in class, including single-hand sight-reading within the treble and bass clef staves, and the realization of chord progressions from Roman numerals and from chord symbols, using appropriate inversions and accompaniment techniques.

**Sight-Reading:**  
Watch for key signatures and clefs. One hand at a time.  
Play in a steady tempo. ♩ = 70



Figure 6.1: Piano I Assessment Test, Sight-Reading

**Roman Numerals:**  
 Take note of the key signature.  
 Work out the chords as they correlate to the roman numerals.  
 Construct triad voicings using appropriate inversions.  
 Play the progression in a simple medium tempo pop/rock style.  
 Be prepared to play from a count-off as you would in a band.



**Chord Symbols:**  
 Construct chord voicings using appropriate inversions.  
 Play the progression in a simple slow pop/rock ballad style.  
 Use the sustain pedal tastefully.  
 Be prepared to play from a count-off as you would in a band.



Figure 6.2: Piano I Assessment Test, Chord Progressions

Students are also required to perform one short piece of their choosing (approx. 3 min.), and the following version of “Happy Birthday”:



Figure 6.3: Piano I Assessment Test, “Happy Birthday”

## **Piano II**

### ***Description***

In Piano II, music majors continue to develop a comprehensive foundation of contemporary keyboard skills, including sight-reading, practicing, performing, and using the keyboard as a MIDI controller in conjunction with LogicPro. As in Piano I, students learn music from chord symbols and from grand-staff piano notation as they study and apply melodic, harmonic, and rhythmic concepts in a variety of musical contexts. Students review guiding principles for effective practicing, and receive both group and individualized instruction. Students perform regularly, self-evaluate, and reflect upon their progress.

Piano II repertoire continues to focus primarily on popular styles of the 20th and 21st centuries, while expanding harmonic and technical complexity, using 7<sup>th</sup> chords, single staff and grand-staff sight-reading, and two-octave scales. Students have greater autonomy in repertoire choice and composing.

### ***Piano II Outcomes***

Most of the Fundamentals and Knowledge, Skill, and Repertoire outcomes for Piano II are extensions of similar outcomes in Piano I. Musicality, Sight-Reading, and Keyboard Workstation outcomes are unchanged.

#### **FUNDAMENTALS**

- Play with relaxed wrists, appropriately curved fingers, and easeful upright posture.
- Practice techniques and chords systematically using shape groups.
- Utilize inversions and register in performances and compositions.

#### **KNOWLEDGE, SKILL, AND REPERTOIRE**

- Play new chord types, such as sus2, sus4, add2, add4, diminished and augmented, in multiple keys and song excerpts.

- Play all types of 7<sup>th</sup> chords with LH root, RH 7-3-5 voicings [see p. 124 for an explanation of the term “voicing”], in multiple keys.
- Play diatonic 7<sup>th</sup> chords in multiple keys.
- Play standard 7<sup>th</sup> chord progressions and variations in multiple keys.
- Harmonize, or “voice,” melodies from contemporary song charts.
- Analyze selected repertoire using Roman numerals, and identify chord progressions by symbols and Roman numerals.
- Play major scales in all 12 keys—RH, two octaves up and down.
- Perform and compose diatonic and non-diatonic chord progressions using borrowed chords and modulations.
- Prepare and perform music from Roman numeral analysis, grand-staff piano notation, and lead sheets with chord symbols.
- Perform in social settings, both inside and outside of class.

#### MUSICALITY

- Perform with expressive articulation and phrasing, and appropriate stylistic interpretations, including varied dynamics and effective use of the sustain pedal.

#### SIGHT-READING

- Sight-read excerpts of popular hit songs and various other repertoire using Roman numerals, lead sheets with chord symbols, and single staff and grand-staff notation.

#### KEYBOARD WORKSTATION

- Use LogicPro software to create recordings of original compositions, and to complete projects with play-along tracks.
- Use notation software to create standard chord charts.

*Excerpts from Piano II Outcomes Assessment Test*

**Sight-Reading:**  
Watch for key signatures and clefs. One hand at a time.  
Play in a steady tempo. ♩ = 80



Figure 6.4: Piano II Assessment Test, Sight-Reading

**Roman Numerals:**  
 Take note of the key signature.  
 Work out the chords as they correlate to the roman numerals.  
 Construct triad voicings using appropriate inversions.  
 Play the progression in a simple medium tempo pop/rock style.  
 Be prepared to play from a count-off as you would in a band.

IV      iv      I      vi      bVII      V7sus4      Isus4      I

**Chord Symbols:**  
 Construct chord voicings using appropriate inversions.  
 Play the progression in a simple slow pop/rock ballad style.  
 Use the sustain pedal tastefully.  
 Be prepared to play from a count-off as you would in a band.

B $\flat$       F/A      A $\flat$       G<sup>aug</sup>      C<sup>min7</sup>      F<sup>7</sup>      B $\flat$ <sup>maj7</sup>

Figure 6.5: Piano II Assessment Test, Chord Progressions

## **Piano III**

### ***Description***

Piano III is intended for music majors with a serious interest in the piano and is designed to continue the development of contemporary keyboard skills, including practice and performance skills, sight-reading, transposition, improvisation, composition, and advanced stylistic techniques. As in Piano I and Piano II, students continue to learn music from chord symbols and grand-staff notation as they study and apply melodic, harmonic, and rhythmic concepts in a variety of musical contexts. Students review guiding principles for effective practicing, and receive both group and individualized instruction. Students perform regularly, self-evaluate, and reflect upon their progress.

Piano III repertoire reinforces the uses of 7<sup>th</sup> chords (including common alterations and substitutions), RH melodic playing, and more advanced LH techniques (including rootless chord voicings and shells). Students sight-read grand-staff notation and play two-octave melodic minor scales. Students have a great deal of autonomy in repertoire choice and composing.

### ***Piano III Outcomes***

Most of the Fundamentals and Knowledge, Skill, and Repertoire outcomes for Piano III are either duplications of Piano II outcomes or extensions of similar outcomes at a greater level of complexity. Musicality, Sight-Reading, and Keyboard Workstation outcomes are the same as those in previous classes.

### **FUNDAMENTALS**

- Practice techniques and chords systematically using shape groups.
- Use advanced harmonic concepts and advanced stylistic piano techniques in performances and compositions.
- Apply fundamental principles of effective learning in practice and performance.

## KNOWLEDGE, SKILL, AND REPERTOIRE

- Play diatonic 7<sup>th</sup> chords in multiple keys.
- Play various types of 7<sup>th</sup> chords using variations on the 7-3-5 voicing (e.g., add9, #5).
- Play standard 7<sup>th</sup> chord progressions such as the ii–V–I in multiple keys.
- Play ii–V progressions using the “secret formula”—dropping the 7 of the ii down a half step.
- Harmonize, or “voice,” melodies from contemporary song charts and jazz standards.
- Analyze selected repertoire using Roman numerals, and identify progressions presented aurally.
- Play major and melodic minor scales in all twelve keys—RH, two octaves up and down.
- Prepare and perform music from grand-staff piano parts and lead sheets with chord symbols.
- Perform and compose diatonic and non-diatonic chord progressions using borrowed chords, modulations, altered chords, and substitutions.
- Perform using more complex RH techniques—variations on standard comping techniques, using more syncopated rhythms, stylistic variations, RH melody—and LH techniques such as complex bass lines, boogie-woogie patterns, or rootless voicings.
- Perform in social settings, both inside and outside of class.

## MUSICALITY

- Perform repertoire using appropriate solo piano, ensemble, or accompanying techniques.
- Perform with expressive articulation and phrasing, and appropriate stylistic interpretations, including varied dynamics and effective use of the sustain pedal.

## SIGHT-READING

- Sight-read excerpts of popular hit songs and various other repertoire using Roman numerals, lead sheets with chord symbols, and grand-staff notation.

## KEYBOARD WORKSTATION

- Use LogicPro software to create recordings of original compositions, and to complete projects with play-along tracks.
- Use notation software to create chord charts.

### *Excerpts from Piano III Outcomes Assessment Test*

As in Piano I and II, students also play scales and a short repertoire piece.

Songwriter



A musical score for a piece titled "Songwriter". It is written for piano in G major (one sharp) and 4/4 time. The score consists of two staves: a treble clef staff and a bass clef staff. The treble staff begins with a whole rest, followed by a series of chords: G4, A4, B4, C5, B4, A4, G4, and F#4. The bass staff begins with a whole rest, followed by a series of chords: G2, A2, B2, C3, B2, A2, G2, and F#2. The piece concludes with a double bar line.

Jazz Piano



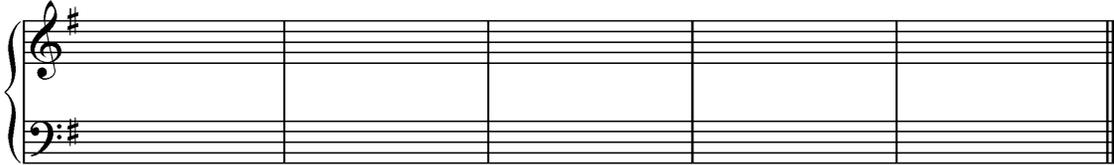
A musical score for a piece titled "Jazz Piano". It is written for piano in B-flat major (two flats) and 4/4 time. The score consists of two staves: a treble clef staff and a bass clef staff. The treble staff begins with a whole rest, followed by a series of chords: Bb4, C5, Bb4, Ab4, Gb4, Fb4, Eb4, and Dbb4. The bass staff begins with a whole rest, followed by a series of chords: Bb2, C3, Bb2, Ab2, Gb2, Fb2, Eb2, and Dbb2. The piece concludes with a double bar line.

Figure 6.6: Piano III Assessment Test, Sight-Reading

**Roman Numeral Reading**

Write out the chord symbols, and then voicings for the following chords.  
Keep the melody as the top note of your voicing.  
Be prepared to play in a slow steady tempo.

I    bVII    bVI    bVII    I    iv    iii    VI    ii    V



**Chord Symbol Reading**

Start with 7-3-5 voicings, and continue with good voice leading.  
Be prepared to play at a medium tempo 2x through.

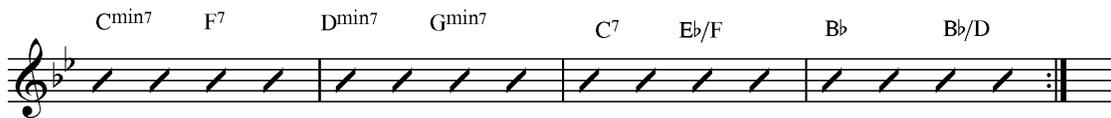


Figure 6.7: Piano III Assessment Test, Chord Progressions

## **Piano IV**

### ***Description***

Like Piano III, Piano IV is designed for music majors with a serious interest in the piano and who wish to continue their development of contemporary keyboard skills, including practice and performance skills, sight-reading, transposition, improvisation, and composition. Students continue to learn music from chord symbols and grand-staff piano music as they study and apply melodic, harmonic, and rhythmic concepts in a variety of musical contexts. Students review guiding principles for effective practicing, and receive both group and individualized instruction. Students perform regularly, self-evaluate, and reflect upon their progress.

In Piano IV, with the introduction of more melodic playing in the right hand, students go deeper into advanced stylistic techniques, including *montunos* [see p. 228 for an example and explanation of the term “montuno”], jazz voicings, and chorale-style spread voicings. Piano IV repertoire includes grand staff notated Western art music pieces notated on the grand-staff and advanced popular/jazz lead sheets that require voicing melodies. Students have a great deal of autonomy in repertoire choice and composing, including opportunities to interpret melodies and re-harmonize progressions.

### ***Piano IV Outcomes***

Most of the Knowledge, Skill, and Repertoire outcomes for Piano IV are either duplications of Piano III outcomes or extensions of similar outcomes at greater levels of complexity. Fundamentals, Musicality, Sight-Reading, and Keyboard Workstation outcomes are the same as those in the previous courses.

#### **FUNDAMENTALS**

- Play with relaxed wrists, appropriately curved fingers, and relaxed upright posture.
- Practice techniques and chords systematically using shape groups on the piano.

- Use advanced harmonic concepts and execute advanced stylistic piano techniques intentionally in performances and compositions.
- Prepare and perform music from Roman numeral analysis, grand-staff piano notation, and lead sheets with chord symbols.
- Apply fundamental principles of effective learning and musical cognition in practice and performance.

#### KNOWLEDGE, SKILL, AND REPERTOIRE

- Play various types of 7<sup>th</sup> chords in both 7-3-5 and 3-7-9 voicings.
- Play chords in three ways: 1) LH bass notes, RH chords, 2) LH chords, RH upper structures, and 3) LH-RH two hand spread voicings using LH shells.
- Harmonize, or “voice,” melodies from contemporary song and standard jazz charts.
- Analyze selected repertoire using roman numerals, and practice aural recognition of progressions.
- Play major and melodic minor scales in all twelve keys—RH, four octaves up and down.
- Perform and compose using standard 7<sup>th</sup> chord progressions such as the ii–V–I, and variations (including sus chords and altered dominants) in multiple keys.
- Perform and compose using more complex RH techniques, such as *montunos*, RH melody and improvisation, and LH techniques such as walking bass lines and stride.
- Perform repertoire using appropriate solo piano techniques, ensemble or accompanist techniques.
- Review and apply standard components of song form in composition, including different ways of labeling sections, typical lengths of sections, common places to repeat sections, modulate, and vary the form.
- Perform in social settings, both inside and outside of class.

#### MUSICALITY

- Perform repertoire using appropriate solo piano, ensemble, or accompanying techniques.
- Perform with expressive articulation and phrasing, and appropriate stylistic interpretations, including varied dynamics and effective use of the sustain pedal.

#### SIGHT-READING

- Sight-read grand staff notation and lead sheets with chord symbols in multiple keys.

#### KEYBOARD WORKSTATION

- Use LogicPro software to create recordings of original compositions, and to complete projects with play-along tracks.
- Use notation software to create chord charts.

#### *Excerpts from Piano IV Outcomes Assessment Test*

As in Piano I, II, and III, students also play scales and a short repertoire piece.

The image displays two musical excerpts for sight-reading, each presented as a grand staff (treble and bass clefs).

The first excerpt, titled "Classical Piano", is in the key of D major. The treble clef part features a melodic line starting with a quarter note D, followed by eighth notes E, F#, G, A, B, C, D. The bass clef part provides harmonic support with chords: D major (D, F#, A), D major (D, F#, A), and D major (D, F#, A). A triplet of eighth notes (G, A, B) is marked with a "3" above it in the final measure.

The second excerpt, titled "Funky Piano Riff", is in the key of B minor. The treble clef part features a melodic line starting with a quarter note B, followed by eighth notes A, G, F, E, D, C, B. The bass clef part provides harmonic support with chords: B minor (B, D, F), B minor (B, D, F), and B minor (B, D, F). The piece concludes with a final chord in the bass clef.

Figure 6.8: Piano IV Assessment Test, Sight-Reading

**Chord Symbol Reading**

Start with a 7-3-5 voicing, then utilize good voice leading.  
Be prepared to play at a medium tempo, 2x through.

B $\flat$ min7 E $\flat$ 7 Amin7 D7 Gmin7 C7 Fmaj7 A7(#5)

B $\flat$ maj7(add9) A7(b9) Dm7(add9) G7 C7(sus4) Fmaj7(add9)

**Roman Numeral Reading**

Write out the chord symbols, and then two hand spread voicings  
for the following seventh chords using LH shells.  
Begin with LH 1-7, RH 3-5-9.  
Be prepared to play in a slow steady tempo.

I maj7 bIII maj7 bVI maj7 ii min7 V7 bII maj7 I maj7

Figure 6.9: Piano IV Assessment Test, Chord Progressions

## **Chapter Seven:**

### **Development and Refinement of the Method**

This is an exciting time to be developing initiatives—a time of change and opportunity. . . (Covach, 2013).

The challenge. . . is to include pop music in the curriculum in ways that have musical integrity. New techniques and modes of instruction need to be devised and incorporated into every aspect of music education (Cutietta, 1991).

When I introduced the first version of the first method book in the Spring semester of 2013, I received varied and valuable feedback from instructors in my department at CU Denver. Some commented on the tone and voice of the narrative, for example, and others offered suggestions for additional repertoire. As I taught using the first edition, I also recognized that revisions were warranted and that additional materials were needed to provide supplementary exercises in all levels to offer students and instructors more repetition and variation.

The process of revision is ongoing. I keep a list that now includes dozens of songs that can be used as examples of specific techniques and progressions. And as our student population and instructors gain familiarity with the method, the appropriate goals for each level of piano class become more clearly focused. The revision process is exciting, and I enjoy that these methods are “living documents” with new content being created every year.

#### **RATIONALE FOR CHORD-FOCUSED CONTENT**

The piano and keyboard parts in many popular songs employ similar techniques that are not very complicated and are often easily playable even by students with limited technical proficiency; however, much of the available piano sheet music for current

popular music is not actually transcribed from professional recordings. Rather, piano sheet music often represents a reduction of the entire piece—the bass line, the piano part, and the vocal melody all notated on a grand-staff piano part. Such parts are very difficult to read and perform. In some instances, piano arrangements are reduced in a way that may be manageable for a novice player but represent an overly simplified rendition of the original performance, most often including a melody played by the right hand that is actually sung, not played, on the original recording.

In a chordal-accompaniment approach to popular music, students learn piano parts as they actually are composed and performed on the original recordings. When necessary, these parts may be simplified to make them more manageable for a novice pianist, but in a way that retains the sound of the original, using the same techniques used by the professionals who crafted the parts. There is an important difference between students performing beginner-level piano arrangements that depart substantially from the original recording and playing the actual piano part of a familiar song along with the original recording. Playing the actual piano parts of popular songs illuminates how the piano is used in professional performance and recording; develops skills that can translate directly into professional music settings; and affords students opportunities to understand, learn, and play music that friends, family, and students themselves know and enjoy.

Chords and chord progressions can be taught in a flexible hierarchy of difficulty, so that advanced students can perform together with less advanced students, playing the same repertoire at different levels of complexity (for example, see the versions of “Happy Birthday” on p. 95-96, and the versions of “Lean on Me” on p. 97-98). Chords offer a quickly accessible pathway to composition, as well as a connection to fundamental music theory lessons. Additionally, chords establish the conceptual foundation for more advanced repertoire without requiring levels of piano technique that are too difficult for novices.

Human memory often organizes series of elements into groups or “chunks,” which facilitates the storage and recall of declarative and procedural memories (e.g., Feltovich, et al., 2006; Miller, 1956; Verwey, 2003). The purpose, then, of learning chords is not only musical. It is related to how humans learn.

Chords are often taught from notation or at the keyboard by counting intervals—four half-steps up to a major third, and three half-steps up from there to the fifth degree of the scale. Shapes, on the other hand, provide visual and physical templates for chord structure, which may facilitate novices’ conceptions of chords as unitary constructs rather than collections of individual tones or intervals. Thus, when students learn chords in piano, they learn shapes. And when students learn chords *as shapes*, they bypass the cumbersome interval-counting method.

Learning chords as shapes also facilitates memorization. The 12 major keys can be chunked into four groups of shapes. Before learning even one scale, students can learn the shapes of chords, and the groups of shapes, and very quickly can learn to play basic chord progressions in any key. This is not an argument against learning scales. It is, however, a shift away from learning scales as a prerequisite to learning chords.

#### **EXAMPLES OF ASSIGNMENTS IN THE METHOD**

Exercises, play-along assignments, compositions, and repertoire performances are the core of demonstrating learning. The method is designed to approach most content in two or more of these activities. For example, in a section on “The ‘Four Chord Song(s)’” (Workbook I, p. 40), I provide a theoretical explanation, examples in the key of C major and A minor, and additional variations with examples from popular songs in the keys of the original recordings that can be learned for performance (Figure 7.1). I include a composition assignment and an opportunity to use the keyboard workstation to create a demo recording (p. 42) (Figure 7.2). I also provide digital play-along recordings in multiple keys that students may use for at-home or in-class practice.

## The “Four Chord Song(s)”

The typical “four chord song” uses a combination of four diatonic chords—one minor chord and three major chords. In major keys that is the I, IV, V, and vi chords. In minor keys, it is the same progression as the major four chord song, except starting on the minor i chord. Look at the visuals below and you will get a contextualized example of how the chord symbols are universal while the analysis is relative.

### Minor Four Chord Song

Key of A minor: i                       $\flat$ VI                       $\flat$ III                       $\flat$ VII



### Major Four Chord Song

Key of C major: I                      V                      vi                      IV

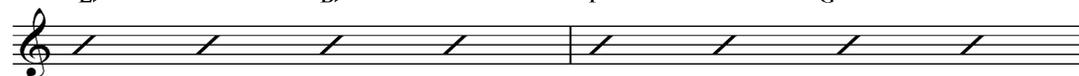


A popular variation on the Four Chord Song is to start on the IV chord. Among the hundreds of songs that use this progression are recent hits such as The Script’s *Falling to Pieces*.

Key of B $\flat$  major:

IV                      I                      V                      vi

E $\flat$                       B $\flat$                       F                      G<sup>min</sup>



Another popular variation on the Four Chord Song is to use the ii minor chord instead of the vi. Cher’s huge hit from 1998, *Believe*, uses this progression:

Key of A $\flat$  major:

I                      V                      ii                      IV

A $\flat$                       E $\flat$                       B $\flat$ <sup>min</sup>                      D $\flat$

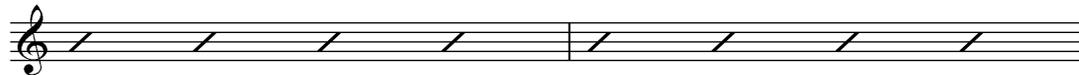


Figure 7.1: The “Four Chord Song(s)”

### Composition

Write a Four Chord Song. Use one of the above progressions' Roman numerals as a template. Choose a key, work out the chords, and experiment with techniques until you find a way to play your progression that sounds good to you. Once you've done one, compose another using a different variation and a different key.

Four Chord Song 1



Four Chord Song 2



### LogicPro Application

Now is a good opportunity to create a track with LogicPro. Choose one of your four chord progressions and record it on LogicPro.

To reduce or increase the challenge, add constraints such as composing in specific key(s), using specific techniques, composing more bars (8, 12, 16...) or less bars (2 bars repeating).

Figure 7.2: Four Chord Song Composition and LogicPro Application

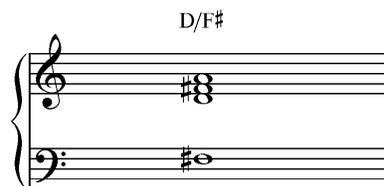
A lesson on “Leading Tone Slash Chords” (Workbook II, pp. 12-14) provides an example of a more complex content area that employs multiple approaches. In order to illustrate the relevance of this fairly complex concept, I offer the example of a popular hit song, Sarah Bareilles’s “Love Song.” After students work through the basics of the progression from “Love Song,” they complete a quiz and a concrete assignment (Figure 7.3 and 7.4).

#### 4) Leading tone slash chords

Leading tone slash chords are really, really important. Seriously, don't skip this.

Do you know what the leading tone is? It's the note one half step below the root. In *solfege*, that's "ti," and it leads to "do." In numbers, it's 7, and it leads to 8 (or 1). So you know what the leading tone is. Now the slash chord...

Take a look at this leading tone slash chord—play it, and try to understand it before I explain it.



Question: What note is the leading tone? And where is it leading?

Answer: The leading tone is F#, and it's leading to G.

What's important to understand now is that this is not an F# chord. It's a D chord. D is the V chord in the key of G. F#, the leading tone, is the 7 of G. But also, F# is the 3 of D. Ooh, the relationships get complicated, don't they?

So here's the deal with the leading tone slash chord: It's just a V chord over its own third (instead of its root). D is the V in the key of G, the third of D is F#, and F# is the leading tone of G. Hence, the D/F# chord—the *leading tone slash chord*. These chords are all over popular music today. A great example is Sarah Bareilles's *Love Song*. Check it out:

<p>LT Slash Chord Leading To G</p> <p>D/F# G<sup>min</sup></p>	<p>LT Slash Chord Leading To Bb</p> <p>F/A B<sup>b</sup>(sus2)</p>	<p>LT Slash Chord Leading To F</p> <p>C/E F</p>	

Traditional harmony has analyses of the leading tone slash chord, based on the inversion and function, but that misses out on the chord's transferability. The coolest thing about leading tone slash chords is that you can use them *anywhere*. They sound great even when they're *not* leading anywhere. And also, you can use them to lead to *wherever* you want to go. If you want to lead to G, a great option is D/F#. If you want to lead to C, use G/B.

**Quiz:** Choose a chord, major or minor, and then figure out and play the corresponding leading tone slash chord and resolve it to your chosen chord. For example: you choose D<sup>min</sup>. The LT slash chord is \_\_\_? A/C#. Play A/C# and resolve it to D<sup>min</sup>.

Figure 7.3: Leading Tone Slash Chords

## Assignment

Play through the exercise below. If you are ambitious, start the progression a half-step higher, on A  $\flat$  /C, and play through the other 6 keys. To take it to the next level beyond, substitute sus 2 chords in your LT Slash Chords. e.g., G<sup>sus2</sup>/B

### Leading Tone Slash Chord Chromatic Exercise

To Major

G/B C A/C# D B/D# E Db/F Gb Eb/G Ab F/A Bb G/B C

C G/B Bb F/A Ab Eb/G Gb Db/F E B/D# D A/C# C

To Minor

G/B Cmin A/C# Dmin B/D# Emin Db/F Gbmin Eb/G Abmin F/A Bbmin G/B Cmin

Cmin G/B Bbmin F/A Abmin Eb/G Gbmin Db/F Emin B/D# Dmin A/C# Cmin

Figure 7.4: Leading Tone Slash Chord Chromatic Exercise

Assignments (in class and out of class) are vehicles for demonstrating learning in ways that are appropriate for individual students of varied abilities. For example, students in the Piano III class “play standard 7<sup>th</sup> chord progressions such as the ii–V–I in multiple keys.” For students with a jazz background the execution of a ii–V progression will come quickly because it is so familiar. For others, it may be entirely new and may require time to learn and master. But students can learn a 7-3-5 voicing of a 7<sup>th</sup> chord very quickly, and learn to play a ii–V progression using the secret formula, as I call it: “Drop the 7 of the ii down a half step” (Workbook II, p. 26).

Play the ii – V progression in the key of C as written below. Don’t forget to move your LH from D to G. And really get a feel for the 7 of the ii going down a half step.

ii-V in C

The 7 of the ii

D<sup>min</sup>7                      G<sup>7</sup>

Figure 7.5: ii-V Progression in the Key of C

Students are then directed to practice the “Major ii-V-I progressions” worksheet (Figure 7.6).



1. Discuss applications of the “secret formula,” responding to questions posed by the teacher.
2. Students play a ii–V–I in the key of C major, in unison at a slow tempo.
3. Students vamp the ii–V–I in a steady tempo for a minute or two while the teacher walks from station to station observing and offering feedback.
4. Students put on headphones and practice the worksheet transpositions at their own pace.
  - a. Advanced students transpose to more keys.
  - b. Struggling students transpose to at least one key.
  - c. The teacher walks from station to station offering feedback (e.g., “Great! Now try it in the key of E and F. . .” “Make sure to use your thumb on the 7, like this [model on the student’s keyboard]. . .” or “That note is wrong. Slow it down and pay close attention to the notes. . .” etc.).
5. With headphones unplugged, students vamp a ii–V–I in unison

#### **EXAMPLES OF PLAY-ALONG ASSIGNMENTS IN THE METHOD**

Play-along assignments provide structure for students in that the chords are predetermined, as are the style, tempo, and other instrumental parts. In these assignments, students download digital play-along files from the class website, insert their play-along file into an empty project in LogicPro, and then record their own piano or keyboard track along with it. Then they can edit and add to their project as they wish or as instructed, and finally upload a digital recording back to the class website for assessment.

Play-along assignments allow students to work at their own pace. In this setting,

ambitious students can get creative with their piano technique, but all students experience applying their knowledge and skills in a stylistically authentic context. Students use the keyboard workstation, honing their fundamental skills with the technology and using digital tools such as editing and quantizing to craft a studio-quality piano part. And all of the above is done in a condensed, manageable context that can be accomplished during a portion of a class period.

After step 5 in the instructional sequence outlined above, students can complete a play-along assignment:

1. Download a digital play-along from the class website and drag it into LogicPro.
2. Download the .pdf chart for the play-along assignment (Figure 7.7).
3. In 20 minutes, record a solid piano part, playing this progression with RH chords and LH bass notes, starting each measure in a 7-3-5 voicing, and using the ii-V secret formula.

### ii - V Play-Along



Figure 7.7: ii-V Play-Along

In Workbook I (p.18), when students learn to play power chords (see Figure 7.8), I use a digital play-along to practice in class as a group, and for students to create their own track on LogicPro. I model variations for students who are ready for a challenge. As the class plays along with the recording, I walk through the room and offer individualized assistance.

### Progressions with a Power Chord

Chunk your power chord with the RH. Meanwhile, with the LH, hit and hold four different notes in succession—C, G, A, F. This will create, essentially, a **chord progression**—even without changing the RH. This particular “four chord song” has been one of the most-used chord progressions in pop music since U2’s 1987 hit, *With or Without You*. In the first 14 years of the 21<sup>st</sup> century, countless hit songs have utilized this progression, but it can be traced back at least as far as Bob Marley’s 1974 hit, *No Woman No Cry*.

Musical notation for a C major power chord progression. The right hand (RH) plays a power chord (C5) in the treble clef, consisting of the notes C4, E4, and G4. The left hand (LH) plays a sequence of four notes in the bass clef: C3, G2, A2, and F2. The progression is labeled with chords: C<sup>5</sup>, C<sup>5</sup>/G, C<sup>5</sup>/A, and C<sup>5</sup>/F.

### Practicing Power Chords

Check the boxes  when you are able to play the progressions with ease.  
For a professional sound, use the sustain pedal. Lift when you change each bass note.

1)

Musical notation for a D major power chord progression. The right hand (RH) plays a power chord (D5) in the treble clef, consisting of the notes D4, F#4, and A4. The left hand (LH) plays a sequence of four notes in the bass clef: D3, A2, B2, and G2. The progression is labeled with chords: D<sup>5</sup>, D<sup>5</sup>/A, D<sup>5</sup>/B, and D<sup>5</sup>/G.

2)

Musical notation for a D minor power chord progression. The right hand (RH) plays a power chord (D<sup>b</sup>5) in the treble clef, consisting of the notes D4, F4, and A4. The left hand (LH) plays a sequence of four notes in the bass clef: D3, A2, B2, and G2. The progression is labeled with chords: D<sup>b</sup>5, D<sup>b</sup>5/A<sup>b</sup>, D<sup>b</sup>5/B<sup>b</sup>, and D<sup>b</sup>5/G<sup>b</sup>.

**Play Along Assignment:** Download the “Play Along Four Chord Jam” track(s), depending on which key you want to practice in; insert the mp3 file into LogicPro; and record yourself playing along using a power chord technique.

Figure 7.8: Power Chords Progression, Practice, Play-Along

Sometimes, during class, I spontaneously create digital play-along tracks with mini lead sheets, such as this one:



Figure 7.9: Spontaneous Lead Sheet for Play-Along

The first time I created this progression with a digital play-along recording, I posted it online for students to download. Students enjoyed the progression so much that I made it an assignment in the next edition of Workbook II (p. 16).

**Play Along Track**

Insert the *Play along add, sus, LT slash chords* mp3 into LogicPro and record a piano track along with it playing the progression below (tempo = 88).



Figure 7.10: Play-Along Assignment (add, sus, LT slash chords)

Each semester, I create more play-along assignments in this way. Some may become assignments in Workbooks, and others may be reused extemporaneously in future semesters. The following example is a progression that I created for a classic Soul style play-along track.

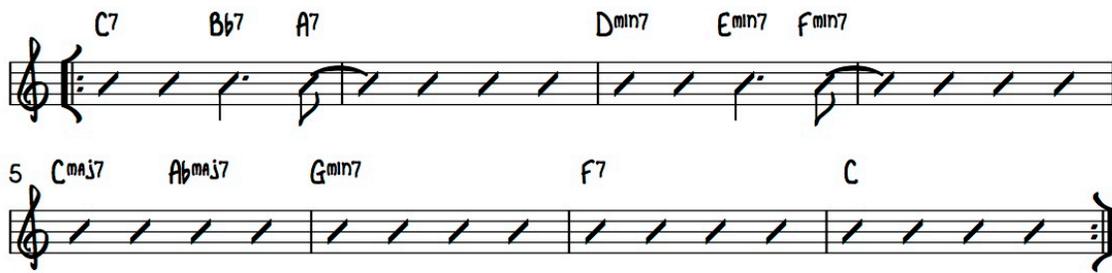


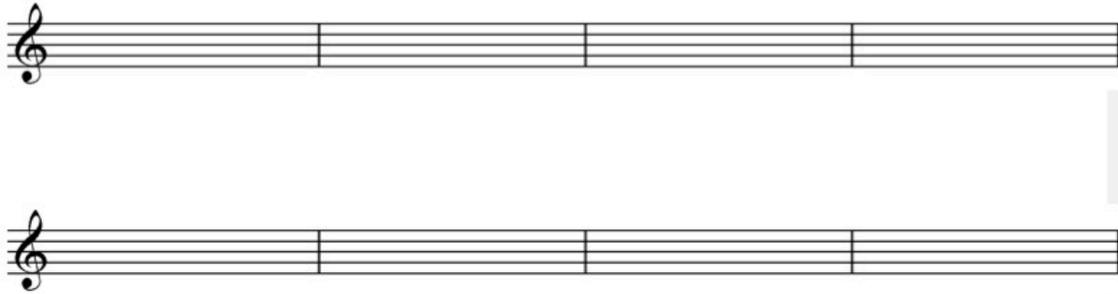
Figure 7.11: 7<sup>th</sup> Chord Play-Along Progression

### EXAMPLES OF COMPOSITION ASSIGNMENTS IN THE METHOD

Composition assignments are also vehicles for students to fulfill instructional goals at their own pace in ways that match their individual interests and capabilities. Compositions provide opportunities for students to independently apply analytical and stylistic tools within specific parameters. Some composition assignments are simple tasks like writing chord symbols and playing simple chords. Other assignments involve notating grand staff piano parts. Large-scale composition assignments direct students to describe and employ not only stylistic and technical elements but also structural elements.

1) Writing chord symbols and playing simple chords (Workbook II, p. 16).

**Composition:** Compose your own 4 bar chord progressions using non-diatonic chords.



**LogicPro Application**

Now is another good opportunity to create a track with LogicPro. Choose one of your four bar progressions and record it on LogicPro.

To reduce or increase the challenge, add constraints such as composing in specific key(s), using specific techniques, composing more bars (8, 12, 16...) or less bars (2 bars repeating).

Figure 7.12: 4-Bar Chord Progression Composition

2) Writing out the grand staff piano part (Workbook II, p. 49).

**Assignment part 2:**

Compose a 4-bar chord progression, applying one of your favorite new techniques.

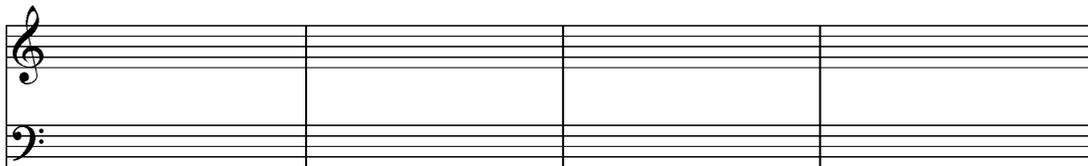


Figure 7.13: 4-Bar Composition Using New Techniques

### 3) Employing stylistic, technical, and structural elements (Workbook II, p. 47).

Write out the parameters of your composition here:

Song Form:

Technique:

Chord Types:

On the following page, write your song chart.

- 1) Fit four bars onto each line (aka "system")
- 2) Label the sections with boxed text
- 3) Write chord symbols above either the melody or slashes (one slash per quarter note)
- 4) Write a treble clef, the time signature and key signature
- 5) Give the song a title and write it at the center-top of the page
- 6) Write your name on the upper right side of the page
- 7) Write any distinguishing style or tempo marks above the first bar

Figure 7.14: Composition Parameters

#### **EXAMPLES OF REPERTOIRE IN THE METHOD**

The assignment of performance repertoire is adapted according to the needs of individual students. For every instructional goal, there are many different songs that provide opportunities for application, practice, and refinement. Students can be presented with a choice of repertoire to prepare and perform, finding songs that are musically appealing and effective for practicing the instructional goals.

The songs below each use close inversions (Workbook I, p. 25).

# Repertoire

## Closest inversions

### *Happy Birthday*

Chord progression: C G G C C F C/G G C

The score for "Happy Birthday" is in 3/4 time. The right hand (RH) plays chords in close inversions, while the left hand (LH) plays a simple bass line. The chords are: C (C4, E4, G4), G (B3, D4, F4), G (B3, D4, F4), C (C4, E4, G4), C (C4, E4, G4), F (F4, A4, C5), C/G (C4, G4, B4), G (B3, D4, F4), and C (C4, E4, G4).

### *Sweet Home Alabama* (E. King, G. Ross, R. Van Zant)

Chord progression: D C G

The score for "Sweet Home Alabama" is in 4/4 time. The right hand (RH) plays chords in close inversions, while the left hand (LH) plays a simple bass line. The chords are: D (D4, F#4, A4), C (C4, E4, G4), and G (B3, D4, F4).

### *Twist and Shout* (P. Medley & B. Russell)

Chord progression: F Bb C

The score for "Twist and Shout" is in 4/4 time. The right hand (RH) plays chords in close inversions, while the left hand (LH) plays a simple bass line. The chords are: F (F4, A4, C5), Bb (Bb4, D5, F5), and C (C4, E4, G4).

Figure 7.15: Repertoire Using Close Inversions

The excerpt below of “How to Save a Life” contains arpeggiated chords in the LH underneath a melody in the RH, which exemplifies the application of Alberti-bass technique in a popular music context.

“How to Save a Life” (Isaac Slade, The Fray)

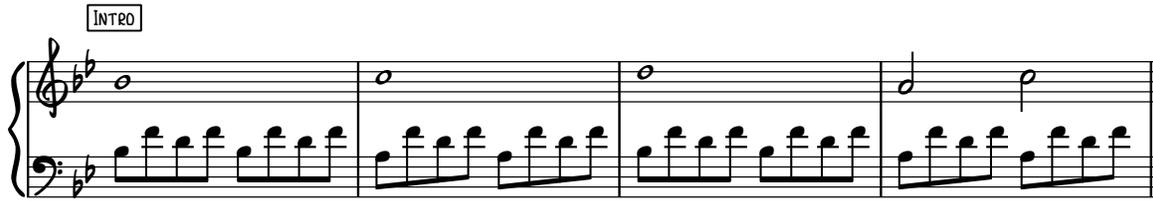


Figure 7.16: “How to Save a Life” Excerpt

This style of accompaniment is somewhat atypical in popular music, however. Much of popular music is performed with the RH playing chord-based parts and the LH playing roots and bass lines. Below (Figure 7.17-7.19) are excerpts from John Lennon’s “Imagine,” Alicia Keys’ “If I Ain’t Got You,” and Adele’s “Someone Like You.” Lennon’s piano part is in the key of C, using eighth notes; Keys’ is in the key of G, using eighth-note triplets; and Adele’s is in the key of A, using sixteenth notes. Each one of these famous piano parts is a chord-based accompaniment. None of them includes a melody, although melodic lines are implied by the chord progressions and inversions. Playing melodies is simply not the piano’s primary function in a great deal of popular music. Modern popular songs, including One Republic’s “Apologize,” Bruno Mars’s “When I Was Your Man,” Ben Folds’s “The Luckiest,” Regina Spektor’s “Us,” and many others are performed with RH chord-based parts. The same is true for multiple generations of quintessential popular piano songs, such as Billy Joel’s “Piano Man,” Bruce Hornsby’s “The Way It Is,” Michael McDonald’s “What A Fool Believes,” Nina Simone’s “My Baby Just Cares For Me,” and Journey’s “Don’t Stop Believing.” All have certain melodic aspects, but utilize RH chords and LH bass notes throughout.

“If I Ain’t Got You” (Alicia Keys)

The musical score for the piano accompaniment of "If I Ain't Got You" is written in 3/4 time with a key signature of one sharp (F#). The piece features a prominent triplet pattern in the right hand. The first system consists of four measures, with the first two measures marked with a Cmaj7 chord and the last two with a Bmin7 chord. The second system also consists of four measures, with the first two marked with an Amin7 chord and the last two with Gmaj7, Amin7, and Bmin7 chords. The bass line is mostly sustained notes, with some movement in the second system.

Figure 7.17: “If I Ain’t Got You” Excerpt

“Imagine” (John Lennon)

The musical score for the piano accompaniment of the intro to "Imagine" is written in 4/4 time with a key signature of one sharp (F#). It is labeled as an "INTRO" in a box. The piece features a steady eighth-note bass line in the left hand and a melody in the right hand that includes some sixteenth-note runs. The melody starts with a series of chords and then moves to a more active line.

Figure 7.18: “Imagine” Excerpt

“Someone Like You” (Adele)

The musical score for the piano accompaniment of "Someone Like You" is written in 3/4 time with a key signature of two sharps (D#). The piece features a complex, flowing melody in the right hand with many sixteenth and thirty-second notes. The left hand provides a simple harmonic accompaniment with sustained notes and some movement.

Figure 7.19: “Someone Like You” Excerpt

There are, of course, a variety of musical contexts and repertoire in which the piano does play the melody. Once students develop competent two-hand piano skills, they can play more melodies that are not overly simplified or decontextualized. The method incorporates two ways to introduce playing a melody in the RH—one is to continue chords in the RH and bass parts in the LH, but “voice the melody” with the RH chords; the other is to play the melody in the RH while the LH takes the accompaniment function.

Figure 7.20 shows five different versions of “Happy Birthday.” Version 1 is the closest to what most traditional class piano students will be able to play, in which the right hand plays the melody and the left hand plays chords. Version 2 is very simple—easy to learn, play, and transpose—with the left hand continuing to use the lower register. The LH can add an octave below and fill out the lower register even further, as in Version 3. Version 4 offers a bit more complexity, with the left hand adding leading tone transitions between chords, and the right hand playing with a bit more rhythm. And for students who are advanced and ambitious, Version 5 presents a way of voicing the melody with RH chords.

1) Simple RH melody version with LH chords

2) Simple chordal accompaniment version

3) Simple chords with octaves in the LH

4) RH chords with more rhythm in sync with the melody, and LH bass notes using leading-tone-slash-chord approaches.

Figure 7.20: “Happy Birthday” Examples 1-4

5) More complex chordal accompaniment using inversions to voice the melody

The image displays two systems of musical notation for piano accompaniment in 3/4 time. The first system consists of six measures. The top staff (treble clef) contains a melody of quarter notes: G4, A4, B4, G4, F4, E4. The bottom staff (bass clef) contains a bass line of quarter notes: C3, G2, F2, E2, D2, C2. Chords are indicated above the treble staff: F/C (measure 2), C (measure 3), G (measure 4), G7 (measure 5), G7/B (measure 6), and C (measure 7). The second system also consists of six measures. The top staff contains a melody: G4, A4, B4, G4, F4, E4, D4, C4. The bottom staff contains a bass line: C3, G2, F2, E2, D2, C2, B1, A1. Chords are indicated above the treble staff: C (measure 1), C/E (measure 2), Fdim7 (measure 3), F (measure 4), C/G (measure 5), G7 (measure 6), C (measure 7), and C7 (measure 8). A triplet of eighth notes (G4, A4, B4) is marked with a '3' above it in the seventh measure of the top staff.

Figure 7.20: “Happy Birthday” Example 5

Playing songs on the piano that “sound full” by using a wider range of the instrument creates a musical effect that invites people to sing and move their bodies along with the music. Version 1, because all of the notes in the arrangement are voiced in the middle to upper register, tends to be unsatisfying to adult listeners (unless a bass player gets involved). Yet, even the notion of “listeners” seems inapt for a song like “Happy Birthday.” “Happy Birthday” is meant to be sung by a group of people, with enthusiasm more importantly than with precision. Almost all popular music is meant to be experienced in a social context.

In Figure 7.21 below, students use inversions to voice the melody of Bill Withers’ classic song, “Lean on Me.” Students in first- and second-semester piano class work on this classic tune in increasingly difficult versions. Version 1 is a typical informal-learning version, similar to how “The Piano Guy” (PianoGuyTV, 2007) teaches viewers on YouTube. This is the easiest version to play, since both hands move in exactly parallel

motion, and the right hand plays triads in root position. However, this version is oversimplified to the detriment of authenticity. Version 2 is much closer to the original version because 1) chords are played in the appropriate inversion, which “voices the melody,” and 2) the bass line goes to G in bar 4 and bar 8. Version 3 is transcribed directly from Bill Withers’ original recording. Since Withers overdubbed acoustic piano and electric keyboard, that version is an amalgam of the two parts.

“Lean on Me” (Bill Withers)

**Version 1**

The image displays two systems of musical notation for the piano accompaniment of "Lean on Me". Each system consists of a grand staff with a treble clef and a bass clef. The right hand (treble clef) plays triads in root position, while the left hand (bass clef) plays a bass line. Chord symbols are placed above the treble staff. The first system covers measures 1 through 4, and the second system covers measures 5 through 8. The chord symbols for the first system are: C, C Dm Em F, F Em Dm C, C Dm Em Em, and Dm. The chord symbols for the second system are: C, C Dm Em F, F Em Dm C, C Dm Em B<sup>o</sup>, and C.

Figure 7.21: “Lean on Me” Version 1

### Version 2

Version 2 of "Lean on Me" is presented in two systems. The first system contains four measures with the following chord sequence: C, C Dm Em F, F Em Dm C, C Dm Em Em/G, and Dm/G. The second system contains four measures with the following chord sequence: C, C Dm Em F, F Em Dm C, C Dm Em G<sup>7</sup>, and C. The notation includes a treble clef with a key signature of one flat (Bb) and a 4/4 time signature. The right hand plays chords in the upper register, while the left hand plays a steady eighth-note bass line.

### Version 3

Version 3 of "Lean on Me" is presented in two systems. The first system contains eight measures with the following chord sequence: C, C Dm C<sup>7</sup>/E F, B<sup>b</sup>/F F F Em Dm C, F/C C C Dm Em Em/G, Dm/G, and F/G. The second system contains four measures with the following chord sequence: C, C Dm C<sup>7</sup>/E F, F Em Dm C, C/E Dm/F Em/F<sup>#</sup> G<sup>7</sup>, and C. The notation includes a treble clef with a key signature of one flat (Bb) and a 4/4 time signature. The right hand plays chords in the upper register, while the left hand plays a steady eighth-note bass line.

Figure 7.21: "Lean on Me" Versions 2-3

As students develop right hand fluency and left hand independence, they can perform Version 3 of "Lean on Me," or other sophisticated popular repertoire such as

John Legend’s “Ordinary People” and Paul McCartney’s “Yesterday.” “Ordinary People” is particularly challenging in the 8-bar intro section—the first four bars of which are shown below (Workbook II, p. 35). “Yesterday” is played in a more limited register, with a simpler right hand part, but with more harmonic complexity (Workbook III, p. 48).

“Ordinary People” (John Legend)

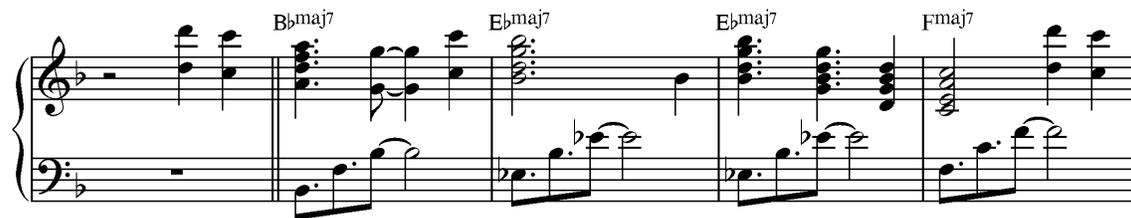


Figure 7.22: “Ordinary People” Excerpt

“Yesterday” (Paul McCartney)



Figure 7.23: “Yesterday” Excerpt

**ASSESSING PERFORMANCE**

Fundamental goals of musicality, technique, and posture can be demonstrated in repertoire performances. The evaluation below (Figure 7.24) is a template designed to assess live performances. It can be used to assess any performance, from the simplest to most complex repertoire.

## Performance Evaluation

NAME, DATE, PIECE: \_\_\_\_\_

YES NO BRINGS APPROPRIATE SHEET MUSIC, OR HAS PIECE MEMORIZED

YES NO PLAYS IN APPROPRIATE, STEADY TEMPO

YES NO PLAYS ALL THE WAY THROUGH THE CORRECT FORM WITHOUT STOPPING AFTER MISTAKES

YES NO PLAYS WITH APPROPRIATE EXPRESSIVE DYNAMICS

YES NO UTILIZES THE SUSTAIN PEDAL APPROPRIATELY

### **RH**

YES NO PLAYS CORRECT NOTES

YES NO TRANSITIONS WITHOUT SIGNIFICANT OR CONSISTENT HESITATIONS

YES NO PLAYS WITH RELAXED WRIST AND ROUNDED FINGERS

YES NO PLAYS IN CORRECT/APPROPRIATE REGISTER

YES NO PLAYS STYLISTICALLY APPROPRIATE RHYTHM/FEEL

### **LH**

YES NO PLAYS CORRECT NOTES

YES NO TRANSITIONS WITHOUT SIGNIFICANT OR CONSISTENT HESITATIONS

YES NO PLAYS WITH RELAXED WRIST AND ROUNDED FINGERS

YES NO PLAYS IN CORRECT/APPROPRIATE REGISTER

YES NO PLAYS STYLISTICALLY APPROPRIATE RHYTHM/FEEL

**COMMENTS**

Figure 7.24: Performance Evaluation

## Conclusion

Leaders in music education have asserted that “we need to break the mold and encourage universities to be innovative and fresh in their development of curricula” (Cutietta, 2007, p. 18). The curriculum and materials that I developed for this dissertation are guided by the belief that a piano curriculum based in popular music is responsive to the life experiences of students in ways that respect the social and musical worlds in which they live.

My purposes in creating and implementing these workbooks were:

- To demystify contemporary music theory and illuminate the piano’s role in the prevalent music of our culture;
- To cultivate the knowledge and skills necessary to understand and perform popular music on the keyboard in informal and professional settings; and
- To facilitate the sequential development and application of knowledge and skills, building independence and creativity on the keyboard, and in so doing, equip students with tools and opportunities to pursue autonomously the realization of their own musical visions on the keyboard.

It bears repeated acknowledgment that method books, no matter how well conceived, cannot guarantee successful learning. The sequence of behaviors through which a learner proceeds can be directed explicitly or implicitly in a book, but the book cannot assess the learner’s performance, offer feedback, or direct him to systematically refine his playing. The guidance of a skilled teacher is an important component of optimal learning.

The writing of a piano method is a complex, arduous, difficult, exasperating, exhilarating, and time-consuming task. Over the years, many methods have been written; few have succeeded. . . . It is up to the teacher to take the materials

available and personalize them to the needs of each individual student (Manus, 1996, p. 32).

A student equipped with the principles and tools for optimizing the learning process can, to some degree, become her own best teacher. It is toward this end that the curriculum and workbooks that I have written seek to engage students with personal stories, narrate directives, explain aspects of style, and suggest options for sequencing practices effectively. Effective teachers guide students through the principles of effective learning, directing them through the discipline of practicing concrete skills to automaticity and applying those skills creatively. I have attempted in this project to provide a framework of study so that students can learn not only *what* but *how* to learn most effectively.

I have written these workbooks with the understanding that any teacher who uses them will have to integrate the content into his own instructional approach. It could be argued that these workbooks represent an instructional approach that is so personalized to my own style that the books are difficult for other teachers to use. Whether this is the case must be left to the determination of teachers who do in fact try to use the books. In the past year at CU Denver, some piano class instructors have used my method books as the core content of their class, others have used bits and pieces as supplementary materials, and others have chosen to use different instructional materials and methods. As passionate as I am about the effectiveness of these materials, I recognize that my approach may not be appropriate for every piano class, teacher, or student.

Contemporary class piano instruction in the US enrolls an increasingly diverse student population. As much as possible, instructional methods and outcomes should be tailored to align with the real-world needs of students. In the setting of non-traditional college music programs, teaching a piano curriculum based in popular and jazz music may help to engage students by learning about familiar popular music that they may work

with directly in their future careers.

Only future research that assesses the long-term outcomes accomplished by students will verify the effectiveness of the methods I developed. In the meantime, the evidence demonstrated in my classes—the successful learning, creativity, and enthusiasm of students—continues to propel me forward on this pedagogical path.

**Appendix A: Workbook I**

*Peter John Stoltzman's*

**Contemporary Piano Class Workbook I**

The Beginning

F            C            G    G#dim   Amin            F            C/E            F/G            C



A musical staff with a treble clef on the left. The staff is divided into four measures by vertical bar lines. Each measure contains five slanted lines representing notes. Above the staff, the following chord symbols are aligned with the measures: F, C, G G#dim Amin, F, C/E, F/G, C.

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## Videos

Instructional Video Playlist (YouTube): <http://goo.gl/i2Vita>



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Instructional videos for many of the songs and excerpts can also be found at the playlist above. New videos are added throughout each semester.

# Introduction

What music is meaningful to you? Do you love contemporary R&B, or are you only interested in Country, or Classic Rock? Do you listen to moody Alternative bands, or do you prefer Gospel? Are you a Jazz lover, or a Classical purist? Your musical taste may include any or all of the above-mentioned styles. I ask because in order to maintain your motivation, you need to consistently reflect on your own preferences.

This workbook is not in any way meant to condone or condemn musical styles or tastes. Rather, I want you to apply the skills you learn here directly to the music that matters to you. In so doing, you will ground your practice in meaningful, motivating contexts.

So for starters, go through your music collection and identify a handful or two of tunes that you would love to be able to play. Make a playlist or burn a CD of those tunes, and start listening intently to what the piano or keyboard players actually are doing. If there is no piano on the record, what are the other instruments doing? Specifically take a listen to the bass, and then listen for the melody. Also, if there are drums, let your ears really check out the beat in detail. Can you pick out the various patterns—the hi-hat, the kick and snare drums, etc.? You already know and love this music, so you might think you know it inside and out, but if my experience is any indicator, you will be surprised at the details you have never paid attention to. And if you really get deep into the listening experience, you may be impressed at the insights that you have.

Behind those things that tend to stand out—the bass line, the melody, the beat—most of the time (though not *all* of the time) there are parts that establish the harmony of a song. These parts can include guitar, strings, horns, and/or background singers, but oftentimes the instrument serving a **harmonic function** in music is the acoustic or electric piano.

This “harmonic function,” as I’m calling it, is what guides the emotional meaning and trajectory of instrumental music. A song could have the happiest lyrics in the world, but if the harmony didn’t match, the song would sound like a bizarre parody. As a primary conveyor of harmony, the piano is at the heart of music, and a tastefully played keyboard part can take a listener on an emotional journey.

With the widest range of any common instrument, pianists can do it all. From an epic score to a repetitive loop, keyboard parts not only establish the harmony, but rhythmic and stylistic “feel,” and oftentimes melody as well. This makes the piano an unrivaled instrument as a tool for composing and arranging, not to mention just playing songs—as a soloist or accompanist.

The physical layout of keys offers a bird’s-eye view of the notes, which makes the piano an instantly accessible instrument—you press the right keys at the right time with the right amount of force, and you get the sound you want. I have often thought that playing the piano is quite similar to playing video games—only the piano has 88 keys, 10 fingers that can play at any given time, and it only does what you make it do. Of course, if you’re working with contemporary sequencing software already equipped with drum loops, bass lines, and keyboard riffs, pre-recorded by top professional musicians, you can really get into video game mode—just press a button and amazing things happen.

There are many ways in which we can conceive of music on the piano—we name the notes, number the notes, write the notes on staff paper, use chord symbols and rhythmic notation in lead sheets, we hear the sounds and recognize or figure things out by ear, we see the patterns on the keyboard, and we touch the keys and put our fingers in different positions in order to execute the music. Oftentimes, music books are organized around all the cerebral stuff—names, numbers, symbols, etc.—but the experience of playing the piano doesn't rely on that stuff at all. It's an aural and physical experience primarily. For those of us with sight, the piano can be a very visual experience as well. But the many legendary blind pianists lay waste to any theory that the visual aspect is necessary. Skim off all the theory and visuals, and piano playing boils down to a delicious reduction of shapes and sounds.

Two fundamental axioms stem from this:

- 1) If you can play it with your eyes closed, you really know it
- 2) If it *sounds* good (to you), it *is* good (to you, at least)

That said, the visual and theoretical aspects of piano playing can be extremely helpful, as long as they don't take you out of the flow and diminish the joy of music for you. Thinking about the music does not have to be a drag. Without theory knowledge, you are musically illiterate. You might be a poet, but how will you write things down to share with others? How will you explain things to the next generation?

Thinking about music will give you two things:

- 1) A common language for communicating with other musicians
- 2) The ability to replicate, alter, refine and expand what you do with conscious, intelligent intention

You're a student, so let's study. Learn the names, numbers, and symbols, and connect them to the visual, aural, and physical experience. Do this in an embodied way. DO NOT read this book without putting your fingers on the piano and listening actively to the sounds they produce. If you're not at a piano, put this book down now, and open it back up when you get to one.

# Piano Geography

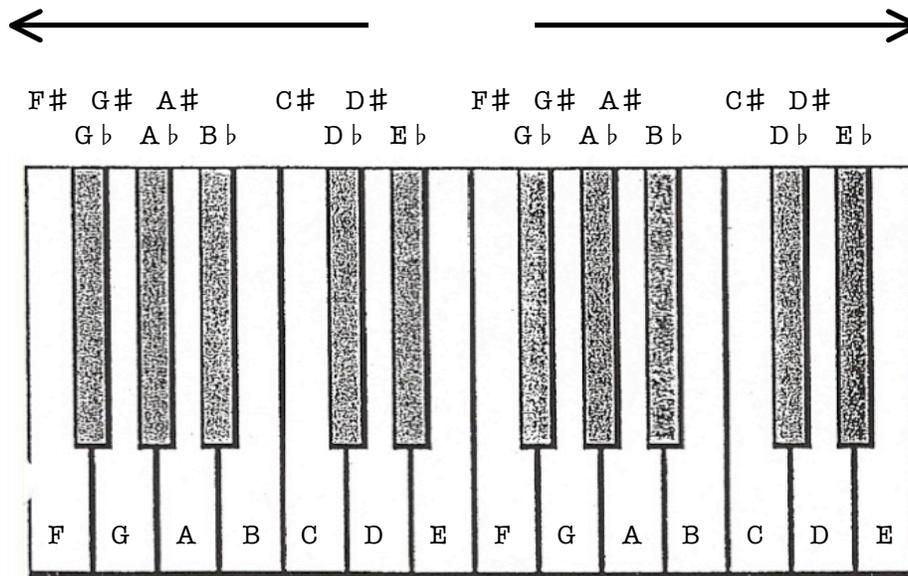
## Piano Geography and Note Names

What do you notice as you look at the keyboard? There are white keys that stretch from the bottom to the top of the piano, and intermittent groups of black keys. Put two fingers of your right hand on a group of two black notes. Then put three fingers on a group of three black notes. These two black note groupings help organize the piano visually and physically. Can you imagine if all the notes were white? Or if white and black notes simply alternated all the way across the keyboard—how would you know which note is which? As strange as the layout of black and white keys may appear, it's actually an ingenious way of visually and physically organizing notes.

Remember:

"Up," or "higher" = to the right.

"Down," or "lower" = to the left.



If you need assistance learning the note names, remember: "D is in the doghouse." Between any two-black-note group is the white note named D.

A, B, C, D, E, F, and G are the white notes. And then each of the black notes has two names, depending on how they're functioning in the music. Each black note has a sharp (#) name and a flat (b) name. For example, the black note above F and below G is called F sharp (F#), or G flat (Gb).

### Quiz:

The black note below D is called \_\_\_\_\_ and the black note above D is called \_\_\_\_\_.

The black note above G is called \_\_\_\_\_. The black note below G is called \_\_\_\_\_.

# Intervals

## The Half Step

The smallest distance between notes on the piano is an interval called a half step. Half steps are mostly moving from a white note to a neighboring black note (or black note to white note), but there are two half steps on the piano that occur with a pair of white notes. The groupings of two and three black notes make this possible.

Notice where there are no black notes in between the white notes. That's where the white-white half steps are—B to C, and E to F.

## The Whole Step

Combine two half steps and you get an interval called a whole step. Whole steps are mostly moving from a white note to a neighboring white note (or black note to black note), but there are four whole steps on the piano that occur with a white-to-black or black-to-white note shape.

Again, notice where there are no black notes in between the white notes. That's where the white-black and black-white whole steps are—B to C#, B $\flat$  to C, and E $\flat$  to F and E to F#.

## The Octave

An octave is probably the second most important interval next to a half step. Derived from the Latin *octava*, meaning "eighth part," you can find an octave just by counting notes—1, 2, 3, 4, 5, 6, 7, 8 = A, B, C, D, E, F, G, A. Even simpler, however, is to just know that an octave above A is the next A to the right on the piano. An octave down is the next A to the left on the piano.

### Quiz:

Say any note name and then play it.

Play the notes a half step above/below and name them.

Play the notes a whole step above/below and name them.

Play the same note an octave above or below. Play it two octaves above or below.

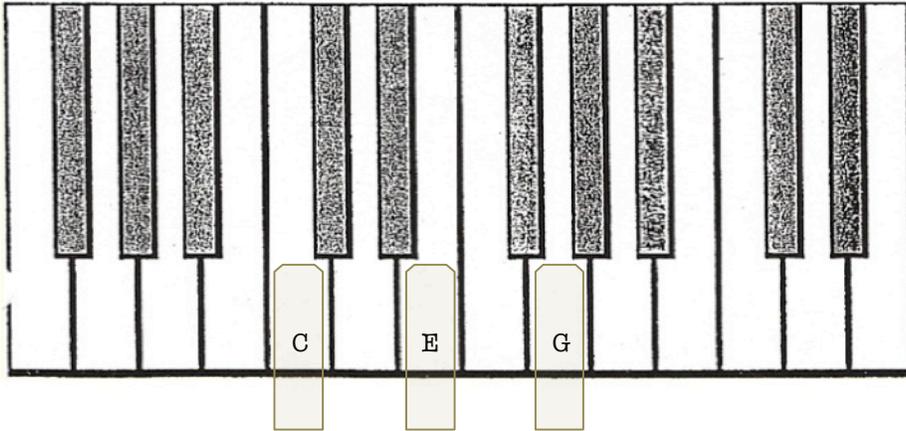
### Piano Geography & Intervals

Instructional video: <http://youtu.be/BIXnrgCfxNY>





# Shapes on the Piano: Chords



## Constructing Chords: Triads

Constructing chords out of notes is similar to constructing words out of letters. Each note has its own name and sound, but when you put them together, they create a new sound, and have a new name.

C + E + G = a C major triad

## Fingering

To play a chord, play all three notes at the same time. If you play the three notes one at a time, it's called an arpeggio. Using just your RH, put your thumb on C, index finger on E, and middle finger or ring finger on G.

Other fingerings:

- People with short fingers may prefer thumb-middle-pinky
- People with very long fingers may prefer index on C, middle on E, and ring on G

## Hand Placement

Situate your RH near the middle of the piano and your LH an octave or two below that. The RH covers the chordal accompaniment, and the LH covers the bass function. Put your RH thumb on a middle C, and complete the C major triad with the E and G. Put your LH thumb on a C one octave below. If and when you're ready for it, add your LH pinky on a C an octave below your thumb (i.e. "grab an octave" with your LH).

## The Four Shape Groups

Put your fingers on a C major triad in root position, and think of it as a cookie cutter. Pick up your cookie cutter without changing the shape, move it to the right until your bottom finger is hovering over F. Put your fingers down on the keys, and you should have an F major triad. Same thing goes for G. All three notes are white notes. I call it the white-white-white shape group.

White White White

C F G

This section shows three chords: C major, F major, and G major. Each chord is represented by a treble clef staff with a chord symbol above it, and a corresponding keyboard diagram below. The keyboard diagrams show the white keys with yellow boxes indicating the fingerings for each note.

White Black White

D E A

This section shows three chords: D major, E major, and A major. Each chord is represented by a treble clef staff with a chord symbol above it, and a corresponding keyboard diagram below. The keyboard diagrams show the white and black keys with yellow boxes indicating the fingerings for each note.

Black White Black

D $\flat$  E $\flat$  A $\flat$

This section shows three chords: D minor, E minor, and A minor. Each chord is represented by a treble clef staff with a chord symbol above it, and a corresponding keyboard diagram below. The keyboard diagrams show the white and black keys with yellow boxes indicating the fingerings for each note.

Others

B B $\flat$  F $\sharp$

This section shows three chords: B major, B minor, and F major. Each chord is represented by a treble clef staff with a chord symbol above it, and a corresponding keyboard diagram below. The keyboard diagrams show the white and black keys with yellow boxes indicating the fingerings for each note.

### Shape Groups on the Piano

Instructional video: <http://youtu.be/gCmZpXhgFII>



### Practice

Play through all three chords in each shape group. Use your fingers like a cookie cutter. Do this for the white-white-white, white-black-white, and black-white-black groups. Try to maintain the shape once you have it in your fingers, and just pick up your hand and move it over to the other two chords.

### Assignment

Play all twelve major triads in root position. As soon as possible, you need to play triads in all twelve keys. Work to be able to recognize those triads on the staff, and to be able to construct them from looking at a chord symbol. Most importantly, feel the shapes in your fingers, and hear the sound of a major triad, no matter what key you play it in.

### Quiz

Name any key and play the major triad in root position, with your RH playing the chord and your LH on the root (no LH chord). Check the boxes  next to each key once you can name the key and put your hands quickly on the major triad with minimal anxiety in the fingers.

- |                            |  |
|----------------------------|--|
| <input type="checkbox"/> A | <input type="checkbox"/> D $\flat$ /C $\sharp$ |
| <input type="checkbox"/> B | <input type="checkbox"/> E $\flat$ /D $\sharp$ |
| <input type="checkbox"/> C | <input type="checkbox"/> G $\flat$ /F $\sharp$ |
| <input type="checkbox"/> D | <input type="checkbox"/> A $\flat$ /G $\sharp$ |
| <input type="checkbox"/> E | <input type="checkbox"/> B $\flat$ /A $\sharp$ |
| <input type="checkbox"/> F |  |
| <input type="checkbox"/> G |  |

## **Anxiety and Automaticity**

One of the weirdest involuntary things you will experience while learning the piano is anxiety *in your fingers*. If they don't know where to go, they will shake and jump around, desperately searching for their target. It's actually quite comical—if only it weren't so frustrating too!

The secret cure for anxiety is **automaticity**. Once you effectively program your brain and fingers, they will execute what you intend with a single cognitive prompt. Such a cognitive prompt, by the way, could be a thought (e.g., "I'm going to play D minor now"), or a symbol (e.g., written notes or chord symbols), or an expressive intention (e.g., you want to evoke a certain feeling, and you know D minor is going to do that), or even just an intuition (e.g., you're in the flow, and D minor just seems like the right place to go). Whatever the nature of the prompt, it's like pressing a keyboard shortcut on your computer. Practicing for automaticity is basically programming shortcuts for your brain and fingers.

While you are playing, thinking through the details of theory—names, numbers, etc.—actually creates anxiety. You need to do your thinking in class, and in the practice room, in order to *not* have to think while you perform. Use your thinking in the most powerful way—to create shortcuts, to facilitate automaticity. Thinking will help you make sure you are practicing things correctly, and that is crucial! But practice for automaticity. Can you play it with your eyes closed? Can you play it while you watch TV? If not, then it's not automatic.

## **Posture**

Good posture helps everything.

Sit at the piano with a comfortable upright posture, with your arm hanging loosely at your side. As you lift your hands up, gently hold an invisible softball to get the perfect curvature in your fingers. Relax your wrists, maintaining just enough tension that they don't go limp.

## **Technique: The Beginning**

I want you to learn how pianists actually play the piano. And I don't mean virtuoso artists. I mean songwriters, keyboard players in bands, church pianists, nightclub pianists, studio musicians, and family musicians who can sit down and play "Happy Birthday" or accompany holiday songs at parties.

The first thing to understand is the function of your hands.

The left hand (LH) naturally falls on the middle-to-lower end of the piano, and the right hand (RH) on the middle-to-higher end. Imagine a band performing—what's going on in the lower, middle, and higher registers?

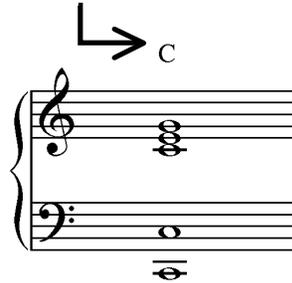
Bass lines are low. Harmonies—generally chords, though sometimes melodies too—are in the middle. And melodies tend to be higher (some supporting harmony parts are higher too).

So to start, your LH is going to take the bass function, and your RH will cover most of the harmony along with occasional melody. As your technique grows, you will play repertoire that requires the LH to take on more harmonic function, and the RH to take on more melodic aspects of the music.

# Contemporary Chord Theory

## Chord Symbols

For every chord, there is a chord symbol.



A chord symbol provides you with all the basic information you need to construct a chord—the chord type, the root of the chord and the bass note.

(Often, the bass note is the root of the chord, but there are important exceptions.)

What the chord symbol doesn't do is tell you anything about the musical style, or what techniques to use to perform that chord. The figure above shows the notes of a C major triad and the LH bass notes on the grand staff, but (contemporary) lead sheets may only show a chord symbol, over lyrics or with slashes in the bars, like this:



The chord symbol, C, can read as "C," or as "C major."

If you are given a lead sheet—or a "chart"—you can play a chord in any number of ways. Chord symbols give the performer interpretive freedom. But of course, you must still make your choices as to what to play within the constraints of the style.

It is important to note: the symbol represents the sound, not the shape.



## In the Key



Bill Withers' *Lean on Me* is in the key of C. Being "in the key of" C (or any other key) means a few things:

- 1) There is an established harmonic "home," or tonic, which is numbered in analysis as the Arabic numeral 1, or the Roman numeral I.
- 2) There is a scale that correlates to the key. Notes that are in the scale are called **diatonic**. Notes that are not in the scale are **non-diatonic**. Single notes are numbered in analysis with Arabic numerals—1 through 7.

Numbers	1	2	3	4	5	6	7	8/1
Notes on the Staff								
Names	C	D	E	F	G	A	B	C

- 3) Each note in the scale correlates to a chord as well. These chords are called diatonic chords, and are numbered in analysis with Roman numerals—I through vii. The Roman numerals are capitalized for major chords and lower case for minor chords.

The diatonic chords in the key of C major are:

	I	ii	iii	IV	V	vi	vii°
Chord symbol	C	D <sup>min</sup>	E <sup>min</sup>	F	G	A <sup>min</sup>	B <sup>dim</sup>
Staff notes							

Play through these chords from middle C to an octave above. Since C is the one key with no flats or sharps, you can use the "cookie cutter," and just go up the white notes. However, when you transpose diatonic chords to other keys, it won't be so easy. You really have to know the unique shape of each key. And that's one of the reasons we practice scales.

**Assignment:** Write the chord symbols, Roman numerals, and notes on the staff, and play through the diatonic triads in the keys of F and G. As you learn all 12 major scales, write out the corresponding diatonic chords in each key.

Rom. numeral	
Chord symbol	
Staff notes	

# Performance Techniques

## Chunking, Broken Chords, Arpeggios

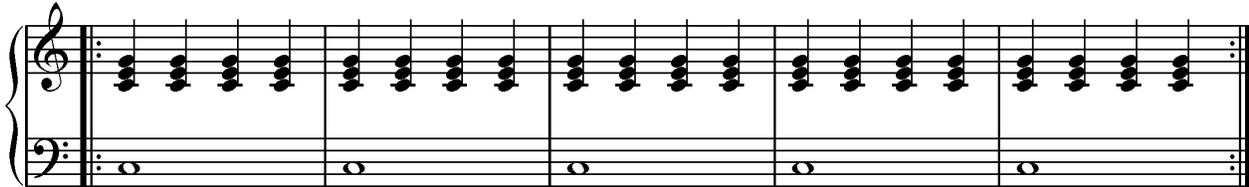
Instructional video: <http://youtu.be/8U9CqDlevzA>



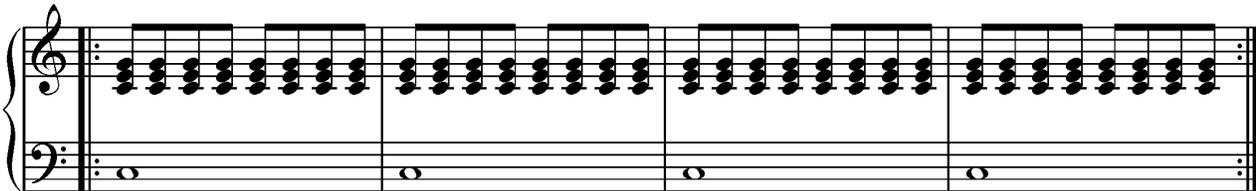
### Technique 1: Chunking

A standard pop piano technique is simply “chunking” the RH chords on every beat, while holding long notes (e.g. whole notes), or playing bass lines with the LH.

Basic chord chunking looks like this:

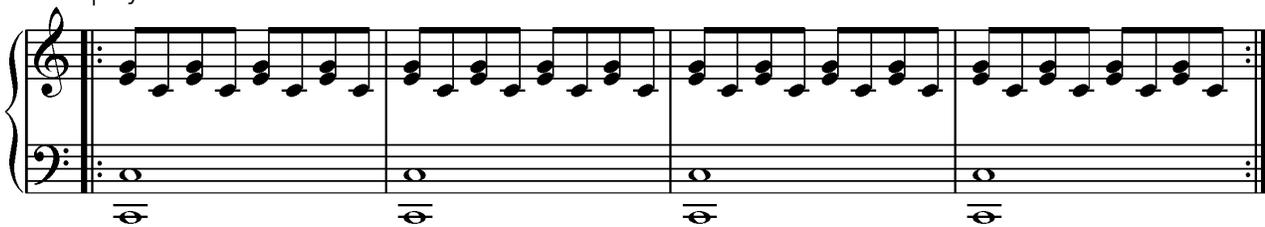


You can also chunk chords twice as fast (i.e., double time). In double time chunking, there are 8 “chunks” per bar, like this:



### Technique 2: Broken Chords

Another standard pop piano technique is to break the chord up into two parts and alternate them. In this case, separate the top two notes (E and G) from the bottom note (C), and play this:



NOTE: Broken chords are almost always played with the top two notes first—on the downbeat.

### Technique 3: Arpeggios

A third standard pop piano technique is to arpeggiate the chord – to play the notes one at a time. There are many variations on arpeggio techniques. To start, try this:



### Musicality: Sustain Pedal

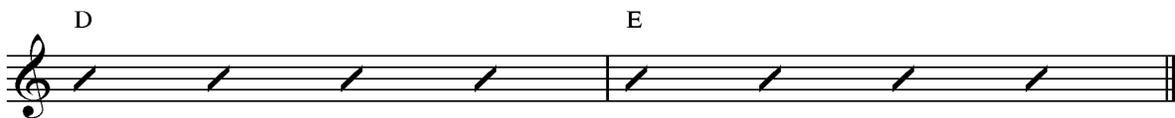
All of the techniques and progressions you've seen so far sound better with some sustain pedal. If you're at a keyboard or piano with two or three pedals, the sustain pedal is the one on the right.

The secret to sustain pedal technique: hold the pedal while you're playing until you come to a place where you don't want the notes to hold out anymore, and *lift* your foot (briefly!—just a little foot hiccup) off the pedal *at the same time* that you play the new notes.

Lift at the same time that you play. This is the only way to avoid sounding like you're taking a breath. You want seamless transitions between chords.

### Practice Reading Chord Symbols

Count off a steady medium tempo and play the chords below in root position. RH plays the chord using one of the techniques above (chunking, broken chords, or arpeggios), and LH plays the root.



### Comping: Rhythm and Style

You've already worked on three different performance techniques—chunking, broken chords, and arpeggios. The following I–IV–V repertoire opens some new doors for accompaniment techniques. Instead of "performance techniques," from here on out I'm going to use the term **comping**. Comping is associated with the word accompanying, as well as complementing. Comping is what pianists do when they're playing chords along with a song. When you're comping, you are responsible for playing the appropriate techniques and rhythms in the appropriate style. Often, all you get are chord symbols.

When you're playing from sheet music, you still have to interpret the style, but techniques are given to you. Sometimes charts have a combination of both written notes and chord symbols.

The reason I believe it is crucial and most valuable to learn to interpret the music from chord symbols rather than always read the notes is to develop an in-depth understanding of the music. Why does this chord progression sound so good? Why does that technique work so well? If you don't develop an understanding of those things, then you're just pressing the right buttons at the right time.

## Advanced Applications

Hundreds, if not thousands of popular songs use variations on these basic techniques—from John Lennon’s *Imagine* to Adele’s *Someone Like You*.

This is what Lennon plays in the beginning of *Imagine*.



This is a broken chord pattern, except the LH thumb grabbing an octave is replacing the RH thumb. It could also be played with the RH playing the whole broken chord pattern, like this:



Here is the piano part at the beginning of Adele’s *Someone Like You*.



Notice the key signature. That’s A major – three sharps (F#, C#, G#). Because sharps in the key signature carry throughout every measure, the sharps present at the beginning of each measure are actually unnecessary to write. They are simply there to make reading the notes a little easier—they’re called courtesy accidentals. (Courtesy accidentals are often written in parentheses.)

Notice the technique. The RH has an arpeggio pattern—up and down, 1-3-5-3—and the LH has the simple bass function.

A simple lead sheet version would look like this.



Also common is to see the chord symbols over lyrics, like this:

A                      C#min/G#                      F#5  
*I heard, that you settled down, that you met a girl, that you’re...*

# Expanding Technique: Slash & Power Chords

The excerpts from *Imagine* and *Someone Like You* introduce three important chord techniques—slash chords, power chords, and inversions.

## Slash Chords

It is important to understand that every chord has a root, but the chord can be played over different bass notes, which significantly alters the sound. When this occurs, we use slash chord symbols.

Remember the information that a chord symbol gives you:

- the **chord type**
- the **root** of the chord
- the **bass note**

Slash chords are the exception, where the root of the chord is different from the bass note. Slash chords tell you the chord type and root first, then they tell you what the bass note is.

A slash chord such as C/A is read, “C over A.” Again, the chord is being played over a different bass note (A) than its root (C).

In *Someone Like You*, the second chord is “C sharp minor over G sharp” – a C sharp minor chord over a G sharp bass note.

Notice that the chords in measure 2 and 3 are not standard triads. The first bar is an A major triad in root position, but the second bar uses a slash chord, and the third bar uses a **power chord**. These chords are in the key of A, but they are not the most typical or predictable shapes and sounds, and that’s part of what makes the song so compelling.

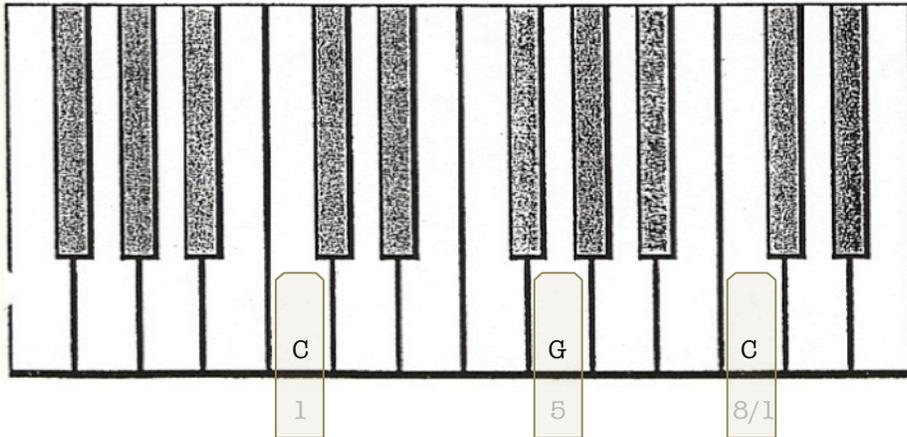
Look again at “Someone Like You,” this time with chord symbols over the notation.

The image shows three measures of musical notation for the song "Someone Like You" in the key of A major. The notation is written on a grand staff with a treble clef on the top line and a bass clef on the bottom line. The key signature has two sharps (F# and C#). The first measure is labeled with the chord symbol "A" above the staff. The second measure is labeled with the slash chord symbol "C#min/G#" above the staff. The third measure is labeled with the power chord symbol "F#5" above the staff. The melody in the treble clef consists of eighth notes, and the bass line in the bass clef consists of whole notes.

## Power Chords

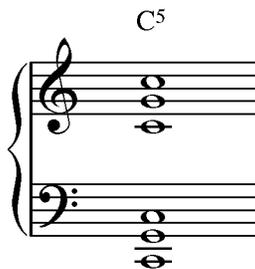
Most of the triads you've been playing are in the shape called **root position**. The 1-3-5 shape is called root position because the root of the chord—the 1—is on the bottom (furthest note to the left). There are other shapes you can play a chord in, called inversions. But before exploring inversions, here is another common pop piano technique—the power chord.

Instead of playing the whole chord in the RH, play just the C and G. If your fingers will do it (most hands will, though some won't), grab an octave above C with your pinky. So your RH should look like this:



This is a 1-5-8 shape, also known as a “power chord.” Play a 1-5-8 shape (in the key of C) with both hands. Arpeggiate if you can't reach to play all three notes at once. Once you get comfortable with this shape in both hands, you are in great position for playing contemporary piano styles.

To start, play the power chord with both hands. The chord symbol and notation look like this:



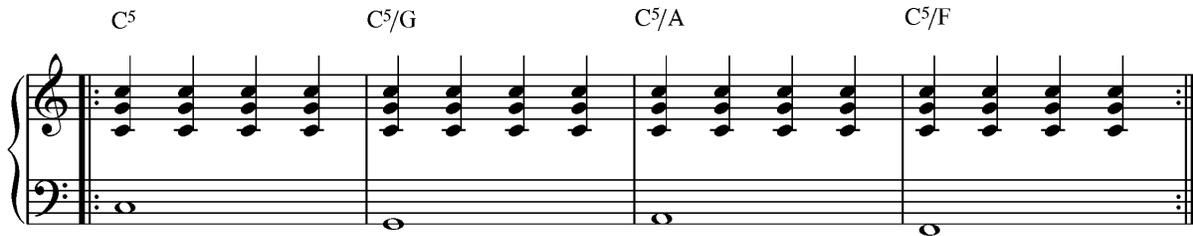
That chord symbol is read as, “C five.” The LH isn't obligated to play anything other than the bass note, but this reach is a great skill to develop. Again, if your hand doesn't reach an octave, either arpeggiate or just skip the octave.

The power chord is one of the foundational structures of rock guitar—it's an easy shape to play on guitar because of the intervals between the strings. On the piano the power chord doesn't have nearly the meaty sound that a distorted guitar can have. But a guitar can't play it with both hands at the same time!

### Progressions with a Power Chord

Chunk your power chord with the RH. Meanwhile, with the LH, hit and hold four different notes in succession—C, G, A, F. This will create, essentially, a **chord progression**—even without changing the RH. This particular “four chord song” has been one of the most-used chord progressions in pop music since U2’s 1987 hit, *With or Without You*. In the first 14 years of the 21<sup>st</sup> century, countless hit songs have utilized this progression, but it can be traced back at least as far as Bob Marley’s 1974 hit, *No Woman No Cry*.

C<sup>5</sup>                      C<sup>5</sup>/G                      C<sup>5</sup>/A                      C<sup>5</sup>/F



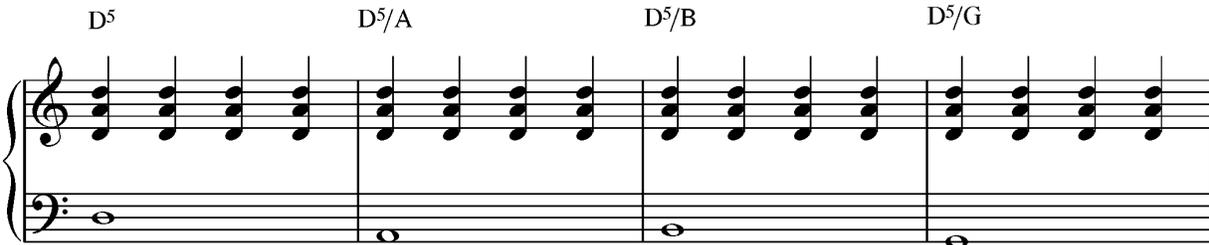
### Practicing Power Chords

Check the boxes  when you are able to play the progressions with ease.

For a professional sound, use the sustain pedal. Lift when you change each bass note.

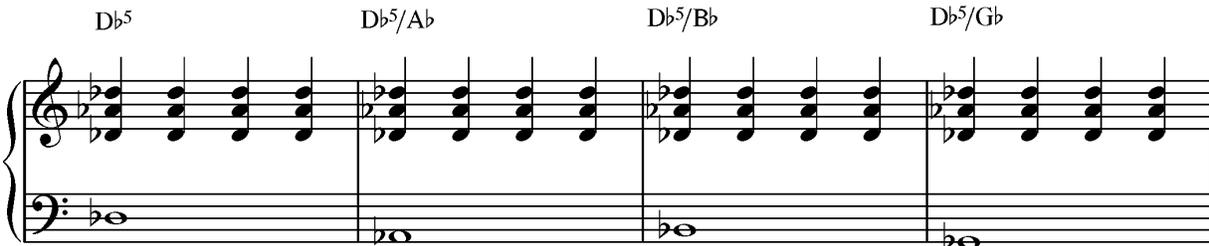
1)

D<sup>5</sup>                      D<sup>5</sup>/A                      D<sup>5</sup>/B                      D<sup>5</sup>/G



2)

D<sup>b5</sup>                      D<sup>b5</sup>/A<sup>b</sup>                      D<sup>b5</sup>/B<sup>b</sup>                      D<sup>b5</sup>/G<sup>b</sup>



# Expanding Technique: Inversions

## What Are Inversions?

Have you ever played the game “Tetris”? In Tetris, various shapes fall down the screen, and you have the ability to invert them in order to fit into the shapes that are already there. Press the button and your shape rotates to the right—same shape, but new shape! Press it again, and it rotates again—same shape, new shape. Press it again—same shape, new shape. Press it one more time and you come full circle to the original shape. There are four and only four permutations of any given Tetris shape. And the game itself only uses seven shapes. And yet, one can play Tetris for endless hours. The more you play, the more you start to recognize combinations of shapes that go together particularly well. And as your recognition of combinations grows, you can execute the game faster and faster.

In the same way, inverted chords fit together in combinations that aid your skillful execution. As you recognize the combinations of shapes more quickly, you are able to play faster, and attain new levels.

*Lest we forget—in music, there’s more than just executing skills. There is creativity—the power to apply skills in new ways, to make expressive and interpretive choices in the moment, the power to compose your own music. There is autonomy—the power to choose what to play, how, when, and why. Of course, all these choices are normally made within the structures of songs and chord progressions, and utilizing the structures of chords, melodies, rhythms, techniques, etc.*

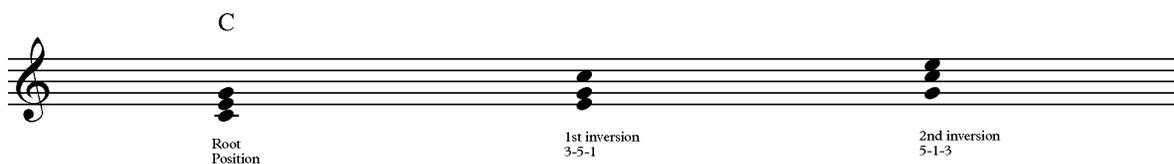
*So in the same way that we keep going back to games like Tetris to increase our high score, we return to studying music again and again to grow our skills and offer something valuable with the music we create.*

Once your skill set on the piano includes root position major triads in all twelve keys, you need to learn how to invert those shapes. This will create new possibilities of chord combinations that will make playing typical progressions sound better and be physically easier to play.

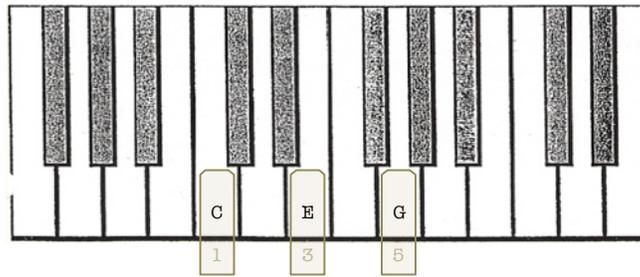
## Inversions of a Triad

There are three notes in a major triad, and therefore three possible **voicings**. Chord “voicings” is the term that refers to the shape of the chord, inverted or not.

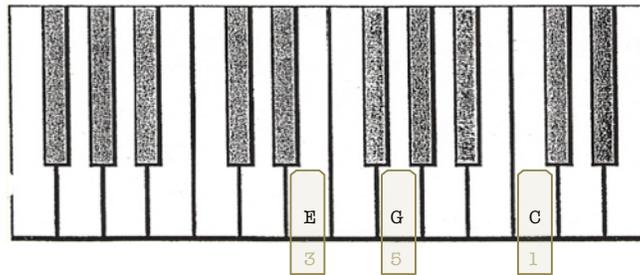
In the next visual, you see the inversions of a C major triad. As you look them over, put your RH fingers on those notes. Understand that each inversion is still a C major chord, despite being a different shape. Recognize how the 1-3-5 root position shape can be inverted to 3-5-1 or 5-1-3, and then comes full circle to 1-3-5 (root position) again.



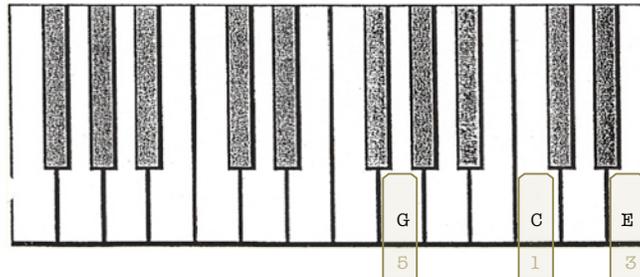
### Root position



### 1<sup>st</sup> Inversion



### 2<sup>nd</sup> Inversion



### Inversions in Other Keys

**B**

Root Position      1st inversion 3-5-1      2nd inversion 5-1-3

**D<sup>b</sup>**

Root Position      1st inversion 3-5-1      2nd inversion 5-1-3

**D**

Root Position      1st inversion 3-5-1      2nd inversion 5-1-3

## Practicing Inversions & Techniques

- 1) Play the root of the chords with your LH (preferably grabbing an octave), and play each inversion of the chord with your RH.
- 2) Apply the three techniques—chunking, broken chords, and arpeggios—to each inversion.

### Example:

Chord = C major triad

Inversion = 1<sup>st</sup> inversion

Technique = Broken Chord



**Quiz:** Name a key, an inversion, and a technique. Without putting your hands on the piano, look at the keyboard and visualize what you need to play. Once you can see it, then count off four beats (“1, 2, 3, 4”) and jam on it, with your RH playing the chord and your LH playing only the root (no LH chord). Check the boxes  next to each key once you can call any inversion, visualize it within a few seconds, and play it in a groove.

B    C    D $\flat$ /C $\sharp$     D

### Inversions

Instructional video: <http://youtu.be/XgHtnKX7WSU>



### An Important Distinction: Inversions v. Slash Chords

For our purposes, inversions are *not* slash chords. They are just different “versions” of a chord. When you see the chord symbol, C, you may play the chord in any inversion you choose.

Slash chords, on the other hand, dictate that you must play a specific note in the bass. When reading the slash chord, C/E, you may still play whatever inversion of the C major chord that you choose with your RH, but you must play the note E in the bass, with your LH.

### Another Distinction: Traditional v. Contemporary Theory

In traditional Western music theory, inversions are signified with a chord symbol system called “figured bass.” The intervals between the notes are inserted next to or in some cases above or below the chord symbol, revealing the shape of the inversion. For instance, in a 2<sup>nd</sup> inversion C triad, C is a fourth above G, and E is a sixth above G. So the figured bass chord symbol is  $C_4^6$ .

If you are interested in Baroque improvisation styles, I encourage you to take a traditional harmony class. This workbook, however, will not be dealing with chord symbols in that way. This workbook uses the contemporary musician’s symbol system—what you will read in chord charts from jazz to show tunes to Christian rock, from wedding bands to singer-songwriter studio sessions.

(Note: There is another contemporary chord symbol system, often referred to as “Nashville chord numbers.” This system is a kind of folk hybrid of Roman numerals and chord symbols—except it uses Arabic numerals. Most Nashville musicians should be able to read contemporary chord symbols, but many contemporary musicians aren’t familiar with the Nashville chord number system.)

### Why We Invert

In the contemporary chord symbol system, inversions are optional unless notated. The reasons for using inversions have to be understood and practiced.

And the reasons are:

- 1) To minimize hand movement, and create smooth voice-leading
- 2) To “voice the melody”—i.e., play chords with the melody as the top note

### Groups and Progressions

Start with close positioning of the hands and smooth voice leading.  
Use C as the tonic, or I chord, from the white-white-white shape group.  
That means F is the IV, and G is the V.

Look at the difference between root position chords and the closest inversion chords.

The first musical example shows two pairs of chords on a grand staff. The first pair, labeled 'root position', shows a C chord (I) and a G chord (V). The C chord has C in the bass, E in the middle, and G in the treble. The G chord has G in the bass, B in the middle, and D in the treble. The second pair, labeled 'closest inversion', shows a C chord (I) and a G chord (V). The C chord has C in the bass, G in the middle, and E in the treble. The G chord has G in the bass, D in the middle, and B in the treble.

The second musical example shows two pairs of chords on a grand staff. The first pair, labeled 'root position', shows a C chord (I) and an F chord (IV). The C chord has C in the bass, E in the middle, and G in the treble. The F chord has F in the bass, A in the middle, and C in the treble. The second pair, labeled 'closest inversion', shows a C chord (I) and an F chord (IV). The C chord has C in the bass, G in the middle, and E in the treble. The F chord has F in the bass, C in the middle, and A in the treble.

**Assignment:** Transpose the above chord progressions (using root positions and closest inversions) to other shape groups—the keys of A and A $\flat$ .

KEY OF A: A will be the I chord from the white-black-white shape group. That means D is the IV, and E is the V. Write out the chord progressions in root position and close position.

1) I – V (root position)

I – V (closest inversion)

A musical staff with a grand staff (treble and bass clefs) divided into two sections. The first section is for the I-V progression in root position, and the second section is for the I-V progression in closest inversion. The staff is currently empty.

2) I – IV (root position)

I – IV (closest inversion)

A musical staff with a grand staff (treble and bass clefs) divided into two sections. The first section is for the I-IV progression in root position, and the second section is for the I-IV progression in closest inversion. The staff is currently empty.

KEY OF A $\flat$ : A $\flat$  will be the I chord from the black-white-black shape group. That means D $\flat$  is the IV, and E $\flat$  is the V. Write out the chord progressions in root position and close position.

1) I – V (root position)

I – V (closest inversion)

A musical staff with a grand staff (treble and bass clefs) divided into two sections. The first section is for the I-V progression in root position, and the second section is for the I-V progression in closest inversion. The staff is currently empty.

2) I – IV (root position)

I – IV (closest inversion)

A musical staff with a grand staff (treble and bass clefs) divided into two sections. The first section is for the I-IV progression in root position, and the second section is for the I-IV progression in closest inversion. The staff is currently empty.

## Practicing Chord Progressions

Play through the chord progressions below. Recognize the finger movement patterns, and how different they feel to execute in these different keys. To increase the challenge, play through the progressions with specific performance techniques (such as chunking or arpeggios), play them in more keys, or memorize them. Check the boxes  when you are able to play the progressions with ease.

1)

C G C F C

I V I IV I

2)

D A D G D

I V I IV I

3)

D $\flat$  A $\flat$  D $\flat$  G $\flat$  D $\flat$

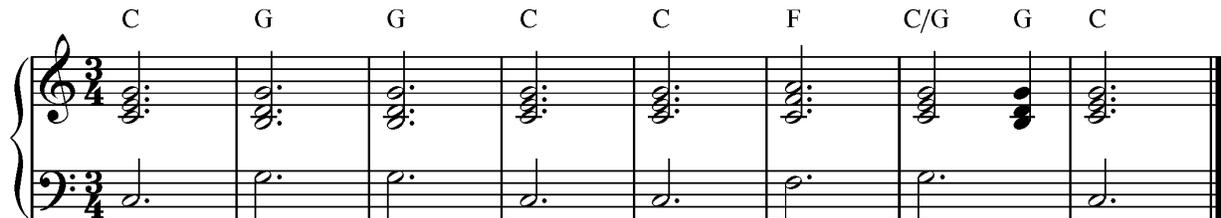
I V I IV I

# Repertoire

## Closest inversions

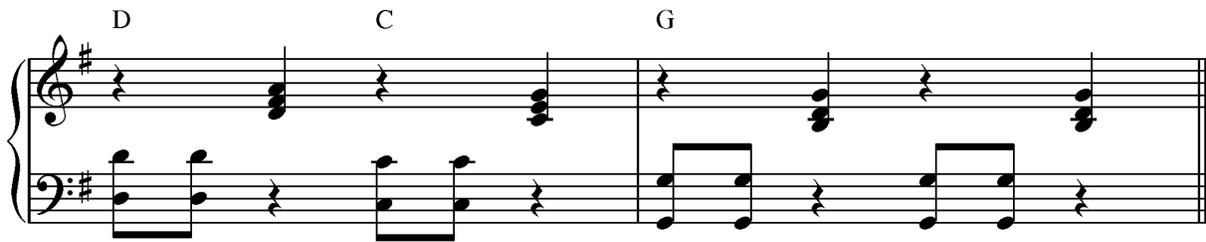
### *Happy Birthday*

C G G C C F C/G G C



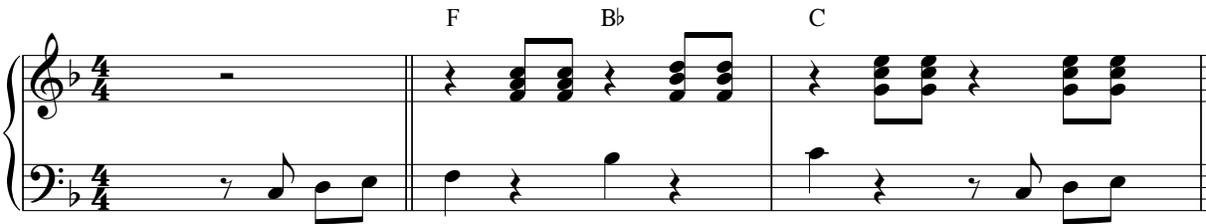
### *Sweet Home Alabama* (E. King, G. Ross, R. Van Zant)

D C G



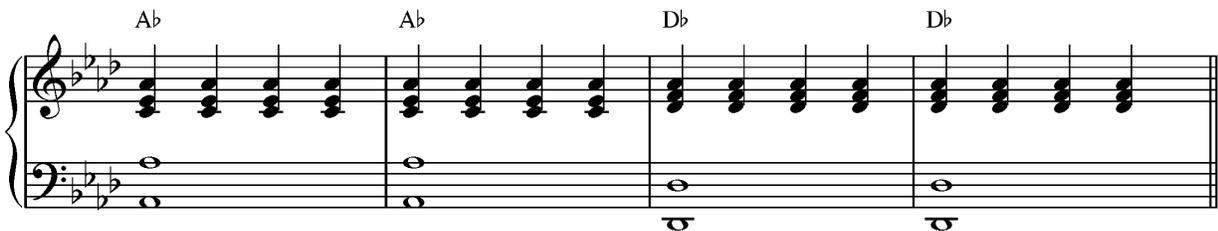
### *Twist and Shout* (P. Medley & B. Russell)

F Bb C



### *Give Peace a Chance* (John Lennon)

A $\flat$  A $\flat$  D $\flat$  D $\flat$



# Repertoire

## Voicing the melody

### *Lean on Me* (Bill Withers)

C C Dm Em F F Em Dm C C Dm Em Em/G Dm/G

The first system of music for 'Lean on Me' consists of two staves. The upper staff is a grand staff with a treble clef and a bass clef, containing block chords for the right hand. The lower staff is a bass clef staff with a single bass line. Above the staves, the following chords are indicated: C, C Dm Em F, F Em Dm C, C Dm Em Em/G, and Dm/G.

C C Dm Em F F Em Dm C C Dm Em G<sup>7</sup> C

The second system of music for 'Lean on Me' consists of two staves. The upper staff is a grand staff with a treble clef and a bass clef, containing block chords for the right hand. The lower staff is a bass clef staff with a single bass line. Above the staves, the following chords are indicated: C, C Dm Em F, F Em Dm C, C Dm Em G<sup>7</sup>, and C.

### *Pachelbel's Canon*

D A B<sup>min</sup> F<sup>min</sup> G D G A

The first system of music for 'Pachelbel's Canon' consists of two staves. The upper staff is a grand staff with a treble clef and a bass clef, containing block chords for the right hand. The lower staff is a bass clef staff with a single bass line. Above the staves, the following chords are indicated: D, A, B<sup>min</sup>, F<sup>min</sup>, G, D, G, and A.

### *Pachelbel's Canon* With arpeggio technique

D A B<sup>min</sup> F<sup>min</sup> G D G A

The second system of music for 'Pachelbel's Canon' with arpeggio technique consists of two staves. The upper staff is a grand staff with a treble clef and a bass clef, containing arpeggiated chords for the right hand. The lower staff is a bass clef staff with a single bass line. Above the staves, the following chords are indicated: D, A, B<sup>min</sup>, F<sup>min</sup>, G, D, G, and A.

### Practice Voicing the Melody

Use the given notes as the **top note** of your chord. The chords are given, so you have to figure out what inversion of those chords will give you the melody note on top. Write in the RH and LH notes.

G      D      C      G      C      G      D      G

### Transposing from Roman Numerals

In Roman numerals, the chord progression of Happy Birthday is:

I	V	V	I
I	IV	I	V

Having the Roman numeral analysis means you can transpose the tune in the most efficient way. Your challenge now is to transpose the chord progression of Happy Birthday from the key of C to the key of A and the key of A $\flat$ . Using the Roman numeral progression above as a reference, write the chord symbols above the staves below, and play the song through in both keys, using the closest inversions. Why not provide the Roman numerals on the staves in the exercise? You could even “give” the students the opening I chord.

Happy Birthday in A

<b>A</b> I	V	V	I
------------	---	---	---

I	IV	I	V
---	----	---	---

Happy Birthday in A $\flat$

<b>A<math>\flat</math></b> I	V	V	I
------------------------------	---	---	---

I	IV	I	V
---	----	---	---

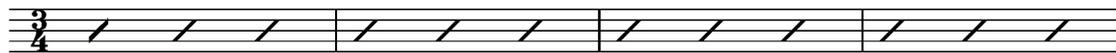
## Roman Numeral Analysis

Go through the following songs and label the chord symbols with Roman numerals. Just write in the Roman numeral beside the chord symbol. This requires that you:

- 1) Understand what the tonic of the key is
- 2) Calculate the intervallic relationship between chords

The key of each song is given. The key the song is in can be called the tonic, or the I. All you need to calculate these relationships is the musical alphabet and one hand. We're dealing with I, IV, & V chords right now. Is the song in the key of C? C = I, D = ii, E = iii, F = IV, G = V. Is the song in the key of C#? You can still count up the alphabet: C, D, E, F, G. . . One, two, three, four, five. In that key, C, D, E, F, and G are all sharp (#), but the musical alphabet remains. That's part of the nature of a diatonic major scale, actually—regardless of sharps and flats, you always have the musical alphabet.

Below is a visual of Happy Birthday as an example of what your analysis should look like:

C I	G V	G V	C I
			
C I	F IV	C I	G V C I
			

Now analyze the following songs. After your analyses, apply the left hand techniques in the following section to these progressions.

### *Amazing Grace* (John Newton, key of G)

G	G	C	G
			
G	G	D	D
			
G	G	C	G
			
G	D	G	G
			

La Bamba (Trad./Ritchie Valens, key of C)

C F G

The first system of musical notation for 'La Bamba' in C major. It consists of a single treble clef staff with a repeat sign at the beginning and end. The staff contains four measures of music, each represented by a diagonal slash. Above the staff, the chords C, F, and G are indicated over the first three measures respectively.

Achy Breaky Heart (Billy Ray Cyrus, key of A)

A A A E

The first system of musical notation for 'Achy Breaky Heart' in A major. It consists of a single treble clef staff with a key signature of two sharps (F# and C#) and a repeat sign at the beginning and end. The staff contains four measures of music, each represented by a diagonal slash. Above the staff, the chords A, A, A, and E are indicated over the four measures respectively.

E E E A

The second system of musical notation for 'Achy Breaky Heart' in A major. It consists of a single treble clef staff with a key signature of two sharps (F# and C#) and a repeat sign at the beginning and end. The staff contains four measures of music, each represented by a diagonal slash. Above the staff, the chords E, E, E, and A are indicated over the four measures respectively.

You Are My Sunshine (J. Davis, C. Mitchell, key of F)

F F Bb F

The first system of musical notation for 'You Are My Sunshine' in F major. It consists of a single treble clef staff with a key signature of one flat (Bb) and a repeat sign at the beginning and end. The staff contains four measures of music, each represented by a diagonal slash. Above the staff, the chords F, F, Bb, and F are indicated over the four measures respectively.

Bb F F C F

The second system of musical notation for 'You Are My Sunshine' in F major. It consists of a single treble clef staff with a key signature of one flat (Bb) and a repeat sign at the beginning and end. The staff contains four measures of music, each represented by a diagonal slash. Above the staff, the chords Bb, F, F, C, and F are indicated over the five measures respectively.

This Land is Your Land (Woody Guthrie, key of D)

G G D D

The first system of musical notation for 'This Land is Your Land' in D major. It consists of a single treble clef staff with a key signature of two sharps (F# and C#) and a repeat sign at the beginning and end. The staff contains four measures of music, each represented by a diagonal slash. Above the staff, the chords G, G, D, and D are indicated over the four measures respectively.

A A D D

The second system of musical notation for 'This Land is Your Land' in D major. It consists of a single treble clef staff with a key signature of two sharps (F# and C#) and a repeat sign at the beginning and end. The staff contains four measures of music, each represented by a diagonal slash. Above the staff, the chords A, A, D, and D are indicated over the four measures respectively.



## Composing

Learning to play songs is interesting and fun, but the larger goal here is to use techniques intentionally and apply theory creatively. Once you've learned to execute techniques in various ways in various keys, you have the tools to compose.

For your first composition, impose a simple structure—a four bar repeating chord progression.

Above the slashes, first write Roman numerals where you want the chords to be played, and then fill in the chord symbols.

- Use appropriate inversions for smooth voice-leading—don't jump from root position to root position.
- Choose a RH and LH technique and stick with it—chunking, broken chords, etc.
- Play a pattern in 4/4 meter, with a rhythm you can tap your foot/nod your head to.
- Don't write a key signature, but be conscious of what chord is the tonic.
- Use only the I, IV, and V chords from one key.

Composition #1



This time use any chords, regardless of the key or analysis. Just let your ear guide you to what you think sounds good. No Roman numerals, just write chord symbols.

Composition #2



## LogicPro Application

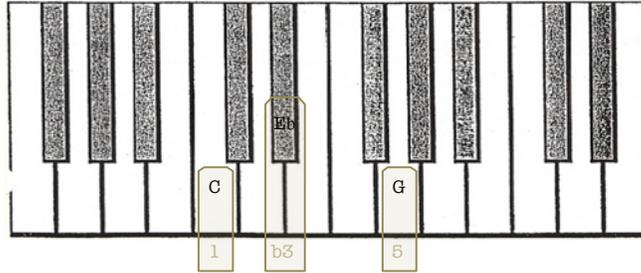
Now is a good opportunity to create a track with LogicPro. Choose one of your four bar compositions and record it on LogicPro.

# New Shapes: Minor

Put your RH on a C major triad. Consciously name the notes—C-E-G. Then consciously number the notes—1-3-5. So E is “the 3,” or “major third,” of C.

The “minor third” = “the flat 3.” So a C minor chord has E ♭ in the middle.

It is important to note that a “flat 3” means that the major third is being lowered by a half step. In the key of D major, for instance, the major third is F ♯. Therefore, the minor third, or flat 3, is F natural. In this case, the term “flat” really refers to the action of lowering a note.



## Minor Chord Symbols

Minor triads need a symbol to differentiate them from major triads. I use **min**.

Some people use **m**, or **mi**, or **-**. I’ve used all of these, but eventually settled on min, because it leaves no doubt. Some systems use **M** for major and **m** for minor. But a capital letter vs. lower case is easily confused. So for our purposes, let’s stick with **min** for minor.

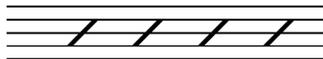
Your C minor chord symbol should look like this:

C<sup>min</sup>



Play a C minor triad in root position, first inversion and second inversion. While you do that, keep your LH on a low C. Remember, as you change the inversion, the chord stays the same. However, if you change your LH to E ♭, your chord symbol becomes:

C<sup>min</sup>/E ♭



## Expanding Technique: Transposing Minor Chords

Now, to practice minor triads in all twelve keys, you can use the same key groups again. Just be aware that the shapes won’t necessarily be the same. C<sup>min</sup>, F<sup>min</sup>, and G<sup>min</sup> now have white-black-white shapes, D<sup>min</sup>, E<sup>min</sup>, and A<sup>min</sup> are now white-white-white, and the other six are a little different. For minor triads, D ♭<sup>min</sup> and A ♭<sup>min</sup> have black-white-black shapes still, along with G ♭<sup>min</sup>.

**Assignment:** Play all twelve minor triads in root position. As soon as possible, you need to play the minor triads in all twelve keys. Work to be able to recognize those triads on the staff, and to be able to construct them from looking at a chord symbol. Most importantly, *feel the shapes* in your fingers, and *hear the sound* of a minor triad, no matter what key you play it in.

**Quiz:** Name any key and play the minor triad in root position, with your RH playing the chord and your LH playing the root (no LH chord). Check the boxes  next to each key once you can name the key and put your hands quickly on the minor triad with minimal anxiety in the fingers.

- |   |   |
|---|---|
| <input type="checkbox"/> A <sup>min</sup> | <input type="checkbox"/> D <sup>b</sup> / C <sup>#</sup> <sup>min</sup> |
| <input type="checkbox"/> B <sup>min</sup> | <input type="checkbox"/> E <sup>b</sup> / D <sup>#</sup> <sup>min</sup> |
| <input type="checkbox"/> C <sup>min</sup> | <input type="checkbox"/> G <sup>b</sup> / F <sup>#</sup> <sup>min</sup> |
| <input type="checkbox"/> D <sup>min</sup> | <input type="checkbox"/> A <sup>b</sup> / G <sup>#</sup> <sup>min</sup> |
| <input type="checkbox"/> E <sup>min</sup> | <input type="checkbox"/> B <sup>b</sup> / A <sup>#</sup> <sup>min</sup> |
| <input type="checkbox"/> F <sup>min</sup> |   |
| <input type="checkbox"/> G <sup>min</sup> |   |

#### Minor Triads

Instructional video: <http://youtu.be/mWfGHkG1DWc>



#### Songs in Minor Keys

There are many fun songs to learn that utilize relatively simple minor chord comping.

As you play through the following excerpts:

- *Get comfortable* with the techniques and the shapes in your fingers. Make it easy!
- *Pay close attention to the sound* of the chords, and then get your analytical thinking involved.
- *Connect the shapes and sounds to what you know* about inversions and chord progressions.
- *Consciously play the chords* (i.e., think of the chord symbol while you play: “This is a D minor chord”). Don’t just execute the notes on the page.

#### Typical Minor Chord Techniques

In the following examples, you’ll use similar comping techniques as before—chunking, arpeggios, and broken chords. If you learn the more complex LH parts, you will be playing independent bass lines, with syncopated LH-RH interaction. A new technique that is more common in minor keys than major is called **line clichés**. The James Bond song, *Skyfall*, has a great example of a line cliché.

# Repertoire

## In Minor Keys

### Chunking

1) *Doo-Wop* (Lauryn Hill, key of A min)

Musical notation for "Doo-Wop" in A minor. The piece is in 4/4 time. The right hand (treble clef) plays a steady eighth-note accompaniment of chords: A minor, G minor, A minor, G minor, A minor, G minor, A minor, G minor. The left hand (bass clef) plays a simple bass line: A2, G2, F2, E2, D2, C2, B1, A1.

2) *Family Affair* (Mary J. Blige & Dr. Dre, key of C # min)

Musical notation for "Family Affair" in C# minor. The piece is in 4/4 time. The right hand (treble clef) plays a steady eighth-note accompaniment of chords: C# minor, G# minor, C# minor, G# minor, C# minor, G# minor, C# minor, G# minor. The left hand (bass clef) plays a simple bass line: C#2, B1, A1, G1, F#1, E1, D1, C#1.

3) *It's a Man's World* (James Brown & Betty Newsome, key of E b min)

Musical notation for "It's a Man's World" in E-flat minor. The piece is in 4/4 time. The right hand (treble clef) plays a steady eighth-note accompaniment of chords: E-flat minor, D-flat/B-flat, E-flat minor, D-flat/B-flat, E-flat minor, D-flat/B-flat, E-flat minor, D-flat/B-flat. The left hand (bass clef) plays a simple bass line with triplets: E-flat2, D-flat2, C2, B1, A1, G1, F1, E-flat1.

### Syncopated Comping

4) *Billie Jean* (Michael Jackson, key of F# min)

Musical notation for "Billie Jean" in F# minor. The piece is in 4/4 time. The right hand (treble clef) plays a syncopated accompaniment of chords: F# minor, G#m/F#, A/F#, G#m/F#, F# minor, G#m/F#, A/F#, G#m/F#. The left hand (bass clef) plays a simple bass line: F#2, E2, D2, C2, B1, A1, G1, F#1.

### Arpeggios

1) *Moonlight Sonata* (Ludwig Beethoven, key of C#min)

Musical notation for the first arpeggio exercise. The key signature is C# minor. The first measure is labeled C#min and the second measure is labeled C#min/B. Both measures contain a series of four triplet eighth notes in the right hand, with a single eighth note in the left hand. The notes in the right hand are: C#4, E4, G#4, A4, C#5, E5, G#5, A5.

2) *Fallin'* (Alicia Keys, key of Emin)

Musical notation for the second arpeggio exercise. The key signature is E minor. The first measure is labeled Emin and the second measure is labeled D/B. Both measures contain a series of four triplet eighth notes in the right hand, with a single eighth note in the left hand. The notes in the right hand are: E4, G4, Bb4, C5, E5, G5, Bb5, C6.

3) *Stairway to Heaven* (J. Page & R. Plant, key of Amin)

Musical notation for the third arpeggio exercise. The key signature is A minor. The first measure is labeled Amin, the second is Amin(add2)/G#, the third is Amin/G, and the fourth is Amin/F#. Each measure contains a series of four eighth notes in the right hand, with a single eighth note in the left hand. The notes in the right hand are: A4, C5, E5, G5, A5, C6, E6, G6.

### Line Clichés

1) *Dream On* (Steven Tyler, key of Fmin)

Musical notation for the first line cliché exercise. The key signature is F minor. The first measure is labeled Fmin, the second is Cmin/F, the third is Fmin6, and the fourth is Fmin(b6). Each measure contains a series of four eighth notes in the right hand, with a single eighth note in the left hand. The notes in the right hand are: F4, A4, C5, D5, F5, A5, C6, D6.

2) *Skyfall* (Thomas Newman, key of Cmin)

Musical notation for the second line cliché exercise. The key signature is C minor. The first measure is labeled Cmin, the second is Cmin(#5)/Ab, the third is Cmin6/F, and the fourth is Cmin(#5)/F. Each measure contains a series of four eighth notes in the right hand, with a single eighth note in the left hand. The notes in the right hand are: C4, Eb4, Gb4, Ab4, C5, Eb5, Gb5, Ab5.

## In a Minor Key

Remember, being “in a key” means:

- 1) There is an established harmonic “home,” or tonic, which is numbered in analysis as the Arabic numeral 1, or the Roman numeral I. For minor, the Roman numeral should be labeled in lower case. So in a minor key, the tonic is **i**.
- 2) There is a scale that correlates to the key.
- 3) Each note in the scale can correlate to a chord as well. In a minor key, the diatonic chords are numbered in analysis from **i** through **bVII**.

The diatonic chords in the key of A minor are:

Rom. numeral	<b>i</b>	<b>ii<sup>o</sup></b>	<b>bIII</b>	<b>iv</b>	<b>v</b>	<b>bVI</b>	<b>bVII</b>
Chord symbol	A <sup>min</sup>	B <sup>dim</sup>	C	D <sup>min</sup>	E <sup>min</sup>	F	G
Staff notes							

Play through these chords up and down the scale. Just as with C major, you can use the “cookie cutter,” and move up and down the white notes. Again, when you transpose to other minor keys, it won’t be so easy. You really have to know the unique shape of each key.

**Assignment:** Write the chord symbols, Roman numerals, and notes on the staff, and play through the diatonic triads in the keys of **D minor** (relative minor to F major) and **E minor** (relative minor to G major).

Rom. numeral	
Chord symbol	
Staff notes	

Rom. numeral	
Chord symbol	
Staff notes	

## Relative Minor

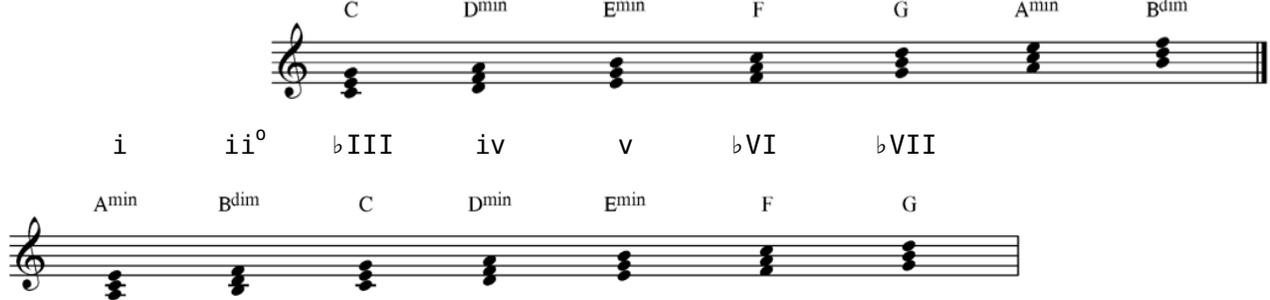
The key of A minor actually does have exactly the same notes and chords as C major—but the tonic is different. With A as the tonic, or  $\text{i}$  chord, C is no longer I. In the key of A minor, C is the  $\text{b III}$ .

Chord symbols are universal, and analysis is relative.

Any C major chord is a C major chord, no matter what key you're in. But a C major chord in the key of A is the  $\text{b III}$ , and in the key of F it's the V, and in the key of G it's the IV, etc., etc. Get it? If not, take some time to do the math and let this concept sink in.

The visual below shows the key of C major overlapping with the key of A minor.

	I	ii	iii	IV	V	vi	vii <sup>o</sup>
	C	D <sup>min</sup>	E <sup>min</sup>	F	G	A <sup>min</sup>	B <sup>dim</sup>

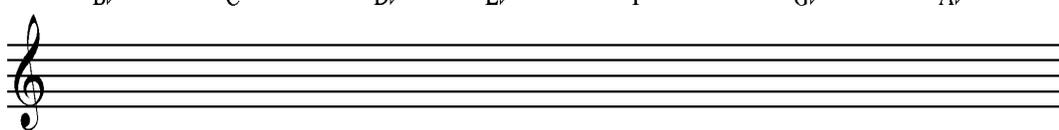


i	ii <sup>o</sup>	$\text{b III}$	iv	v	$\text{b VI}$	$\text{b VII}$
A <sup>min</sup>	B <sup>dim</sup>	C	D <sup>min</sup>	E <sup>min</sup>	F	G

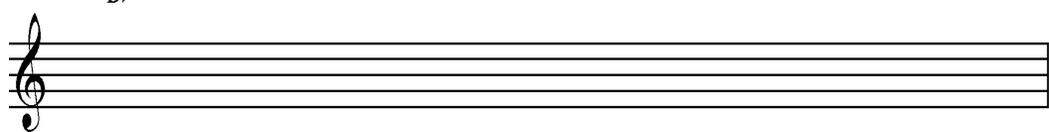
## Assignment:

Transpose the diatonic triads in a minor key up a half step from A minor (as pictured above) to B $\flat$  minor. Translate those chords into the relative major—D $\flat$  major.

B $\flat$ <sup>min</sup>	C <sup>dim</sup>	D $\flat$	E $\flat$ <sup>min</sup>	F <sup>min</sup>	G $\flat$	A $\flat$
--------------------------	------------------	-----------	--------------------------	------------------	-----------	-----------



D $\flat$
-----------



**Quiz:** Play a diatonic chord from the key of C major, and identify its Roman numeral in the key of C, and its Roman numeral in the key of A minor.

KEY OF		KEY OF	
C	A	C	A
<input checked="" type="checkbox"/> C	<u>I</u> <u>bIII</u>	<input type="checkbox"/> G	__ __
<input type="checkbox"/> D <sup>min</sup>	__ __	<input type="checkbox"/> A <sup>min</sup>	__ __
<input type="checkbox"/> E <sup>min</sup>	__ __	<input type="checkbox"/> B <sup>dim</sup>	__ __
<input type="checkbox"/> F	__ __		

**Quiz:** Name a minor key, an inversion, and a technique. Without putting your hands on the piano, look at the keyboard and visualize what you need to play. Once you can see it, then count off four beats ("1, 2, 3, 4") and jam on it, with your RH playing the chord and your LH on the root (no LH chord). Check the boxes  next to each key once you can call any inversion, visualize it within a few seconds, and play it in a groove.

- Cmin       Dmin       Ebmin       F#min

### Composition

Impose a simple structure—a four bar repeating chord progression. You fill in the chord symbols above the slashes.

- Choose a minor key and use only the i, bVII, and bVI chords from that key.
- Choose a technique and stick with it—chunking, broken chords, arpeggios, etc.
- Play a pattern in 4/4 meter, with a rhythm you can tap your foot/nod your head to.

Composition #3



This time use any chords, regardless of the key or analysis. Just let your ear guide you to what you think sounds good. Use any combination of minor and major chords.

Composition #4



# Repertoire

## Minor Chords in Major Keys

Learning to use the *vi* minor chord, as well as the *ii* and *iii*, opens the door to playing a huge cache of popular songs—many thousands of songs. In the following song excerpts, you'll see examples in various keys, adding different chords, and different techniques.

### *Stand by Me* (King, Lieber, Stoller)

\* Fingering advice: Start the bass line on your LH thumb.

First system of musical notation for *Stand by Me*. The key signature is one sharp (F#), and the time signature is 4/4. The notation consists of a grand staff with a treble clef and a bass clef. Above the staff, four chords are indicated: A, A, F#m, and F#m. The bass line starts on the thumb (C4) and follows a simple rhythmic pattern.

Second system of musical notation for *Stand by Me*. The key signature is one sharp (F#), and the time signature is 4/4. The notation consists of a grand staff with a treble clef and a bass clef. Above the staff, four chords are indicated: D, E, A, and A. The bass line continues the rhythmic pattern from the first system.

### *Unchained Melody* (Zaret & North)

Musical notation for *Unchained Melody*. The key signature is one sharp (F#), and the time signature is 12/8. The notation consists of a single staff with a treble clef. Above the staff, two chords are indicated: C and Am. The melody is a simple, repetitive eighth-note pattern.

### *Clocks* (Coldplay)

Musical notation for *Clocks*. The key signature is three flats (Bb, Eb, Ab), and the time signature is 4/4. The notation consists of a grand staff with a treble clef and a bass clef. Above the staff, three chords are indicated: Eb, Bbmin, and fmin. The bass line is a simple, repetitive eighth-note pattern.

# The “Four Chord Song(s)”

The typical “four chord song” uses a combination of four diatonic chords—one minor chord and three major chords. In major keys that is the **I, IV, V, and vi** chords. In minor keys, it is the same progression as the major four chord song, except starting on the minor **i** chord. Look at the visuals below and you will get a contextualized example of how the chord symbols are universal while the analysis is relative.

## Minor Four Chord Song

Key of A minor: **i**                       **$\flat$ VI**                       **$\flat$ III**                       **$\flat$ VII**

A<sup>min</sup>                      F                      C                      G



## Major Four Chord Song

Key of C major: **I**                      **V**                      **vi**                      **IV**

C                      G                      A<sup>min</sup>                      F



A popular variation on the Four Chord Song is to start on the **IV** chord. Among the hundreds of songs that use this progression are recent hits such as The Script’s *Falling to Pieces*.

Key of B $\flat$  major:

**IV**                      **I**                      **V**                      **vi**  
E $\flat$                       B $\flat$                       F                      G<sup>min</sup>



Another popular variation on the Four Chord Song is to use the **ii** minor chord instead of the **vi**. Cher’s huge hit from 1998, *Believe*, uses this progression:

Key of A $\flat$  major:

**I**                      **V**                      **ii**                      **IV**  
A $\flat$                       E $\flat$                       B $\flat$ <sup>min</sup>                      D $\flat$



### Four Chord Songs

Instructional video: <http://youtu.be/R2xK14jBkMM>



### Substitutions for the Diatonic Diminished Chord

Let's be honest—the diminished chord in the diatonic scale sounds terrible. You will never hear it in a song. Never.

However...

You *do* hear the 7 used in major key chord progressions a *lot*. And you do sometimes hear diminished chords. So what's the deal?

Diminished chords have a distinctly contracted sound because of their minor third intervals, and they can sound jarringly intense (I experience them as tangy, like lemon juice). This intensity creates tension, which means an opportunity for release. So, diminished chords can bring a great flavor into a chord progression. However, in songs with diatonic harmony such as today's popular four chord songs, they're just a little too spicy.

There are two slash chords commonly used as a substitution for the diatonic diminished chord. In the key of C major, they are G/B and E<sup>min</sup>/B.

That's the V chord over its own 3 (V/3), and the iii chord over its own 5 (iii/5). Go back to Adele's *Someone Like You* and you'll see the second chord is one of these variations!

Question: Can you identify which variation it is?

Answer: C#min/G# in the key of A major is the iii/5.

Question: What would the V/3 be in the key of A?

Answer: E/G#

Unlike the V/3 and iii/5 chords, diminished chords are most often used as **leading chords** going to minor chords. For instance, G#<sup>dim</sup> leads up to A<sup>min</sup>. and C#<sup>dim</sup> leads to D<sup>min</sup>.

### Assignment

Play the following progression in C major, chunking the chords in a steady tempo. Circle the V/3, iii/5, and diminished leading chords. Then transpose the progression to F major.

A<sup>min</sup>    F            C            E<sup>min</sup>/B            A<sup>min</sup>            G/B            C            G#<sup>dim</sup>



### Composition

Write a Four Chord Song. Use the Roman numerals from one of the above progressions as a template. Choose a key, work out the chords, and experiment with techniques until you find a way to play your progression that sounds good to you. Once you've completed one song, compose another song using a different variation and a different key. Use at least one substitution or diminished chord in each song.

Composition #5



Composition #6



### LogicPro Application

Now is another good opportunity to create a track with LogicPro. Choose one of your four bar compositions and record it on LogicPro.

To reduce or increase the challenge, add constraints such as composing in specific key(s), using specific techniques, composing more bars (8, 12, 16...) or less bars (2 bars repeating).

### Independent Learning

As producers, songwriters, arrangers, accompanists, band members, or just living room sing-along leaders, CU Denver Music & Entertainment Industry Studies graduates need to be able to *construct* music—and that ability comes primarily through chord-based skills. Still, there is no substitution for note-reading ability. At each level of piano class, teachers address note reading, scale playing, and keyboard workstation competence as well. Successful completion of this workbook in conjunction with piano class represents a strong first step towards developing a skill set on the keyboard that is applicable in all of the above-mentioned musical contexts.

As you refine these skills, you will understand the music that you listen to. And as you understand the music, you will be able to create your own.

The journey of learning is never-ending, so keep on truckin'!

# Outcomes Review

## **FUNDAMENTALS**

- Play in all registers of the piano, including up and down by octaves. (p4)
- Understand piano geography (e.g., right=up). (p3)
- Organize the twelve keys into the four "shape groups"—C/F/G, A/D/E, Ab/Db/Eb, Bb/B/F# -- based on the root position major triad shapes. (p7)
- Practice shapes and techniques to automaticity. (p9)

## **KNOWLEDGE, SKILL, & REPERTOIRE**

- Play major and minor triads in root position in all twelve keys. (p8)
- Play major and minor triads in all inversions in multiple keys. (p19-20)
- Play diatonic triads in major and minor keys. (p37)
- Minimize hand motion in chord progressions through the use of inversions. (p22-25)
- Harmonize, or "voice," melodies through the use of inversions. (p26-27)
- Analyze and Practice typical chord progressions from popular music, such as I – V – vi – IV, V – vi – IV – I, and IV – I – V – vi. (p28-29, 40-41)
- Perform and Compose diatonic (e.g., I-vi-IV-V) chord progressions. (p40-42)
- Perform and Compose chord progressions using major and minor triads, power chords, slash chords. (p14-18, 23-29, 34-35)
- Prepare and perform music from notated piano music, Roman numeral analysis, and lead sheets with chord symbols. (p25-26, 34-35, 39-40).
- Perform using various RH comping techniques (p13), such as "chunking," broken chords, and arpeggios, and LH techniques (p31) such as simple bass lines, independent bass lines, alternating bass lines, arpeggios, and 1-5-8 patterns.

## **MUSICALITY**

- Play with relaxed wrists, appropriately curved fingers, and easeful upright posture. (p9)
- Use sustain pedal effectively. (p14)

## Additional Materials & Song Charts

Additional materials and song charts will be distributed by teachers as they deem appropriate for instruction.

## Instructional Videos

For my Instructional Video Playlist (YouTube): <http://goo.gl/i2Vita>

Or scan this QR code with your mobile device:



## Contact

Email me at [peter.stoltzman@ucdenver.edu](mailto:peter.stoltzman@ucdenver.edu) with requests or questions.

## Appendix B: Workbook II

Peter John Stoltzman's

# Contemporary Piano Class Workbook II

## The Foundation

Musical notation for 'The Foundation' in 4/4 time. The notation consists of a single staff with a treble clef and a 4/4 time signature. The melody is written in a simple, rhythmic style. Above the staff, the following chord symbols are indicated: C, G/B, Amin, F(add2), Abmaj7, Bb7(sus4), C(sus4), and C. The notation includes a treble clef, a 4/4 time signature, and a key signature of one flat (Bb). The melody starts with a quarter note G4, followed by a quarter note A4, a quarter note Bb4, and a quarter note C5. The second measure contains a quarter note G4, a quarter note A4, a quarter note Bb4, and a quarter note C5. The third measure contains a quarter note G4, a quarter note A4, a quarter note Bb4, and a quarter note C5. The fourth measure contains a quarter note G4, a quarter note A4, a quarter note Bb4, and a quarter note C5. The fifth measure contains a quarter note G4, a quarter note A4, a quarter note Bb4, and a quarter note C5. The sixth measure contains a quarter note G4, a quarter note A4, a quarter note Bb4, and a quarter note C5. The seventh measure contains a quarter note G4, a quarter note A4, a quarter note Bb4, and a quarter note C5. The eighth measure contains a quarter note G4, a quarter note A4, a quarter note Bb4, and a quarter note C5. The notation ends with a double bar line.

3<sup>rd</sup> edition ©2013

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Instructional Video YouTube Playlist: <http://goo.gl/i2Vita>



# Introduction

This workbook is specifically designed for 2<sup>nd</sup>-semester class piano students at the University of Colorado at Denver, where our lab is equipped with workstations that include LogicPro. Each student will complete at least one project using LogicPro in each semester of piano class. Most of the instruction related to such a project will come in class from the teacher. Also, this workbook is designed for students who have some basic music theory background or are concurrently taking a music theory class. I'm assuming you've seen notes on a staff before, you know the symbols for sharp (#) and flat (b), and someone else has taught or is teaching you music fundamentals such as key signature and time signature.

This workbook will help you make efficient progress, but it will not make playing the piano any easier. You are a computer engineering student, your body is the computer, and I'm going to teach you the language and how to effectively program your own software.

With so many possibilities at your fingertips, learning to play the piano can be potentially overwhelming at times. Therefore, learning efficiently and progressing consistently are crucial in order to avoid getting bogged down in the myriad possibilities and the endless process of learning repertoire, developing skills, and applying concepts on the instrument.

This workbook is intended to help you:

- 1) Practice the piano effectively and efficiently
- 2) Play the piano like contemporary pianists really play
- 3) Understand the skills and concepts involved in your repertoire
- 4) Refine and Expand skills
- 5) Apply skills and concepts independently
  - in learning/practicing
  - in performance
  - in composition

With or without a teacher, it is highly desirable for you to refine your practice process – trust me! Let these three words be your mantra: Make It Easy. You want to optimize the effectiveness of the time you spend at the piano. There are three keys to doing that. Your practice should be:

- 1) Meaningful
- 2) Manageable
- 3) Modeled Well

I make instructional videos that correlate to many of the lessons here. Those videos can serve as models, but they can't assess exactly where you're at in the moment, which little thing is tripping you up every time, etc. Having a teacher who can see exactly what you're doing right and wrong, and show you what to do next is irreplaceable.

Though this workbook should be applicable to any piano student, it is focused primarily on contemporary popular music and various related styles – from folk to film score, jazz to hip-hop, and a sprinkling of church and classical styles. I encourage any student or teacher using this book to supplement with appropriate songs and sight-reading repertoire.

I want you to gain control over your learning process. No more "I'm just not good at this. . ." I want you to feel like virtually everything you learn can become part of your personal

skill-set. Not everyone has the same proclivity or ambition, but anyone who learns how to learn can make significant progress. So let's get started!

## Do What the Pros Do

Think of a pianist whose music you love to listen to. Imagine him or her playing, or better yet go look him or her up on the internet and watch a video. Best of all, go to a concert and sit or stand where you can really see the pianist in action. What is he or she doing? What is so great about it? Before you turn this page, write down a list of adjectives that describe your chosen pianist.

Adjectives that describe the great pianist, \_\_\_\_\_ .  
[name of pianist]


Once you have your list of adjectives, consider what your chosen pianist actually does that makes these adjectives true for you. Write a list of these concrete actions—phrases that begin with verbs—next to each adjective.

For example:

<b>Adjectives</b>	<b>Verb phrases</b>
Exciting	Plays with wide dynamic range
	Articulates rhythms with intensity
	Builds energy in music to peak moments

On the next page, write in adjectives and then at least three correlating verb phrases. My music education mentor, Bob Duke, led me through this exercise in a class at The University of Texas, and it blew my mind.



What I want you to take away from this adjective-verb exercise is:

- 1) Descriptions in adjectives might feel meaningful when you say them, but they are actually meaningless without accompanying actions.
- 2) You can use a thousand adjectives to describe the same actions, but the actions don't change—they are objective and concrete. In this case, it's not "the devil" that's in the details, it's the actual physical reality.
- 3) There are some things that pianists do that you can identify right now, and other things that are still more or less a mystery. (And that's a good thing. . . otherwise you don't need this book!)

### **The Power of Verbs**

My primary job is to help you identify and practice the concrete actions that comprise satisfying piano playing, in ways that are easy and enjoyable—or, as I will say again and again, manageable and meaningful. This workbook exists to demystify that process. Verbs are a key ingredient of that process—they have the power to make the unseen seen!

Don't get me wrong—I love a little mystery as much as anyone. There's enough mystery in the elemental questions like, "what purpose does this serve," or "why does that feel so good," to keep me going for a lifetime. But the point of expressive ventures such as playing the piano is not to gape at the mystery of it all, any more than it is to robotically execute finger patterns. The point is to actually do something you care about.

The first step towards actually doing something you care about is to identify what those things are. So now refine or expand your personal list of the behaviors (verb statements) of a successful contemporary keyboard player.

On the next page, I will share my own list of verb phrases with you. These are all things that I do, or strive to do, as a professional keyboard player.

My verb list is just abstract enough so that it can accommodate virtually any level of player. All the details of what notes to play are left out, because that depends entirely on repertoire and skill level. For example, there are opportunities to "read chord symbols and form appropriate chord voicings" as simple as playing a C major triad, or as complicated as playing two-handed spread voicings through a jazz standard. This workbook will guide you through various concrete examples at various levels of complexity, but each student will have adjustments to make depending on his or her own proclivity and ambition, as I mentioned before. Therefore, my list is intended to be applicable by anyone.

## Behaviors of a Successful Contemporary Keyboard Player

### 1) Engage in the Learning Process:

- Show up consistently and punctually
- Listen actively and maintains focus
- Seek help when needed
- Offer help when able
- Practice consistently
- Practice to the point of internalizing knowledge/skills/repertoire
- Independently apply skills
- Transfer skills to various contexts

### 2) Perform Repertoire:

- Play standard song forms and excerpts or phrases
- Recognize standard and non-standard forms and progressions
- Apply appropriate comping techniques
- Adjust technique and thinking processes spontaneously and/or with practice
- Count off and play at an appropriate tempo
- Keep time and form with or without accompaniment
- Recover from mistakes without stopping or starting over
- Play with appropriate dynamics
- Play with appropriate articulation
- Play with stylistically appropriate "feel"

### 3) Understand and Utilize Contemporary Chord Theory:

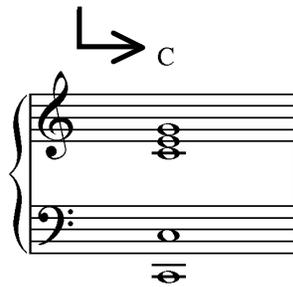
- Read chord symbols and form appropriate chord voicings
- Utilize inversions to minimize hand movement and/or to voice melodies
- Transpose chords and progressions using numerical analysis

# Content Review

In your first semester of piano class, you developed foundational knowledge and skills regarding piano geography, intervals, chords voicings, progressions, and comping techniques. To review, read and play through everything through page 10. The more keys you can transpose this stuff into, the more you are on your way to mastering contemporary piano skills.

## Chord Symbols

For every chord, there is a chord symbol.



A chord symbol provides you with all the basic information you need to construct a chord—the chord type, the root of the chord and the bass note.

What the chord symbol doesn't do is tell you anything about the musical style, or what techniques to use to perform that chord. The figure above shows the notes of a C major triad and the LH bass notes on the grand staff, but contemporary lead sheets may show only a chord symbol, over lyrics or with slashes in the bars, like this:



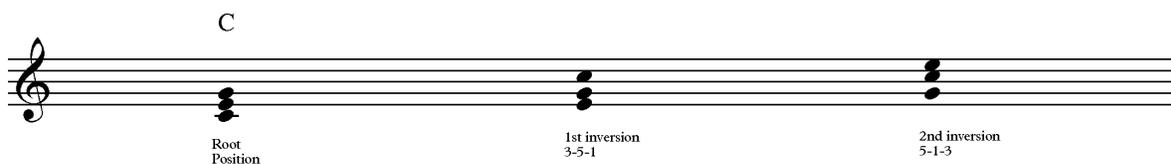
The chord symbol, C, can be read as "C," or as "C major."

If you are given a lead sheet—or, chart—you can play chords in any number of ways. Chord symbols give the performer interpretive freedom. But of course, you must still make your choices as to what to play within the constraints of the style.

A chord symbol represents a sound, not a shape.

## Inversion of a Triad

There are three notes in a major triad, and therefore three possible **inversions**.



## Shape Groups on the Piano

White White White

C F G

White Black White

D E A

Black White Black

D $\flat$  E $\flat$  A $\flat$

Others

B B $\flat$  F $\sharp$

### In the Key

Being "in the key of" C (or any other key) means a few things:

- 4) There is an established harmonic "home," or tonic, which is numbered in analysis as the Arabic numeral 1, or the Roman numeral I.
- 5) There is a scale that correlates to the key. Notes that are in the scale are called **diatonic**. Notes that are not in the scale are **non-diatonic**. Single notes are numbered in analysis with Arabic numerals—1 through 7.

Below is the "C major scale," correlating to the key of C major.

Numbers	1	2	3	4	5	6	7	8/1
Notes on the Staff								
Names	C	D	E	F	G	A	B	C

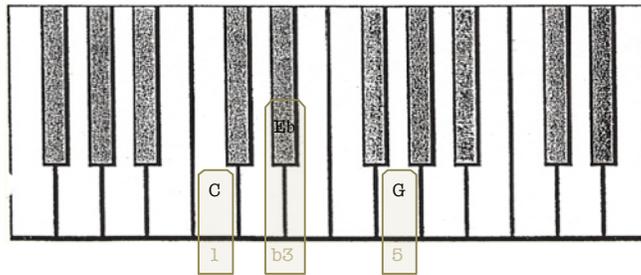
- 6) Each note in the scale correlates to a chord as well. These chords are called diatonic chords, and are numbered in analysis with Roman numerals—I through vii. The Roman numerals are capitalized for major chords and lower case for minor chords.

The diatonic chords in the key of C major are:

Rom. numeral	I	ii	iii	IV	V	vi	vii <sup>o</sup>
Chord symbol	C	D <sup>min</sup>	E <sup>min</sup>	F	G	A <sup>min</sup>	B <sup>dim</sup>
Staff notes							

### Minor Chords

The “minor third” = “the flat 3.” So a C minor chord has E<sup>b</sup> in the middle.



Your C minor chord symbol should look like this:

C<sup>min</sup>



### Relative Minor

The key of A minor actually has exactly the same notes and chords as C major—but the tonic is different. With A as the tonic, or *i* chord, C is no longer I. In the key of A minor, C is the *b* III.

Chord symbols are universal, and analysis is relative.

The visual below shows the key of C major overlapping with the key of A minor.

	I	ii	iii	IV	V	vi	vii <sup>o</sup>
	C	D <sup>min</sup>	E <sup>min</sup>	F	G	A <sup>min</sup>	B <sup>dim</sup>
	<i>i</i>	<i>ii</i> <sup>o</sup>	<i>b</i> III	<i>iv</i>	<i>v</i>	<i>b</i> VI	<i>b</i> VII
	A <sup>min</sup>	B <sup>dim</sup>	C	D <sup>min</sup>	E <sup>min</sup>	F	G

## LH Techniques

1-5 1-5-8

1-3-5

## Repertoire Review

### Closest inversions

*Happy Birthday*

C G G C C F C/G G C

### Voicing the melody

*Pachelbel's Canon*

D A Bmin F#min G D G A

### Reading Chord Symbols and Roman Numerals

*You Are My Sunshine* (J. Davis, C. Mitchell, key of F)

I                      I                      IV                      I  
F                      F                      B $\flat$                       F

IV                      I                      I                      V                      I  
B $\flat$                       F                      F                      C                      F

The image shows two staves of musical notation. The first staff contains four measures of chords: F, F, B-flat, and F. The second staff contains five measures of chords: B-flat, F, F, C, and F. Roman numerals are placed above each chord symbol. The key signature is one flat (F major).

### Minor Key

*Doo-Wop* (Lauryn Hill, key of A $\text{min}$ )

A $\text{min}$     G $\text{min}$

The image shows two staves of musical notation. The first staff contains two measures of chords: A $\text{min}$  and G $\text{min}$ . The second staff contains two measures of bass lines corresponding to the chords above. The key signature is no sharps or flats (A minor).

### Minor Chords in Major Keys

*Stand by Me* (King, Lieber, Stoller)

A                      A                      F $\sharp$ m                      F $\sharp$ m

D                      E                      A                      A

The image shows two staves of musical notation. The first staff contains four measures of chords: A, A, F-sharp minor, and F-sharp minor. The second staff contains four measures of bass lines corresponding to the chords above. The key signature is two sharps (A major).

### RH Arpeggio Technique

*Unchained Melody (Zaret & North)*

Two staves of music in 12/8 time. The first staff has chords C and Am. The second staff has chords F and G. The melody consists of eighth notes.

### LH "Alberti-bass" Technique

*How to Save a Life (The Fray)*

A grand staff with treble and bass clefs. The bass line features a repeating Alberti-bass pattern. Chords B $\flat$ , F $^6$ /A, B $\flat$ , and F $^6$ /A are indicated above the staff.

### Minor Four Chord Song

Key of A minor: i                       $\flat$ VI                       $\flat$ III                       $\flat$ VII  
Amin                      F                      C                      G

A single staff with a treble clef. The staff contains four measures of slash marks representing chords.

### Major Four Chord Song

Key of C major: I                      V                      vi                      IV  
C                      G                      Amin                      F

A single staff with a treble clef. The staff contains four measures of slash marks representing chords.

### Variations on the Diatonic Diminished Chord

A single staff with a treble clef. Chords Amin, F, C, E $^{\flat}$ min/B, Amin, G/B, C, and G $\sharp$ dim are shown. Arrows point from E $^{\flat}$ min/B and G/B to G $\sharp$ dim, with notes "(instead of B $^{\circ}$ )" above them. A note "(vii $^{\circ}$  works better resolving to minor)" is above G $\sharp$ dim.

# More Shapes and Sounds

There are so many great variations on standard chords—different chord types, different chord progressions, different chord voicings. Let’s go over some other chord types now. If you’ve mastered major and minor chords, you’ve almost certainly been exposed to some of the chords below. If this is your first time through studying chords, brace yourself. Either way, this section contains potent information that will supply you with a professional-level arsenal of possibilities at your fingertips. As I’ve already said, it will take years of experience to retain and master all of this, though. So be as patient and as diligent as you can.

## New Chord Types

### 1) sus 4 and sus 2

“Sus” chords are characterized by a *suspension* of their harmonic quality—minor or major. Pop quiz: Which note gives a chord a minor or major quality?

Answer: “The 3”

If you’re still not sure you get that:

Sing the notes of a major triad in root position—1, 3, 5...

Now sing the notes of a minor triad in root position—1, ♭ 3, 5...

That’s a huge difference that the 3 (or ♭ 3) makes!

If you move the 3 up to the 4, or down to the 2, you suspend the harmonic quality of the chord—you make it a **sus chord**. Oftentimes suspensions are “resolved,” as in the sus 4 resolving to the major 3. But other times they are left hanging, or used as an alternative to the typical chord in any given situation.

Try these voicings in your RH, while playing the root with your LH. Apply a little creativity and you can create an almost infinite array of music with these voicings alone. Watch the video for some models.

Two musical staves showing chord voicings. The first staff shows G(sus4), G, G(sus4), and G. The second staff shows G(sus2), G, G(sus2), and G. Each chord is represented by a treble clef, a G note on the first line, and a triad of notes on the staff.

### 2) add 2 and add 4

“Add” chords are similar to sus chords, except they are not suspending the quality at all. They are enhancing the quality, by adding the 2 or the 4 into the mix. There are many ways that you can voice these chords. Here are just a few examples.

A musical staff showing four chord voicings: G(add4), G(add2), Gmin(add4), and Gmin(add2). Each chord is represented by a treble clef, a G note on the first line, and a triad of notes on the staff.

### 3) Diminished and Augmented

If you've taken a traditional harmony or music theory class, you've already studied diminished and augmented triads. The truth is, they're not used that often nowadays. But they definitely have their moments! If you haven't used a diminished or augmented chord effectively, you're missing out. There is a great example of both a diminished 7<sup>th</sup> chord and augmented 7<sup>th</sup> chord in *I Believe I Can Fly*. Both chord types create tension—and give an extra twinge of tension compared to, for instance, a leading tone slash chord or a plain old V–I progression.

You can remember these chords by simply associating the meaning of their names with their root position shape. Diminished is smaller, augmented is larger. Simple as that. (Sort of)

NOTE: The chord symbol for diminished can be *dim*, but it can also be <sup>o</sup>, as in G<sup>o</sup>.

The chord symbol for augmented can be *aug*, but it can also be <sup>+</sup>, as in G<sup>+</sup>.

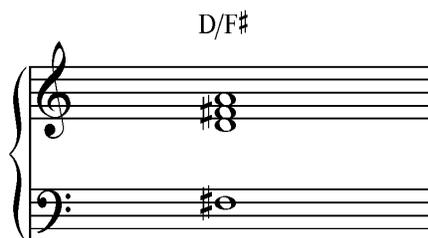


### 4) Leading tone slash chords

Leading tone slash chords are really, really important. Seriously, don't skip this.

Do you know what the leading tone is? It's the note one half step below the root. In *solfege*, that's "ti," and it leads to "do." In numbers, it's 7, and it leads to 8 (or 1). So you know what the leading tone is. Now the slash chord...

Take a look at this leading tone slash chord—play it, and try to understand it before I explain it.



Question: What note is the leading tone? And where is it leading?

Answer: The leading tone is F#, and it's leading to G.

What's important to understand now is that this is not an F# chord. It's a D chord. D is the V chord in the key of G. F#, the leading tone, is the 7 of G. But also, F# is the 3 of D. Ooh, the relationships get complicated, don't they?

So here's the deal with the leading tone slash chord: It's just a V chord over its own third (instead of its root). At the end of *Workbook I: The Beginning*, I introduced you to this chord as a substitution for the vii<sup>o</sup>. Now you can expand your concept of this special kind of slash chord.

D is the V in the key of G, the third of D is F#, and F# is the leading tone of G. Hence, the D/F# chord—the *leading tone slash chord*. These chords are all over popular music today. A great example is Sarah Bareilles's *Love Song*. Check it out:

LT Slash Chord Leading To G      LT Slash Chord Leading To B $\flat$       LT Slash Chord Leading To F

D/F#    G $^{min}$       F/A    B $\flat^{(sus2)}$       C    D $^{min}$       C/E    F

Traditional harmony has analyses of the leading tone slash chord, based on the inversion and function, but that misses out on the chord's transferability. The coolest thing about leading tone slash chords is that you can use them *anywhere*. They sound great even when they're *not* leading anywhere. And also, you can use them to lead to *wherever* you want to go. If you want to lead to G, a great option is D/F#. If you want to lead to C, use G/B.

**Quiz:** Choose a chord, major or minor, and then figure out and play the corresponding leading tone slash chord and resolve it to your chosen chord. For example: you choose D $^{min}$ . The LT slash chord is \_\_\_? A/C#. Play A/C# and resolve it to D $^{min}$ .

**Extra Hip: sus 2 and add 2 Leading tone slash chords**

If you like the leading tone slash chord, try it with a triad variation, rather than just a plain old triad. The best of these is the sus 2 or add 2 chord (played over its third). So much tasty music in these chords...explore, enjoy, and employ these shapes and sounds in your own music.

D $^{(sus2)}/F\#$       D $^{(add2)}/F\#$

**Assignment:**

Play through these LT Slash Chord progressions and write in the missing chord symbols.

Example:

E /G#    A    \_\_\_ /C#    D    \_\_\_ /B    C    \_\_\_ /A    B  $\flat$     \_\_\_ /A#    B

# Assignment

Play through the exercise below. If you are ambitious, start the progression a half-step higher, on A b /C, and play through the other 6 keys. To take it to the next level beyond, substitute sus 2 chords in your LT Slash Chords. e.g., G<sup>sus2</sup>/B

## Leading Tone Slash Chord Chromatic Exercise

To Major

G/B C A/C# D B/D# E Db/F Gb Eb/G Ab F/A Bb G/B C

C G/B Bb F/A Ab Eb/G Gb Db/F E B/D# D A/C# C

To Minor

G/B Cmin A/C# Dmin B/D# Emin Db/F Gbmin Eb/G Abmin F/A Bbmin G/B Cmin

Cmin G/B Bbmin F/A Abmin Eb/G Gbmin Db/F Emin B/D# Dmin A/C# Cmin

# Non-Diatonic Progressions

There are times when music can get a lot more interesting if the harmony goes outside the box—even just a little! One well-timed minor chord when the ear is expecting major can create involuntary emotional responses. One strategically placed  $\flat$  VI chord instead of the I can inspire comments like, “You’re a genius!” Trust me, you don’t have to be a genius. . . these are tricks that film score composers use all the time, and most good songwriters use whether they understand the theory behind it or not.

## Borrowing

One primary way to create nice non-diatonic progressions is to borrow chords from another diatonic realm—e.g., if you’re in the key of C major, you borrow chords from the key of C minor.

1) Major Key

Borrowed iv  
Borrowed d  
Borrowed  $\flat$ VII

C C/E Fmin F/G A $\flat$ maj7 B $\flat$  C

2) Minor Key

Borrowed V  
Borrowed IV

Cmin Eb A $\flat$  G G/B Cmin Cmin/B $\flat$  F/A

## Modulating

Another common way to move out of a diatonic realm is to change keys. There are many ways to change keys, including *just changing* keys! However, for now let’s focus on one particular vehicle—the leading tone slash chord.

LT Slash Chord  
Modulating  
To B $\flat$

D Bmin G F/A B $\flat$  E $\flat$  F B $\flat$

## Combining

Once you have a handle on more than one way to create non-diatonic progressions, you can of course combine those methods as you choose. Maybe you use a leading tone slash chord to go to a chord borrowed from the minor scale. Perhaps you change keys and borrow chords in the new key.

Example:

Borrowed iv  
LT Slash Chord Modulating To A $\flat$   
Borrowed  $\flat$ VII

F C D $\text{min}$  B $\flat$  $\text{min}$  F E $\flat$ /G A $\flat$  A $\flat$ /C D $\flat$  G $\flat$  A $\flat$



Play through the above progressions in a steady tempo using a simple chunking technique.

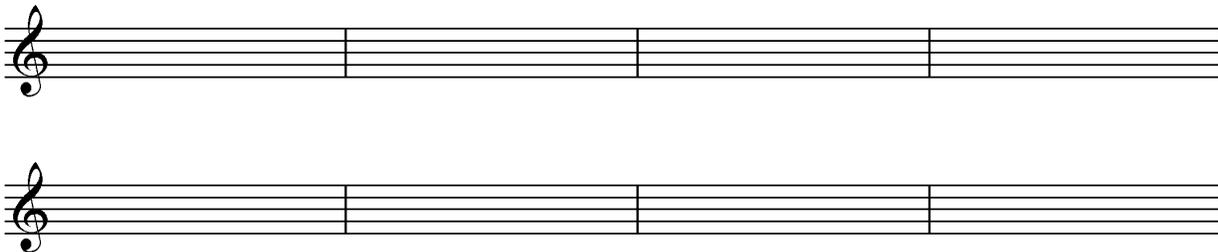
## Play Along Track

Insert the *Play along add, sus, LT slash chords* mp3 into LogicPro and record a piano track along with it playing the progression below (tempo = 88).

D $\flat$ (add2) E $\flat$ (sus4) E $\flat$  C/E F $\text{min}$  A $\flat$ (sus2)/C



**Composition:** Compose your own 4 bar chord progressions using non-diatonic chords.



## LogicPro Application

Now is another good opportunity to create a track with LogicPro. Choose one of your four bar progressions and record it on LogicPro.

To reduce or increase the challenge, add constraints such as composing in specific key(s), using specific techniques, composing more bars (8, 12, 16. . .) or less bars (2 bars repeating).

# 6<sup>th</sup> and 7<sup>th</sup> chords

## maj6 and min6 chords

Major and Minor 6<sup>th</sup> chords are, for the most part, a dated sound. They were common in jazz and show tunes throughout the first half of the twentieth century. Many of those songs are still classics that we know and love. Minor 6<sup>th</sup>'s still show up once in a while in popular music, but major 6<sup>th</sup>'s are very rare. There is one harmonic context in particular in which both major and minor 6<sup>th</sup> chords are still used in popular music, and that is on the IV (or iv) chord.

6<sup>th</sup> chords can be voiced by simply adding the 6<sup>th</sup> (a whole step above the natural 5<sup>th</sup>) to a triad. Also, the 6<sup>th</sup> can be played without the 5<sup>th</sup> or instead of the 5<sup>th</sup>. And in any voicing that works for a 7<sup>th</sup> chord, the 7<sup>th</sup> can be lowered to the 6<sup>th</sup>.

Lenny Kravitz's 1991 hit, *It Ain't Over 'til It's Over*, is a good example of a cliché chord progression that contains both the major IV<sup>6</sup> and minor iv<sup>6</sup>. Check it out:

I	I <sup>maj7</sup>	I <sup>7</sup>	IV <sup>b6</sup>	iv <sup>b6</sup>
D <sup>b</sup>	D <sup>b</sup> maj7	D <sup>b</sup> 7	G <sup>b</sup> 6	G <sup>b</sup> min6



## 7<sup>th</sup> chords

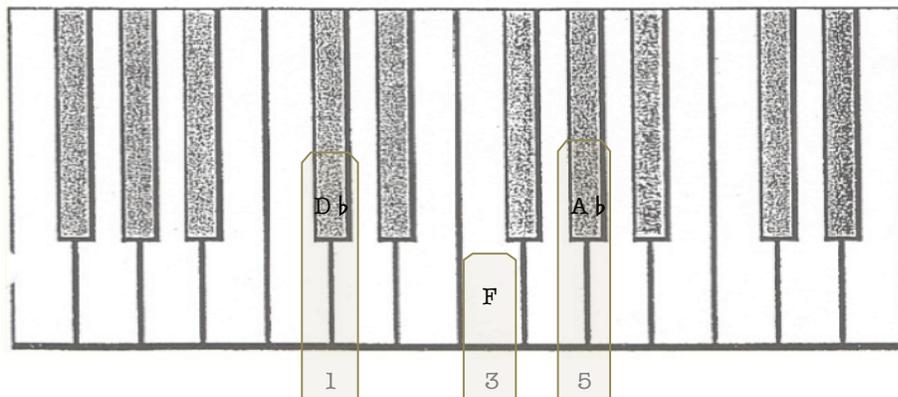
So now, let's take a look at 7<sup>th</sup> chords on paper. If your knowledge of chords is well established, you can probably take this in visually and intellectually, but regardless of your prior knowledge, I can't stress enough how important it is that you go through this stuff on the keyboard.

7<sup>th</sup> chords, like 6<sup>th</sup> chords, have been used in popular music for over a century. However, 7<sup>th</sup> chords continue to be used commonly in many styles, including jazz, R&B, funk, pop, songs for film and theatre, etc. 7<sup>th</sup> chords are everywhere—sometimes obvious, sometimes as a result of combining chords and bass notes, or sometimes just as a passing tension.

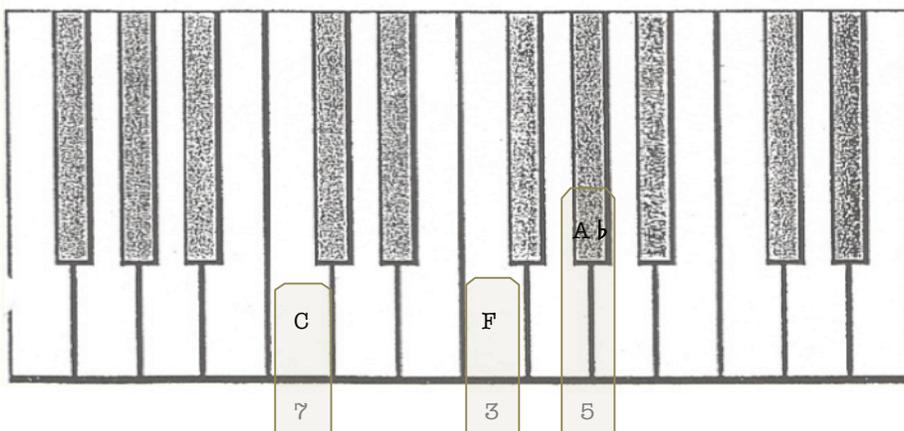
To start playing 7<sup>th</sup> chords on the piano, follow these steps:

- 1) Play a major triad in root position with your RH and the root of the chord in the LH.
- 2) In your mind, number the notes of the chord: 1-3-5. Play the 1 with your thumb.

For example, D<sup>b</sup> - F - A<sup>b</sup>



- 3) Whatever chord you're playing, think of the major scale that correlates: 1-2-3-4-5-6-7.
- 4) Understand that the major 7 is one half step below the 1. Identify the note name.  
For example, "The 7 of D ♭ is C."
- 5) Then, drop your RH thumb (the 1) down a half step to the 7. Keep the root in the LH.
- 6) Play this chord solidly with both hands.



- 7) In your mind, number the notes of the chord: 7-3-5. (And 1 in the LH.)
- 8) Understand that you are now playing a major 7<sup>th</sup> chord.
- 9) Write the chord symbol. For example, D ♭ <sup>maj</sup>7.
- 10) Speak the chord symbol. For example, "D flat major seven."

Take your hands off the keyboard and try it again, with only these steps:

- 1) Decide on a major 7<sup>th</sup> chord you want to play, and write the chord symbol.
- 2) Without putting your hands on the piano, visualize the major triad in root position, and then visualize the 7-3-5 voicing.
- 3) Count off, and play the chord. Hit it and hold it. Make sure it looks, feels, and sounds right.

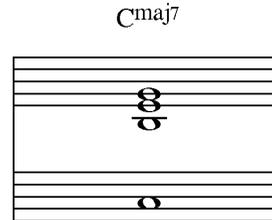
Do this as many times as you need to until you feel some sense of mastery—the ability to accurately anticipate and flawlessly execute your goal.

**Quiz:** Call keys randomly and play a major 7<sup>th</sup> chord with the RH on the 7-3-5 voicing and LH on the root.

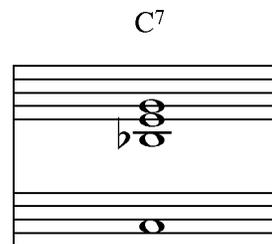
### Expanding Knowledge and Technique: Memorize 7<sup>th</sup> chord formulas and Transpose

We need to unpack the 7<sup>th</sup> chord voicings a little more for you to be able to apply them universally. You have to know what kind of 7 you're looking for, and that depends on the chord type. Memorize these formulas, a.s.a.p.:

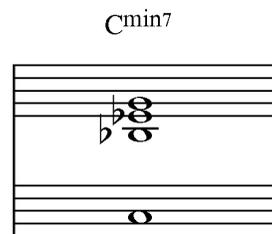
- Major 7 (e.g., C<sup>maj7</sup>) = major 3 and major 7



- Dominant 7 (e.g., C<sup>7</sup>) = major 3 and flat 7 (aka minor 7)



- Minor 7 (e.g., C<sup>min7</sup>) = flat 3 (aka minor 3) and flat/minor 7



**Note:** It is important to remember that a “flat 3” means that the major third is being lowered by a half step, and a “flat 7” means that the major seventh is being lowered by a half step.

In the key of D major, for instance, the major seventh is C#. Therefore, the minor seventh, or flat 7, is C natural. In the analysis of chord tones, the term “flat” really refers to the action of lowering a note.

### Assignment:

Play a major 7, dominant 7, and minor 7 chord in the 7-3-5 area code in all 12 keys.

- | Group 1                    | Group 2                    | Group 3                      | Group 4                      |
|----------------------------|----------------------------|------------------------------|------------------------------|
| <input type="checkbox"/> C | <input type="checkbox"/> D | <input type="checkbox"/> D b | <input type="checkbox"/> B   |
| <input type="checkbox"/> F | <input type="checkbox"/> E | <input type="checkbox"/> E b | <input type="checkbox"/> F # |
| <input type="checkbox"/> G | <input type="checkbox"/> A | <input type="checkbox"/> A b | <input type="checkbox"/> B b |

# 7th Chords in the 7-3-5 Area Code

## Major, Dominant, Minor, Diminished

Cmaj7                      C7                      Cmin7                      Cdim7

### Common Minor Variations

Cmin7(b5)                      Cmin6                      Cmin(maj7)

### Common Dominant Variations

C7(b5)                      C7(#5)                      C7(add13)                      C7(sus4)                      C9

funk voicing

### Common Major Variations

Cmaj7(b5)                      Cmaj7(#5)                      Cmaj7(add13)                      Cmaj9                      C6/9

pop voicing

# 7<sup>th</sup> Chord Shapes & Sounds

7<sup>th</sup> chords add layers of complexity that can make music richer, and complexity that can make execution more difficult. Certainly, the theory of 7<sup>th</sup> chords is a deep study that could fill a book by itself. My objectives for you in these sections on 7<sup>th</sup> chords are to learn:

- fundamental, professional-quality voicings
- effective ways to navigate typical chord progressions
- typical 7<sup>th</sup> chords in major and minor keys
- typical variations of 7<sup>th</sup> chords
- contextual examples from popular repertoire

This section will open a Pandora's box of complexity and possibilities. You need to practice these shapes and progressions in order to gain some control over them. But even more importantly, you need to have meaningful contexts in which to apply your knowledge and skills. The real purpose of learning all this stuff is not to master 7<sup>th</sup> chords completely, but rather to be able to understand, to play, and even to write songs that have 7<sup>th</sup> chords in them, without being overwhelmed or lost. And the point is also to appreciate 7<sup>th</sup> chords—the depth and interest they bring to harmony—and to become familiar with their sounds and shapes so they become less like some foreign food you've never wanted to try, and more like great recipes that you can execute to perfection and spices that you can use your imagination to create new flavor combinations.

## Voicings

You have now learned the 7-3-5 voicing (or “area code,” as I like to call it). Make sure you have completed the 7-3-5 worksheet before moving on. You need to experience constructing those different types of 7<sup>th</sup> chords in different shape groups. And you need to be very familiar with the difference between major 7<sup>th</sup>, minor 7<sup>th</sup>, dominant 7<sup>th</sup>, diminished 7<sup>th</sup> chords. Often, the difference is just one note being a half step down or up—all of a sudden it's a *very different* chord. There's no room for guessing—if you play a major 7 instead of a dominant 7, it will sound horrible. So—deep breath—get ready to do some shedding.

With every 7<sup>th</sup> chord you learn, it can be valuable to play a root position: 1, 3, 5, 7. But root position 7<sup>th</sup> chords sound clunky and trite, so I'm not even going to spend time on them here. I want you to learn to play every 7<sup>th</sup> chord in a 7-3-5 voicing as your default, and expand from there. Pros play 7-3-5, *not* root position. Once in a while there's a good example of a root position 7<sup>th</sup> chord in a song, but the instances are few and far between.

Below are major 7<sup>th</sup> chords in all twelve keys, organized by their triad shape groups.

Four staves of music showing major 7<sup>th</sup> chords in all twelve keys, organized by their triad shape groups. The chords are: Cmaj7, Fmaj7, Gmaj7; Dmaj7, Emaj7, Amaj7; Dbmaj7, Ebmaj7, Abmaj7; Bmaj7, Bbmaj7, F#maj7.

**Assignment:** Play through each of these with the RH, and with the LH playing the roots.

**Diatonic 7<sup>th</sup> Chords**

Let's take a different approach now and look at 7<sup>th</sup> chords in the scale correlating to the key—just as we did with diatonic triads. Start in the key of C major.

- 1) Play a C major triad in root position with your RH
- 2) Drop the C (the "1") down a half step to B (the "7")
- 3) Still play the root of the chord in the LH
- 4) Go up through the C major scale with both hands, keeping the 7-3-5 shape
- 5) Name the chords consciously as you go, and listen closely to the sounds

A single staff of music showing diatonic 7<sup>th</sup> chords in the key of C major: Cmaj7, Dmin7, Emin7, Fmaj7, G7, Amin7, Bmin7(b5).

**Assignment:**

Write out and play the diatonic 7<sup>th</sup> chords in all 12 keys, using 7-3-5 voicings.

Use the key of C above as a template. Each key should follow the same pattern:

I<sup>maj7</sup>, ii<sup>min7</sup>, iii<sup>min7</sup>, IV<sup>maj7</sup>, V<sup>maj7</sup>, vi<sup>min7</sup>, vii<sup>min7(b5)</sup>

Diatonic 7<sup>th</sup> Chords

The image displays eleven empty musical staves, each beginning with a treble clef. These staves are arranged vertically and are intended for the student to write the diatonic 7th chords for each scale degree of a major scale. The staves are completely blank, providing space for the student's work.

## Diatonic 7<sup>th</sup> Chord Progressions

There are a slew of great songs that utilize straightforward diatonic 7<sup>th</sup> chord progressions. Many, however, have tasteful variations. We will examine typical progressions and variations in the next section. But at this point, just experiment with what you have.

**Assignment:** Choose a key, play through the diatonic 7<sup>th</sup> chords in the 7-3-5 area code, and then put together a chord progression that you like. They might go up the scale or down the scale; they might jump up or jump down; they might start on the I, or start on any other chord in the scale.

Experiment, and let your ear tell you what you like and don't like.

Write one or two chords per bar. Depending on where you want to end your progression, write four or five bars per system. Write chord symbols over slashes. Then analyze the chords relative to the key, and write in Roman numerals next to the chord symbols.

Write each progression in a different key.

Example:

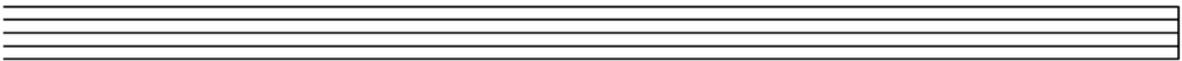
I<sup>maj7</sup>                      iii<sup>min7</sup>                      vi<sup>min7</sup>                      IV<sup>maj7</sup>  
G<sup>maj7</sup>                      B<sup>min7</sup>                      E<sup>min7</sup>                      E<sup>min</sup>/D                      C<sup>maj7</sup>



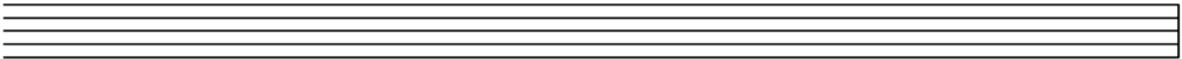
1)



2)

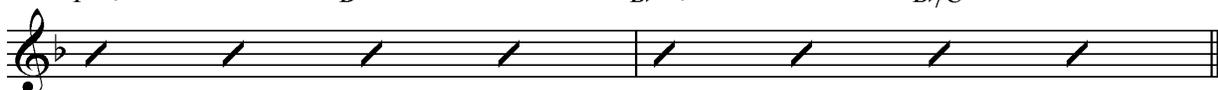


3)



## Can't Get Enough of Your Love, Babe (Barry White)

F<sup>maj7</sup>                      D<sup>min7</sup>                      B<sup>b</sup><sup>maj7</sup>                      B<sup>b</sup>/C



# The ii – V

You really can't study 7<sup>th</sup> chords without discussing ii – V progressions. In the key of C major, a ii – V progression is...?

Think it through, if you don't already know it. C is the I, D is the ii, etc.

So a ii – V is: D<sup>min7</sup> G<sup>7</sup>

NOTE: The dash in the ii – V is just to show movement. It is *not* an important part of analysis.

Remember how the V chord leads back to the I? Well, the ii leads to the V.

So, a ii – V progression gives you a double layer of tension and resolution—the ii has tension that resolves to the V, which has its own tension that wants to resolve to the I (primarily). All this tension and resolution is what helps make music flavorful.

## The Secret Formula

Now, you can play a D<sup>min7</sup> and G<sup>7</sup> in the 7-3-5 area code, but that requires jumping the chord a fourth up or fifth down from D to G, and it will get harder once you move to other keys with black notes. I'm going to give you the secret formula for playing ii – V progressions—this is how you avoid jumping around, and sound like a pro moving from the ii to the V.

The secret formula is... .

*Drop the sizzle of the tizzle down a hizzle.*

That's right. Say it out loud. Don't be shy. We're allowed a little fun in the midst of all this complicated stuff.

But what does it mean to drop the sizzle of the tizzle down a hizzle?!

Translation: "Drop the seven of the two down a half step." On paper, that should actually be: Drop the 7 of the ii down a half step.

(NOTE: Remember, in analysis, we're using Arabic numerals for numbering single notes in relation to a chord or key, and Roman numerals for numbering chords in relation to a key or tonal center.)

Play the ii – V progression in the key of C as written below. Don't forget to move your LH from D to G. And really get a feel for the 7 of the ii going down a half step.

**ii-V in C**

The 7 of the ii

D<sup>min7</sup> G<sup>7</sup>

### Shortcut the Math

The 7 of D is. . . ?

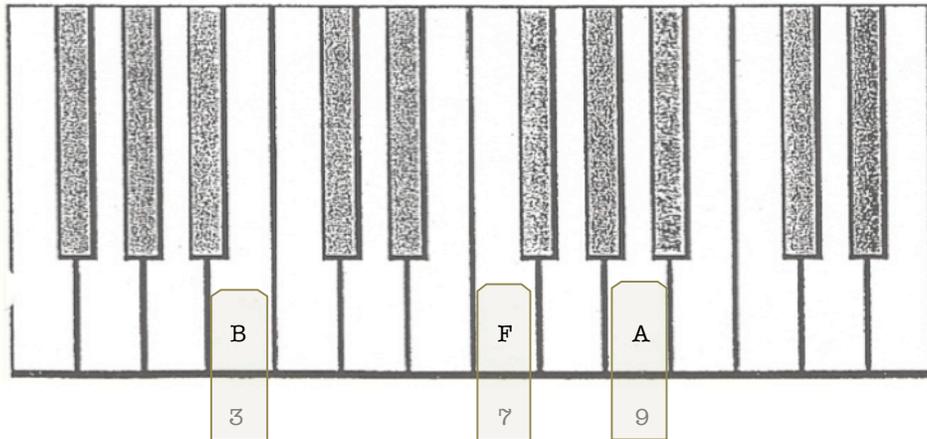
Instead of counting up from D ("D=1, E=2," etc.), just go to the note below the root. You can always do that to find the 7 of a chord. You really don't have time to sit around counting up to 7, anyway. Just go to the note below the root, and that's the 7. The note below D is C. So, in your  $ii - V$  progression in the key of C, you start with  $D^{\text{min}7}$  in the 7-3-5 area code, and then you drop C down a half step to B, move your LH bass note to G, and voila!—a beautiful  $G^7$ .

### 3-7-9 Voicings

There are many, many ways that you can voice 7<sup>th</sup> chords. The 7-3-5 voicing (aka "area code") is the easiest to find and sound professional with. But you've got to have some variations in your toolbox. And the  $ii - V$  progression reveals the first variation for you to learn: 3-7-9.

You might have noticed that when you use the secret formula to move from the  $D^{\text{min}7}$  (RH in the 7-3-5) area code to a  $G^7$ , that  $G^7$  is no longer in the 7-3-5.

Take a look at it—it's in the 3-7-9 area code. (Make sure your LH is playing the root—G.)



Now, if you want to be extremely thorough, you will practice every 7<sup>th</sup> chord you've played in the 7-3-5 area code in a 3-7-9 area code. I know you might run into trouble with that, though. Finding the 9 can be tricky until you get used to it (it's a whole step above the 1), and seeing the 3-7-9 voicing is more difficult visually because it bears little resemblance to a related triad. And unless you really are ambitious to master this stuff, it's not going to be effective for you to do all the transpositions at this point—you will likely overwhelm your brain.

So what we really need to do is apply some of these new voicings in the contexts of progressions, techniques, and songs.

Before we move on to songs, I want you to get a taste of the full  $ii - V - I$  progression and some common variations.

## The ii – V – I

You've played V – I progressions, and you've played ii – V progressions. So now we'll play ii – V – I's. That's spoken: "Two five one's."

Here is your ii – V – I in the key of C major.

Play it now, and listen to it as you play. It sounds very consonant to resolve to the I chord; yet the major 7 gives it a twinge of tension, for sure. If you want a less jazzy, less tense sound, resolve to a C major triad.

### ii-V-I in C

Musical notation for ii-V-I in C major. The progression consists of three chords: D<sup>min</sup>7, G<sup>7</sup>, and C<sup>maj</sup>7. The voicings are 7-3-5 for D<sup>min</sup>7, 3-7-9 for G<sup>7</sup>, and 7-3-5 for C<sup>maj</sup>7. The bass line starts on D, moves to G, and then to C.

The above ii – V – I starts in a 7-3-5 voicing, but you can also start in a 3-7-9 voicing (or any voicing, for that matter). Check it out:

### ii-V-I in C

Musical notation for ii-V-I in C major. The progression consists of three chords: D<sup>min</sup>7, G<sup>7</sup>, and C<sup>maj</sup>7. The voicings are 3-7-9 for D<sup>min</sup>7, 7-3-13 for G<sup>7</sup>, and 3-7-9 for C<sup>maj</sup>7. The bass line starts on D, moves to G, and then to C.

If this is your first time through this section, this second set of voicings may be a little mystifying. 7-3-13?? Don't worry. . . it's just one of *many* variations that you're about to explore. At this point, unless you're particularly motivated to absorb the theory of this stuff, just don't even think about the "13." All you need to know is the 7-3-5 and the 3-7-9, and how to apply the secret formula for ii – V progressions.

*Your understanding will get deeper and more thorough naturally with repetition. What you really need to focus on going forward is practicing. Take your time to get your fingers on the right notes. Then repeat the physical motions until they are automatic. Make It Easy. The more keys you practice in to the point of automaticity, the more the shapes will become familiar. Once you establish familiarity with the shapes and progressions, then the theoretical understanding has roots to ground into. Listen to Nike: Just Do It. Correctly. Again and Again and Again. . .*

**Assignment:** Complete the Major ii-V-I worksheet.



# Variations on the $ii - V$

Like I've said, there are *many* variations on the  $ii - V$  progression. I'm going to take you through a few of my favorites here, and then in the next section show you examples from hit songs.

NOTE: In general, I believe that starting with repertoire before technique and theory is the most motivating way to learn. But. . .

- 1) I want you to *understand* what's happening in the music as well as be able to play it—this is not just an informal private lesson where I teach you some songs.
- 2) As the complexity increases, it becomes more necessary to have the requisite technical facility to learn new repertoire without extreme frustration—getting familiar with the chords and progressions in this section builds that foundation.

I am *not* asking you to learn everything in every key as a prerequisite for playing songs. This section asks you to become *familiar with* a new knowledge and skill set, so that you can apply it with a modicum of confidence. *After* you learn some songs, you can by all means go back to these practices and shed them in all keys. But for most people who use this book, the best thing you can do is to establish the knowledge and skills necessary to learn songs on your own, and to write your own songs with a more sophisticated musicianship.

## Variations

There are three common ways to vary chords in a  $ii - V$  progression:

- 1) Suspensions (e.g., sus4)
- 2) Change the chord type (e.g., minor to dominant)
- 3) Alter chord tones (e.g., #5)

### $ii^{min7} - V^7(sus4)$

Transforming the  $V^7$  chord to a sus4 is a smooth move. Stevie Wonder uses this extensively in his writing. It's used by younger artists like John Legend, and also in classic hits like the Commodores' *Easy*. Here is a  $ii^{min7} - V^7(sus4)$  in the key of F:

$G^{min7}$	$B\flat/C$ or $C^7(sus4)$

Write in the RH notes yourself for the  $G^{min7}$ . Then think about the  $C^7(sus4)$  for a minute. Remember the secret formula. *Drop the sizzle of the tizzle.* . . Except in this case, you want a sus4 on the  $V$  chord—and what is the sus4 on C? It's F. So you don't actually drop anything anywhere! The sizzle (7) of the tizzle ( $ii$ ) stays right where it is, and you just move the LH bass note. Resolve this progression to an F major or minor chord.

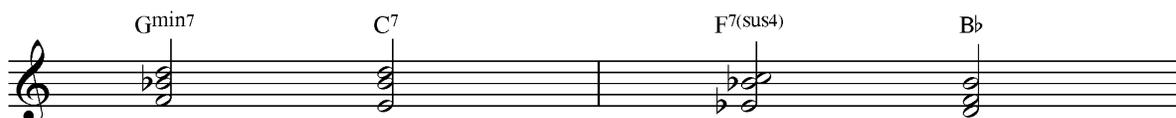
It is germane to note that the  $C^7(sus4)$  could also be called  $B\flat/C$ . Can you see the  $B\flat$  chord? It's in 2<sup>nd</sup> inversion in your RH. Shoot, you could call  $G^{min7}$   $B\flat/G$ , for that matter. There are *many* 7<sup>th</sup> chords that can be written as slash chords, if you so desire. The slash chord symbol

gives a more specific instruction than the  $C^{7(sus4)}$ —there are many possible voicings for a  $C^{7(sus4)}$ , whereas a  $B\flat/C$  more or less necessitates a triad over a bass note.

### **II<sup>7</sup> – V<sup>7(sus4)</sup>**

Changing the  $ii^{min7}$  from minor to dominant (II<sup>7</sup>) is a technique that goes all the way back to Mozart and beyond. Today, songwriters like Randy Newman lean heavily on the II<sup>7</sup> – V<sup>7(sus4)</sup> progression to create a soulful resolution with a little country in it. Classic jazz standards like *Take the A Train* and *Cherokee* use the dominant II<sup>7</sup> as well, though they both resolve through a more typical  $ii^{min7} – V^7$ .

*Don't Know Why*, the song that catapulted Norah Jones to fame, has a great example of the II<sup>7</sup> – V<sup>7(sus4)</sup>. Jones's recording is in the key of B $\flat$ . So the end of the verse resolves through this progression:



Can you see the II<sup>7</sup> – V<sup>7(sus4)</sup> in there? The II<sup>7</sup> is C<sup>7</sup>.

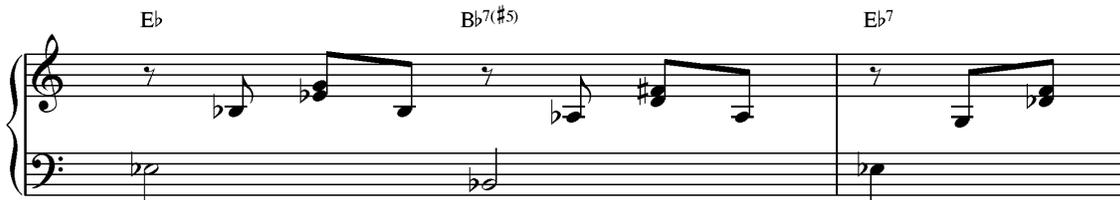
This is a cool example, because there's actually another  $ii – V$  in there—the  $G^{min7}$  to C<sup>7</sup>! Only, in the key of B $\flat$ , that's the  $vi$  to the II, not the  $ii$  to the V. So in analysis, you would label that as the  $vi$  to the II, but in practice,  $G^{min7}$  to C<sup>7</sup> really is a  $ii – V$ . It's important for you to see that at this point.  $ii – V$ 's don't have to correlate to the  $ii$  and V of the key you're playing in.

### **Altered Dominant 7<sup>th</sup> Chords**

There are many ways to skin a cat. Why would anyone ever say that?? It's a truly revolting thought. But, while I've got your attention, there are also many ways to alter 7<sup>th</sup> chords. Oh boy, I think could write the lame metaphor scripts for insurance commercials!

As an introduction to altered 7<sup>th</sup> chords, let's focus on two common alterations—the  $\flat 9$ , and the  $\sharp 5$ . In *I Believe I Can Fly*, you already encountered an  $E^{7(\sharp 5)}$ . Both the  $\flat 9$  and  $\sharp 5$  tend to be used on V<sup>7</sup> chords that resolve to minor chords. But in jazz in particular, you'll find altered 7<sup>th</sup> chords resolving interchangeably to major or minor. The mix of tensions and resolutions gives jazz music some of its unpredictability. Randy Newman loves altered 7<sup>th</sup> chords, too. Check out the first two bars of the Verse of *You've Got a Friend in Me*.

(Note: the  $B\flat^{7(\sharp 5)}$  resolves to an  $E\flat^7$  rather than a plain  $E\flat$  major chord, but the function of the resolution is the same.)



For an example of a  $\flat 9$ , look again at a  $ii - V - I$  in the key of C.

ii-V-I in C

$D^{min7}$ 
 $G^7$ 
 $C^{maj7}$

7-3-5
3-7-9
7-3-5

Now, follow these steps:

- 1) Play through this progression, and stop on the  $G^7$ .
- 2) See where the 9 is on that voicing. You see it? The 9 is the A.
- 3) Flat the 9 by dropping your RH pinky to  $A \flat$ .
- 4) Play the  $G^7$  as a  $G^{7(\flat 9)}$  now. And then resolve it to  $C^{maj7}$ .
- 5) Play through the whole progression

ii-V-I in C

$D^{min7}$ 
 $G^7$ 
 $C^{maj7}$

7-3-5
3-7-♭9
7-3-5

**Recognizing ii-V progressions by ear**

As you get increasingly familiar with these chords and progressions, you will likely start to recognize them when you hear them. But recognizing them by ear will happen more if you practice this skill. As you play the excerpts from songs in the following section, I want you to go and listen to the original recordings. Start having an internal conversation about the music while you listen to it.

"I've always just listened to the lyrics at this part. . . hmmm, here's the Verse, and here comes that ii-V. . . yup, there it is. . .  $G^{min7}$  to  $C^7$ . . ."

Can you visualize yourself playing while you listen? Try it.

**Assignment:** Complete the 7<sup>th</sup> Chord Progressions Worksheet.

# 7th Chord Progressions Worksheet

**Assignment:**  
 Write in the RH notes for all missing chords  
 Practice on the piano, transpose to other shape group keys

**Diatonic 7th Chords**

**Diatonic Progression with ii-V's**

B $\flat$ maj7   Amin7   Gmin7   Fmaj7   B $\flat$ maj7   Amin7 D7   Gmin7 C7   Fmaj7

**Descending ii-V's using V7sus**

Amin7   C/D or D7(sus4)   Gmin7   B $\flat$ /C or C7(sus4)   Fmin7   A $\flat$ /B $\flat$  or B $\flat$ 7(sus4)   E $\flat$ maj7

**II7-V7sus v1**

**II7-V7sus v2**

D7   G7(sus4)   C   D7   G7(sus4)   C

**II7-V7sus v1**

**II7-V7sus v2**

\_\_\_\_\_   \_\_\_\_\_   F   \_\_\_\_\_   \_\_\_\_\_   F

**II7-V7sus v1**

**II7-V7sus v2**

\_\_\_\_\_   \_\_\_\_\_   G   \_\_\_\_\_   \_\_\_\_\_   G

### V<sup>7(sus4)</sup> – V<sup>7</sup>

While it's undeniably hip to resolve from a V<sup>7(sus4)</sup> chord to a I, sometimes you want the V<sup>7</sup>. You can have your cake and eat it too in this case, if you just use the sus4 before the regular dominant 7. Take any dominant 7<sup>th</sup> chord voicing and raise the 3 up a half step—that's the sus4. Play through the following examples, and transpose to other shape group keys.

Musical notation for the first example in C major. The treble clef shows the chords: G7(sus4) (G4, B4, D5, F5), G7 (G4, B4, D5, F5), A7(sus4) (A4, C5, E5, G5), and A7 (A4, C5, E5, G5). The bass clef shows a bass line: G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3.

Musical notation for the second example in D major. The treble clef shows the chords: G7(sus4) (G4, B4, D5, F#5), G7 (G4, B4, D5, F#5), A7(sus4) (A4, C5, E5, G#5), and A7 (A4, C5, E5, G#5). The bass clef shows a bass line: G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3.

Musical notation for the third example in E major. The treble clef shows the chords: G7(sus4) (G4, B4, D5, F#5), G7 (G4, B4, D5, F#5), A7(sus4) (A4, C5, E5, G#5), and A7 (A4, C5, E5, G#5). The bass clef shows a bass line: G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3.

Musical notation for the fourth example in F# major. The treble clef shows the chords: G7(sus4) (G4, B4, D5, F#5), G7 (G4, B4, D5, F#5), A7(sus4) (A4, C5, E5, G#5), and A7 (A4, C5, E5, G#5). The bass clef shows a bass line: G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3, G3, B2, D3, E3.



Easy (Lionel Ritchie, key of A b )

Skills: Inversions for close position, 7-3-5 voicings,  $i i^{min7} - V^{7(sus4)}$

Musical notation for the song "Easy" in the key of A-flat major. It shows four chords in close position: A-flat major, C minor 7, B-flat minor 7, and E-flat 7 (sus4). The notes are written on a single staff in treble clef.

She's Got a Way (Billy Joel, key of G)

Skills: Inversions for close position, LT slash chord (D/F#), Non-diatonic chord ( $G^7$ )

Musical notation for the song "She's Got a Way" in the key of G major. It shows five chords in close position: G major, D slash F sharp, E minor, G 7 slash D, and C major. The notes are written on a single staff in treble clef.

Ordinary People (John Legend, key of F)

Skills: Voicing a melody, 7<sup>th</sup> chord voicings with "grabbing an octave," LH bass line, Non-diatonic chord ( $E b^{maj7}$ )

Musical notation for the song "Ordinary People" in the key of F major. It shows four chords: B-flat major 7, E-flat major 7, E-flat major 7, and F major 7. The notation includes a melody in the right hand and a bass line in the left hand.

If I Ain't Got You (Alicia Keys, key of G)

Skills: Arpeggios, Diatonic 7<sup>th</sup> chords, rootless 7<sup>th</sup> chord voicings

Musical notation for the song "If I Ain't Got You" in the key of G major. It shows two chords: C major 7 and B minor 7. The notation includes arpeggiated chords in the right hand and sustained bass notes in the left hand.

Musical notation for the song "If I Ain't Got You" in the key of G major. It shows five chords: A minor 7, G major 7, G major 7, A minor 7, and B minor 7. The notation includes arpeggiated chords in the right hand and sustained bass notes in the left hand.

# Learning Music for Performance: 5 Axioms to Live By

## Axiom 1: PROGRAM SUCCESS

Everything you do programs your brain, so you must practice skills more times successfully than unsuccessfully. If it takes more than 3 repetitions to execute successfully, it's probably too complex. Just consider: if you make 3 mistakes and play correctly once, you may be programming your brain to do it right only 25% of the time.

This isn't quite so black and white, of course. The brain is amazing—and it learns from mistakes too, in a very important way. The brain actually needs to know what *not* to do. And, after periods of effective practice that include mistakes, the brain utilizes “downtime” to prune undesirable neural pathways that were created or discovered by making mistakes in practice. The only caveat here is that you must know it when you make a mistake. When practices are manageable, mistakes are obvious.

In order to effectively automatize skills, you should try to apply a 3:1 ratio of success to mistakes in your practicing. You will know you've got something automatized when you can play it while conversing or reading out loud. Try it!

## Axiom 2: BREAK IT DOWN

Every skill is comprised of numerous component behaviors. Think of riding a bike: for our bodies to maintain balance, accelerate, decelerate, and turn, all the while being aware of our surroundings and our trajectory, is actually quite complex both in terms of motor skills and cognition. But with practice, we make it look easy—in fact, it really does become easy to us. Even if we go months or years without riding, most of us can simply pick it back up and go. The complex conglomeration of component behaviors that is the skill of riding a bicycle has been automatized.

After you formulate an intention to learn some new skill, you may find yourself unable to tackle the whole thing. At this point, you must reduce the complexity of the task. If going from A to B isn't working, you've got to “break it down” and go from A1 to A2 to A3, before going on to B.

You may find yourself breaking skills down into their various musical aspects—for instance, rhythm, register, tempo, etc. But you can't stop there—you must translate concepts into actions. In analysis, music can be broken down into conceptual components, but actual musical skills are comprised of behaviors. This is really the step in the learning process where the rubber meets the road—and those aspiring musicians who have the will to work through the process time and time again are the ones who get to experience their intentions coming to life.

For many earnest students, the process of refining skills becomes an impediment to enjoying music. But it needn't be that way. I am living testament to the fact that when principles of effective learning are applied in practice, getting better can actually be both fun and efficient.

Remember: Reduce the complexity of your practice by breaking down skills into manageable component behaviors, and practicing to automaticity.

### Axiom 3: FREE YOUR MIND

Following the skillful execution or refinement of skills, you should somehow expand the practice. Expanding practice necessitates the application of concrete skills in a variety of ways. For instance, once an arpeggio is learned, it can be inverted, played in high or low registers, at slow or fast speeds, and with varying dynamics, etc. I might play a similar arpeggio in different keys, over different chords, and in any number of creative ways. In this sense, “expanding” refers to increasing the number of possible applications of any specific concrete skill(s). When learning to play songs, expanding can be as simple as playing a whole phrase or a whole song instead of an excerpt, or playing with both hands instead of one.

But expanding also refers to the awareness experienced by the performer. Even when a student has major instrumental limitations that constrain what he or she can play, there are no such physical limitations on his or her awareness. Novice or expert, a musician can play a note with the contracted awareness of the note name, theory, instrumental fingering, and the like, OR he can play the same note with the expanded awareness of musical principles and strategies, or dare I say, feelings. In this sense, expanding refers to the increasingly abstract cognitive experience of what is being played.

For expert performers, abstract thinking initiates the skillful execution of meaningful musical expressions. Having that experience does not depend on having all the skills of an expert. Rather, it depends on freeing up the requisite attentional capacity to direct actions with thinking that is more strategic and intuitive than detail-oriented and analytical.

Conscious, detail-oriented, analytical brain function is flat-out detrimental to the enjoyable experience of performing music. So, you absolutely must free your mind. Do so by automatizing the skills you will employ, and by thinking strategically, emotionally, intuitively, as you play.

Expanded experience examples:

“Here comes the transition to the Bridge. . .” (Anticipation, structural thinking)

“This part is so sad. . .” (Emotion, narrative thinking)

“I’m in the flow, I’m feeling it. . .” (Intuitive experience, no thinking)

### Axiom 4: GO AHEAD, TRY IT!

Working stuff out in the practice room is one thing, and playing it on the bandstand or in a jam session is another entirely. This is because there are SO many more contextual variables at play. And of course, the reality of no “do-overs” can evoke anxiety, judgment, and a slew of other internal pitfalls. Performers have to be brave—sometimes even if it means appearing foolish—to play in front of varying audiences and in varying circumstances time and time again.

Performance is the ultimate test of readiness. I have learned lesson after lesson from performing, and most of those lessons are learned the hard way—failing in one way or another. Those lessons are often painful, but always valuable.

If you want to be comfortable performing, you must play repertoire that is manageable. Whatever your boundaries are—what’s too fast, too complicated—if the repertoire pushes you beyond them, you are going to fail. Which also means you are going to have opportunities to learn. When I perform in unfamiliar or challenging contexts, I expect to make mistakes, and I expect to learn from it and improve because of it. You absolutely must have this relationship

with failure if you are serious about making progress and maintaining your sanity and self-esteem over time.

#### Axiom 5: AN UNEXAMINED MUSICAL LIFE AIN'T WORTH LIVING

Effective learning starts and ends with the knowledge of what you want, and what you don't want.

Your likes and dislikes may (actually, they almost certainly will) change over time, sometimes drastically. So by no means is determining what you want or don't want an absolute declaration or a confinement. But likes and dislikes are motivating. You need to be motivated when you learn. That's a big part of what makes learning meaningful. There are two indispensable aspects of enjoyable learning—the subject matter must be both manageable and meaningful. Have I said that enough times? I hope it's sinking in.

Now, there may be times when you just have to take somebody's word for it—you might hate practicing scales (like I did), or struggle to learn things in sharp keys (like I did). At such times, practices may not seem particularly meaningful, or manageable. But with successful learning over time, you build a storehouse of motivation that propels you to persevere through challenges, confusion, and other kinds of inertia. As beginners, we rarely have much of a storehouse of motivation. A little failure can knock the wind out of our sails quickly. "Aw, I suck at this, I should just give it up. . ." But the more we invest our time and care into learning, and the more we experience successful learning, the more likely we are to enjoy it and want to continue it. "I've come this far, I know I can get this. . ." A person who experiences successful learning also builds a storehouse of confidence—belief in one's own abilities, or self-efficacy—that supports the ego through frustration. For a person who believes they can achieve their goal, obstacles are frustrating, perhaps, but not crushing.

Exactly how much failure it takes to discourage someone depends on how attainable the goal is and how much the person cares. Making sure practices are both manageable and meaningful necessitates having a critical lens—recognizing mistakes, paying close attention to the music—and having the flexibility to adapt to various contexts and evolve over time. If you care about it enough, you will figure out how to make the necessary changes to achieve your goal.

# Compositional Techniques

- 1) Cadence to expected chord  
In the key of C, we expect a G7 to resolve to C. F major and F minor also create an expectation to resolve to C.
- 2) Cadence to unexpected chord  
In the key of C, a G7 resolving to A minor would be a bit unexpected. G7 resolving to A $\flat$  major would be even more unexpected. Or G7 might lead to a chord like E7, which would in turn create a strong expectation to resolve to A minor.
- 3) Start a new section on the IV chord (or another unexpected chord)  
In the key of C, starting on F creates an uplifting feeling. As it is a consonant chord but unresolved, the IV inspires a feeling of open possibilities, as well as the impending resolution to the I chord.
- 4) Modulation  
In the key of C, a song might modulate up a half step to D $\flat$  and create an uplifting, exciting feeling.
- 5) Change technique  
A high arpeggiated piano part transitions suddenly to low spread voicings.

**Quiz:** Examine the following charts for compositional devices.

In *Dreaming With a Broken Heart*, find:

- Cadence to an unexpected chord
- Change technique

In *We Are the World*, find:

- Cadence to an expected chord
- Cadence to an unexpected chord
- Start a new section on the IV chord

In *I Believe I Can Fly*, find:

- Cadence to an expected chord
- Modulation

In *Imagine*, find:

- Cadence to an expected chord
- Cadence to an unexpected chord
- Start a new section on the IV chord

*Dreaming With a Broken Heart* (John Mayer)

**Intro** G A<sup>7</sup>/G C/G 2x



**Verse 1** G A<sup>7</sup> C 4x



**Chorus**

E<sup>min</sup>7 D/F# G G/B C E<sup>min</sup>7 D/F# G G/B C

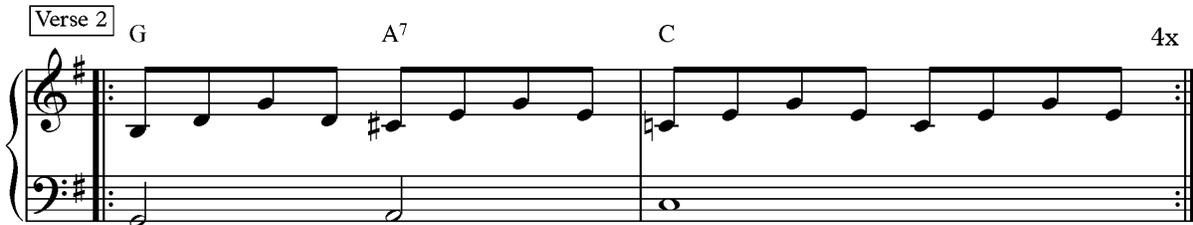
G/B A<sup>min</sup>7 G/B G<sup>min</sup>/Bb A<sup>min</sup>7



**Interlude** G A<sup>7</sup>/G C/G 2x



**Verse 2** G A<sup>7</sup> C 4x



We Are the World (Lionel Ritchie, Michael Jackson)

**Intro**

A E/G# F#min7 A/B B

**Verse**

E A/E B/E E A B E A/E E B/D#

C#m G#m F#m /A B(sus4) B

**Verse**

E A/E B/E E A B E A/E E B/D#

C#m G#m F#m /A B(sus4) B E/G#

**Chorus**

A B A A B E

C#m G#m F#m B

**Interlude**

1. E A/E B/E A/E E A/E B/E A/E

# I Believe I Can Fly (R. Kelly)

## Intro

C/G Fmin6/G

## Verse

C Fmin6/C C Fmin6/C

V 1: I used to think that I could not go on...  
 V 2: See I was on the verge of breaking down...

C Fmin6/C C Fmin6/C E7(#5)

If I can

## Pre-Chorus

C/A Fmin6/Ab C/G F/G

see it...

I believe I can

## Chorus

C C/A F/D F/G G#dim C/A

Fly... I believe I can touch the sky...

Fmin6/Ab C/G Fmin6/Ab 1. C/A F/G To Verse 2

2. C/A F/D C/E F/G

Hey, cause I believe in me...

If I can see it...

## Modulated Pre-Chorus

Db/Bb Gbmin6/A Db/Ab Gb/Ab

I believe I can fly...

Imagine (John Lennon)

Intro

8vb...

The introduction consists of four measures in 4/4 time. The right hand plays chords in the upper register, and the left hand plays a steady eighth-note bass line. The chords in the right hand are C, F, C, and F.

Verse

C F C F

The first line of the verse melody consists of four measures. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter).

C F C F

The second line of the verse melody consists of four measures. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter).

F Am/E F/D F/C G G<sup>7</sup> 2nd x No Repeat

The third line of the verse melody consists of four measures. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter).

Chorus

F G C Cmaj<sup>7</sup> E E<sup>7</sup> F G C Cmaj<sup>7</sup> E E<sup>7</sup>

The first line of the chorus melody consists of four measures. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter).

F G C Cmaj<sup>7</sup> E E<sup>7</sup> F G C /G /A /B

The second line of the chorus melody consists of four measures. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter).

Fine 2nd x

NOTE: The lead sheets above represent typical variations on lead sheet formatting. *Imagine* has the grand staff piano part written for one section, then the melody with chord symbols after that. *I Believe I Can Fly* has chord symbols over slashes with lyric cues, as well as voicing cues in the staff. *We Are the World* has chord symbols over the melody, with rhythmic notation in the interlude. And *Dreaming With a Broken Heart* has a grand staff piano part written out as well as chord symbols. Any of these notation variations may be used in any given lead sheet.

### Analyzing Song Form

This section will analyze two classic popular hit songs—R. Kelly's *I Believe I Can Fly* and John Lennon's *Imagine*.

Just as there are formulaic shapes for chord voicings and progressions, there are typical structures that make up the skeletal systems of songs. We call these structures "**sections**," and the skeleton of each song is called the "**song form**."

You've almost certainly heard and used the terms, "verse," "chorus," and "bridge," when describing songs. Perhaps the term "refrain" is familiar. It depends on your background. Most jazz musicians refer to sections as the "A" and "B" section, etc. And Western classical music analysis has a variety of systems to organize and analyze song form, from numbers and letters to terms such as "exposition" and "development." In contemporary popular styles, depending on the nature of the song, most professional musicians label sections either with words such as "verse" and "chorus," or with letters such as "A" and "B."

Let's analyze the song form of *I Believe I Can Fly* now.

### I Believe

First off, you can see the sections—Verse, Chorus, etc.—labeled in boxes throughout the chart. I've included some note-heads to guide your RH voicings.

If you listen to this song, you hear a long introduction, with strings and an oboe melody. This chart just shows the chords that are played or implied in the Intro. Also, be aware that after the Modulate Pre-Chorus, the song goes on. If you are learning to perform the whole song, you should get the full two-page chart from your instructor.

This book is not the place for unpacking the history or epistemology of terms like "verse" and "chorus." Just know that the Chorus is usually, though not always, the section with the "hook"—that catchy melody and/or lyric that repeats a lot, and then gets stuck in your head. "I believe I can fly. . ." . . . perfect example of a hook. By the time you've heard the song once, you're ready for that hook every time you listen.

Part of what great songs do is to build some kind of anticipation for the hook. So something important changes at each new section, and then the listener has a cue to pay closer attention, and to want to know what's next. Even Bill Withers' *Lean on Me*, which maintains the same chord progression throughout the Verse and Chorus, has these devices. Withers sings the first Verse in unison with the chords, but the second Verse up an octave with a different melody.

While there are plenty of examples of songs like *Lean on Me* that don't change their chord progression, the vast majority of great songs have a harmonic change that accompanies each new section and helps draw listeners into the emotion, setting them up to get "hooked."

Both *I Believe I Can Fly* and *Imagine* have sections that create this kind of tension—the “vista point” moment. Take a look at the Pre-Chorus of *I Believe*. That section begins with a minor chord (it’s an  $A^{\text{min}7}$  written as  $C/A$ ), and progresses downward to  $F/G$ , which is a  $V^{\text{(sus4)}}$  chord in the key of C. That’s the chord that sets up the hook.

### Section Length

Notice that the Verse is 8 bars long, the Pre-Chorus 4, and the Chorus is 10 bars long. This is not entirely usual. The cookie cutter formula would be to have 8 bar sections throughout. But R. Kelly wrote a great song, and part of what makes it more than a sappy feel-good song for a cartoon movie is the sophisticated song form. Of course, long before R. Kelly was adding extra bars, The Beatles were mastering the art of subtly tweaking with listeners’ expectations.

Take a look now at the chart for *Imagine*.

The “hook” of *Imagine* could be argued to be the piano part that starts in the Intro as much as it is in the melody or lyrics.

### Learning the Piano Part

I want to make sure we’re clear about something. You are learning to play these songs the way R. Kelly and John Lennon played them. Neither is a virtuoso pianist, but they write great songs and execute solid piano parts. There are many piano books out there that would have you play the melody on top of a keyboard arrangement of songs, and that’s valuable practice. You or your teacher may choose to supplement your study with pieces like this. Good sight-readers in particular may be able to learn solo piano versions without enormous difficulty.

But *this book* is about learning to play songs, as much as possible, in authentic contexts. We will get to independent RH melodies when they become stylistically appropriate—in more complex styles like jazz and classical. John Lennon almost never played a melody—he sang melodies. Melodies *do* show up in Intro sections, or other specific parts of popular songs, but the RH almost never plays every note the singer sings.

### Imagine

*Imagine* also has an 8 bar section followed by a 4 bar section, and then the Chorus. But I don’t call the 4 bar section a Pre-Chorus, mainly because it repeats to the second Verse before going on to the Chorus, and also because it really seems like part of the Verse. So it’s a 12 bar Verse. If you learn *Yesterday*, you’ll see another example of Beatles’ variations—a 7 bar Verse.

This chapter is intended to lay out structural elements for you to apply to your own composition. Ultimately, I want you to be able to identify the song form—section by section—of any song on the radio; to listen and really hear what techniques are being used in the keyboard parts—holding chords, chunking, broken chords, arpeggios, etc.; and to understand the chord symbols when you look at a song chart—so you can actually put your fingers on the keys and have it sound like the song.

### Performance

If you prepare one of the new songs for performance, plan on being able to play along with the recording. Buy a recording and play along with it at your piano or keyboard. (If you’re

listening through headphones, take one ear off and try to blend your piano playing with the recording.)

## Composition

Compose a two or three section song using the following types of sections: Intro, Verse, Pre-Chorus, Chorus, or you may use A, B, C, etc. Use 8-bar sections as your default this time. In the future, if you want to get a little creative, you may add or subtract bars here or there. One time through the sections of your song should be *at least* 16 bars, and *at most* 32 bars long.

Your completed chart should look something like this:

The musical notation consists of four staves, each representing an 8-bar section. The key signature is one flat (Bb) and the time signature is 3/4. The sections are labeled as follows:

- Section A (Bars 1-8):** Chords: C, C/E, F, C, C, Am, Dm7, G7. The melody features a triplet of eighth notes in the 5th bar.
- Section A1 (Bars 9-16):** Chords: C, C7, F, C, Em7, A7, Dm7, G7, C, F, C. The melody features a triplet of eighth notes in the 11th bar.
- Section B (Bars 17-24):** Chords: F, F/G, C, C7, Dm, C/E, F, D7, G7(sus4). The melody features a dotted half note in the 17th bar.
- Section A2 (Bars 25-32):** Chords: C, C/E, F, C, C/E, F, C/G, G7, G/B, C, F, C. The melody features a triplet of eighth notes in the 29th bar.

Notice, this chart has four sections and 32 bars. The A section repeats three times with variations each time, hence the A1 and A2 labels. The song form is: A, A1, B, A2. I could just as easily have called it Verse 1, Verse 2, Chorus, Verse 3.

Depending on what level you are at, you may or may not choose to write a melody.

The technique used to play this particular song would be RH chords over LH bass notes in simple rhythms—long and short chords. The LH bass line could embellish if desired with passing tones. For instance, after the first C, the LH could slide up to E via D and D#.

The chords cover a range of types and progressions, including major and minor triads, slash chords, 7<sup>th</sup> chords, and ii-V progressions.

Write out the parameters of your composition here:

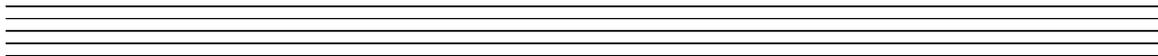
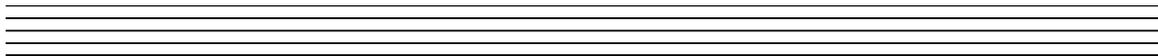
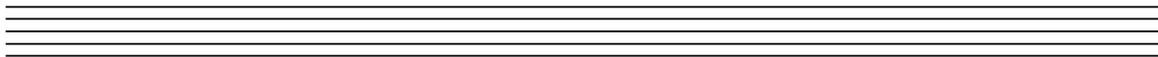
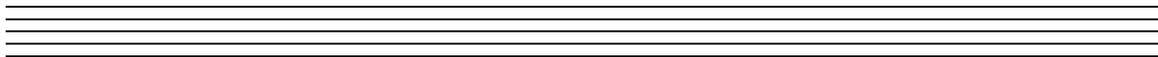
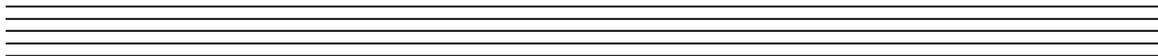
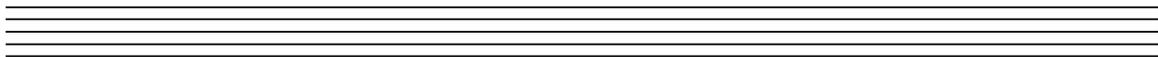
Song Form:

Technique:

Chord Types:

On the following page, write your song chart.

- 1) Fit four bars onto each line (aka "system")
- 2) Label the sections with boxed text
- 3) Write chord symbols above either the melody or slashes (one slash per quarter note)
- 4) Write a treble clef, the time signature and key signature
- 5) Give the song a title and write it at the center-top of the page
- 6) Write your name on the upper right side of the page
- 7) Write any distinguishing style or tempo marks above the first bar



# Stylistic Techniques

Each musical style has its own characteristic rhythmic feel, harmonic tendencies, and typical instrumental techniques. Dissertations have been written on the subtle differences between rhythmic placements in jazz and various world music styles. Capturing and replicating authentic style is similar to speaking a language with an accent. You have to be immersed in a culture in order to really pick it up, and once you really are familiar with the culture's subtleties you can tell if someone else is authentic or not. For instance, I moved to Boston at the age of 8. I never picked up the accent myself, but after living there for the better part of 22 years, I know the accent intimately. I can immediately hear the difference between a New Yorker and Bostonian. I can even tell with confidence if someone is from New Hampshire or Massachusetts. I can hear hints of a Boston accent in people who grew up there and moved away. In the same way, a Brazilian musician can hear if an American jazz musician has really studied Brazilian style, or if he's speaking the language with a terrible accent. This and similar scenarios have happened to me many times. A Cuban saxophonist taught me how to feel the variations of son and rumba clave. A great producer taught me to play well-voiced triads on a crossover record rather than complex jazz voicings. A famous classical soloist taught me to hold back the time at the end of phrases in order to make the music breathe.

Many elements of style are hard to describe, and attempted descriptions don't often help anyone learn to actually execute the style. For instance, I can tell you now that you can insert add2 chords almost anywhere on a Pop ballad, but until you practice some concrete example of how that is done, there's no telling whether you will sound like a pro when you try to insert an add2 chord. Now a truly avid learner will delve deeply into a style, transcribe master performers, listen to the music incessantly. . .

But for the purposes of this book, we will simply generalize some of the most common techniques from a handful of styles, giving you a set of skills to make your piano playing sound that much more professional.

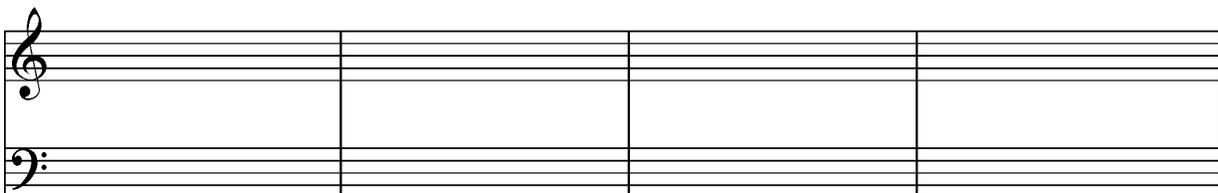
## Assignment part 1:

Play through the following examples. Use the correlating play along mp3s to practice and/or to create tracks in LogicPro.

Identify one or two of your favorites, and transpose them into as many keys as you can. Start by transposing up a half step. Then down a half step. Then transpose to any key that you tend to compose in, or would like to compose in.

## Assignment part 2:

Compose a 4 bar chord progression, applying one of your favorite new techniques.



# Pop Styles

**Skills:**  
• add2 variations  
• stylistic templates

Embellishments - add 2 patterns  
Pop ballad style

Musical notation for Pop ballad style, first system. The right hand (RH) plays a sequence of chords: C(add2) in the first measure, followed by Am(add2) in the second measure. The left hand (LH) plays a simple bass line with quarter notes.

Musical notation for Pop ballad style, second system. The right hand (RH) plays a sequence of chords: C(add2) in the first measure, followed by Am7 in the second measure. The left hand (LH) plays a simple bass line with quarter notes.

Country/Bluegrass style

Musical notation for Country/Bluegrass style, first system. The right hand (RH) plays a sequence of chords: C in the first measure, followed by a sequence of chords in the second measure. The left hand (LH) plays a simple bass line with quarter notes.

Musical notation for Country/Bluegrass style, second system. The right hand (RH) plays a sequence of chords: C in the first measure, followed by a sequence of chords in the second measure. The left hand (LH) plays a simple bass line with quarter notes.

RH static shape: 7-1-5, LH moving bass

Musical notation for Country/Bluegrass style, third system. The right hand (RH) plays a sequence of chords: Cmaj7(omit3) in the first measure, followed by Am7(add2) in the second measure. The left hand (LH) plays a simple bass line with quarter notes.

# Gospel Style Triad Pairs

**Skills:**

- Alternating inversions of 2 chords to create continued melodic motion.
- Transferring between relative major/minor

G and D over G major

Musical notation for the exercise 'G and D over G major'. It consists of a grand staff with a treble clef and a bass clef. The bass line is a simple G major triad (G2, B2, D3) in the left hand. The treble line shows a sequence of chords: G major (G4, B4, D5), D major (D4, F#4, A4), G major (G4, B4, D5), and D major (D4, F#4, A4). The final measure shows a G major chord with a fermata over it.

G and D over E minor

Musical notation for the exercise 'G and D over E minor'. It consists of a grand staff with a treble clef and a bass clef. The bass line is a simple E minor triad (E2, G2, B2) in the left hand. The treble line shows a sequence of chords: G major (G4, B4, D5), D major (D4, F#4, A4), G major (G4, B4, D5), and D major (D4, F#4, A4). The final measure shows a G major chord with a fermata over it.

G and Amin over G major

Musical notation for the exercise 'G and Amin over G major'. It consists of a grand staff with a treble clef and a bass clef. The bass line is a simple G major triad (G2, B2, D3) in the left hand. The treble line shows a sequence of chords: G major (G4, B4, D5), A minor (A4, C5, E5), G major (G4, B4, D5), A minor (A4, C5, E5), G major (G4, B4, D5), A minor (A4, C5, E5), G major (G4, B4, D5), and A minor (A4, C5, E5). The final measure shows a G major chord with a fermata over it.

D and Emin over E minor

Musical notation for the exercise 'D and Emin over E minor'. It consists of a grand staff with a treble clef and a bass clef. The bass line is a simple E minor triad (E2, G2, B2) in the left hand. The treble line shows a sequence of chords: D major (D4, F#4, A4), E minor (E4, G4, B4), D major (D4, F#4, A4), E minor (E4, G4, B4), D major (D4, F#4, A4), E minor (E4, G4, B4), D major (D4, F#4, A4), and E minor (E4, G4, B4). The final measure shows a D major chord with a fermata over it.

# Latin Jazz Montuno Patterns

## Skills

- ii-V formula
- chromatic line cliché
- RH-LH locked in vs. independent timbau

Montuno v1 - basic ii-V

Musical notation for Montuno v1 - basic ii-V. The piece is in 4/4 time and consists of two measures. The first measure is marked with a  $Dm^7$  chord and the second with a  $G^7$  chord. The right hand (RH) plays a series of chords:  $Dm^7$  (F-A-C-E),  $G^7$  (B-D-F-A),  $Dm^7$  (F-A-C-E), and  $G^7$  (B-D-F-A). The left hand (LH) plays a steady eighth-note bass line: C2, D2, E2, F2, G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4.

Montuno v2 - chromatic line cliché

Musical notation for Montuno v2 - chromatic line cliché. The piece is in 4/4 time and consists of two measures. The right hand (RH) plays a chromatic line:  $Dm^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D),  $Bb^7$  (Ab-C-E-G),  $B^7$  (D-F-A-C),  $A^7$  (C-E-G-B),  $G^7$  (B-D-F-A),  $F^7$  (A-C-E-G),  $E^7$  (G-B-D-F),  $D^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D),  $Bb^7$  (Ab-C-E-G),  $B^7$  (D-F-A-C),  $A^7$  (C-E-G-B),  $G^7$  (B-D-F-A),  $F^7$  (A-C-E-G),  $E^7$  (G-B-D-F),  $D^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D). The left hand (LH) plays a steady eighth-note bass line: C2, D2, E2, F2, G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4.

Montuno v3 - chromatic line cliché with octaves & arpeggio figures

Musical notation for Montuno v3 - chromatic line cliché with octaves & arpeggio figures. The piece is in 4/4 time and consists of two measures. The right hand (RH) plays a chromatic line with octaves and arpeggio figures:  $Dm^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D),  $Bb^7$  (Ab-C-E-G),  $B^7$  (D-F-A-C),  $A^7$  (C-E-G-B),  $G^7$  (B-D-F-A),  $F^7$  (A-C-E-G),  $E^7$  (G-B-D-F),  $D^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D),  $Bb^7$  (Ab-C-E-G),  $B^7$  (D-F-A-C),  $A^7$  (C-E-G-B),  $G^7$  (B-D-F-A),  $F^7$  (A-C-E-G),  $E^7$  (G-B-D-F),  $D^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D). The left hand (LH) plays a steady eighth-note bass line: C2, D2, E2, F2, G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4.

Montuno v4 - LH timbau pattern landing on beat 4

Musical notation for Montuno v4 - LH timbau pattern landing on beat 4. The piece is in 4/4 time and consists of two measures. The right hand (RH) plays a chromatic line:  $Dm^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D),  $Bb^7$  (Ab-C-E-G),  $B^7$  (D-F-A-C),  $A^7$  (C-E-G-B),  $G^7$  (B-D-F-A),  $F^7$  (A-C-E-G),  $E^7$  (G-B-D-F),  $D^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D),  $Bb^7$  (Ab-C-E-G),  $B^7$  (D-F-A-C),  $A^7$  (C-E-G-B),  $G^7$  (B-D-F-A),  $F^7$  (A-C-E-G),  $E^7$  (G-B-D-F),  $D^7$  (F-A-C-E),  $C^7$  (E-G-Bb-D). The left hand (LH) plays a timbau pattern: C2, D2, E2, F2, G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4, with a pattern of eighth notes: C2, D2, E2, F2, G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4.

# Two Hand Voicings: Jazz ii-Vs

**Skills:**

- LH 3-note rootless voicings
- RH plays melodic notes
- ii-V formula:  
*drop the sizzle (7) of the tizzle (ii) down a hizzle (half-step).*

*starting in the 7-3-5 area code*

Dmin7 G7 Cmaj7

7-3-5 3-7-9 7-3-5

*drop the sizzle!*

"Charleston" rhythm

Dmin7 G7 Cmaj7

7-3-5 3-7-9 7-3-5

Classic "Bebop" rhythm

When you repeat, anticipate the ii chord on the "and" of four as well

Dmin7 G7 Cmaj7

7-3-5 3-7-9 7-3-5

Classic "Swing" rhythm

Dmin7 G7 Cmaj7

7-3-5 3-7-9 7-3-5

# Independent Learning

The end goal here is that you are able and inspired to seek out music that you want to learn, and successfully tackle it. That begins with listening. And perhaps you spend time just imitating a recording, trying to learn by ear. Perhaps you find sheet music or a chord chart. Perhaps you combine the use of notation and your ear. When I learn songs, it's almost always some combination of the two. Then, you just need to:

- 1) Make time to practice.
- 2) Work out the techniques and challenges.
- 3) Make It Easy.
- 4) And then play for someone—a friend, a family member, a classmate.

There are many pertinent questions, and you can expect to have to ask more than one of them—from “Where do I find chord charts,” to “How do I fit my fingers on this chord?”

Part of independent learning is seeking information when problems arise—your teacher, your peers, and oftentimes a friend named Google, have the answers. If you have an unanswered question, or if you're stuck on a challenge, ask for help.

Each one of the four steps listed above can be frustrating, difficult, or even scary. Sometimes getting help is the only way through.

*After my sophomore year of high school, I was 16 years old, and for the first time in 5 years I decided not to go baseball camp in the summer. Instead, I took a leap and spent eight weeks at Interlochen Arts Camp. It was there that I realized that being a musician was the path I wanted. My peers were incredible musicians—far more advanced than I was in many respects. I was humbled. But my peers were also incredible people. The two jazz pianists ahead of me took me under their wing in different ways—teaching me how to practice, how to voice chords, how to be a stronger improviser. The great jazz pianist, Donald Vega, was 18 at the time, and the top pianist in the camp. I'll never forget one day when I walked by the practice sheds and stopped to listen to him. He looked up and saw me and invited me in. Donald is a generous and very kind man, as anyone who knows him will attest—but he was 18, and I was “competition.” Instead of “vibing” me, Donald showed me what he was practicing—we played for each other, and he gave me advice on what to work on. His actions that day taught me how great being in a community of musicians can be. Sometimes you know what your questions are and sometimes you don't, but if you seek out the people who are at the next level, you are likely to find someone willing to devote his or her time and energy to helping you progress.*

*Someday, you will be that someone, helping others.*

## In Conclusion

I might say “good luck,” but this is really not about luck at all.

Put your fingers on the right notes, apply the principles of effective learning, and seek help when you need it. Choose meaningful repertoire that is exciting to learn, and persevere through the hard stuff. You can do it. There is no doubt.

# Outcomes Review

## **FUNDAMENTALS**

- Practice techniques and chords systematically by using shape groups on the piano. (p19, 22)
- Utilize inversions and register intentionally in performances and compositions. (p9, 16, 24, 52)
- Review and apply fundamental principles of effective learning and musical cognition in practice and performance. (p36-38)

## **KNOWLEDGE, SKILL, & REPERTOIRE**

- Play new chord types, such as sus2, sus4, add2, add4, diminished and augmented, in multiple keys and song excerpts. (p11-14)
- Play all types of 7<sup>th</sup> chords with LH root, RH 7-3-5 voicings, in multiple keys. (p18-20)
- Play diatonic 7<sup>th</sup> chords in multiple keys. (p22-23)
- Play standard 7<sup>th</sup> chord progressions and variations in multiple keys. (p32)
- Harmonize, or “voice,” melodies from contemporary song charts. (p34-35)
- Analyze selected repertoire using roman numerals, and practice aural recognition of progressions. (p13, 17, 24, 30)
- Perform and compose diatonic and non-diatonic chord progressions using borrowed chords and modulations. (p15-16)

## **MUSICALITY**

- Play with relaxed wrists, appropriately curved fingers, and easeful upright posture.
- Use sustain pedal effectively.
- Perform repertoire using appropriate solo piano techniques or accompanist techniques.

# Additional Materials & Song Charts

Additional materials and song charts may be distributed by teachers as they deem appropriate for instruction. This is not a be-all-end-all workbook. It's a foundation to expand on.

## Instructional Videos

For my Instructional Video Playlist (YouTube): <http://goo.gl/i2Vita>

Or scan this QR code with your mobile device:



## Contact

Email me at [peter.stoltzman@ucdenver.edu](mailto:peter.stoltzman@ucdenver.edu) with requests or questions.

## Appendix C: Workbook III

Peter John Stoltzman's

# Contemporary Piano Class Workbook III

## Refining & Expanding

The image shows a musical exercise consisting of four measures, each featuring a different chord. The notation is written on a grand staff with a treble and bass clef. The bass line consists of a simple eighth-note pattern: C4, D4, E4, F4, G4, A4, B4, C5. The treble line contains the chord voicings for each measure. Above the staff, the chord names are written: Dmin7(add9), Cmin7(add9), Bbmaj7(add9), and A7alt.

Measure	Chord	Treble Clef Notes	Bass Clef Notes
1	Dmin7(add9)	F4, G4, A4, B4, C5	C4, D4, E4, F4, G4, A4, B4, C5
2	Cmin7(add9)	B3, C4, D4, E4, F4	C4, D4, E4, F4, G4, A4, B4, C5
3	Bbmaj7(add9)	A3, Bb3, C4, D4, E4, F4	C4, D4, E4, F4, G4, A4, B4, C5
4	A7alt	C#4, D#4, E4, F#4, G4	C4, D4, E4, F4, G4, A4, B4, C5

1<sup>st</sup> edition ©2013

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Instructional Video YouTube Playlist: <http://goo.gl/i2Vita>



# Introduction

This workbook is designed for music majors with a serious interest in the piano to continue their development into and beyond the required three semesters of piano class. This workbook will address contemporary keyboard skills, including practice and performance skills, sight-reading, transposition, improvisation and composition.

Students will learn music from chord symbols as well as grand staff piano music, applying melodic, harmonic, and rhythmic concepts in a variety of musical contexts. Students will go deeper into advanced stylistic techniques, including *montunos*, jazz voicings, chorale-style spread voicings, advanced broken chords and arpeggio patterns, and RH-LH independence.

In a review of the guiding principles for effective practicing, students will explore an in-depth understanding of why and how to refine concrete skills to automaticity and apply them creatively.

Students will work with lead sheets that require voicing and interpreting melodies, arranging and re-harmonizing chord progressions, and composing and improvising within relevant musical constraints.

## Optimizing Your Learning Process

If you're using this book, you are serious about taking your musical skill set to a professional level. Inevitably, some of the content in this book will appeal to you, and some of the content will seem irrelevant. For instance, if you're a bluegrass singer-songwriter, you may never use two handed spread voicings of *i i - V - I* chord progressions. This workbook cannot exactly meet the individual needs and desires of each learner who uses it. The only person that can truly seek out and find exactly what you want and need is *you*. With this in mind, perhaps the most important thing that I can offer you, the reader, is a set of tools to optimize your learning process.

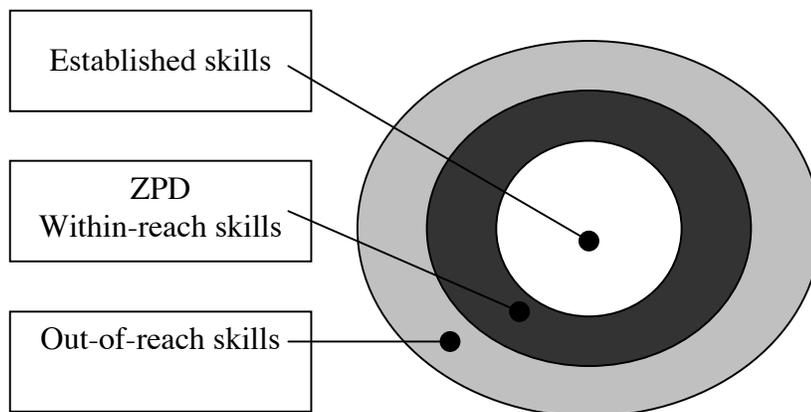
To begin, I will lay out three components for you to understand and utilize in your practice.

- 1) Find your challenge threshold
- 2) Refine
- 3) Expand

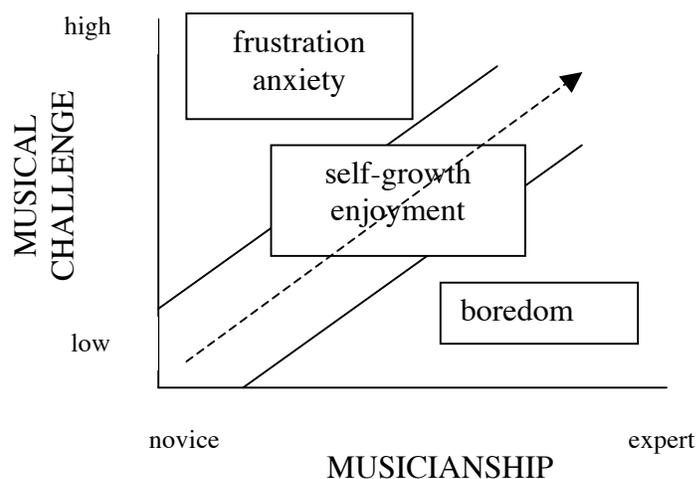
## Challenge Threshold

Each learner has a unique set of strengths and weaknesses and as a result, a unique threshold for challenge. Goldilocks offers a good analogy for finding your threshold. Mama Bear's porridge was too cold, Papa Bear's was too hot, but Baby Bear's was "just right." Throughout the process of learning, you will encounter things that are too hard, too easy, too fast, too slow, too complex, too simple, etc. You need to find that space that is *just right* for you.

Back in the early 1960's, researcher and developmental psychologist Lev Vygotsky described a learner's "just right" as the **zone of proximal development (ZPD)**. The ZPD represents those skills that are within reach, given the appropriate assistance.



In his book on the philosophy of music education, *Music Matters* (1995), David Elliot articulated a very similar concept. The following chart (Elliot, p132), represents a zone of optimal learning as dependent on the appropriate balance between challenge and musical ability.



The lesson inherent in these concepts and diagrams from Lev Vygostky and David Elliot is that there is always a pathway to effective and enjoyable learning available to a learner. When things appear too hard, too easy, too fast, too slow, too complex, too simple, with the proper adjustments you can find your personal “just right.” That’s what **refining** and **expanding** are for.

## Refine

In my previous workbook, I described “5 Axioms” in regard to “Learning Music for Performance.” The first two, “Program Success” and “Break it Down” refer to the refining process. Let’s review:

### Axiom 1: PROGRAM SUCCESS

Everything you do programs your brain, so you must practice skills more times successfully than not. If it takes more than 3 repetitions to execute successfully, it’s probably too complex. Just consider: if you make 3 mistakes and play correctly once, you may be programming your brain to do it right only 25% of the time.

This isn’t quite so black and white, of course. The brain is amazing—and it learns from mistakes too, in a very important way. The brain actually needs to know what *not* to do. And, after periods of effective practice that include mistakes, the brain utilizes “downtime” to prune undesirable neural pathways that were created or discovered by making mistakes in practice. The only caveat here is that you must know it when you make a mistake. When practices are manageable, mistakes are obvious.

In order to effectively automatize skills, you should try to apply a 3:1 ratio of success to mistakes in your practicing. You will know you’ve got something automatized when you can play it while conversing or reading out loud. Try it!

### Axiom 2: BREAK IT DOWN

Every skill is comprised of numerous component behaviors. Think of riding a bike: for our bodies to maintain balance, accelerate, decelerate, and turn, all the while being aware of our surroundings and our trajectory, is actually quite complex both in terms of motor skills and cognition. But with practice, we make it look easy—in fact, it really does become easy to us. Even if we go months or years without doing it, most of us can simply pick it back up and go for a bike ride. The complex conglomeration of component behaviors that is the skill of riding a bicycle has been automatized.

After you formulate an intention to learn some new skill, you may find yourself unable to tackle the whole thing. At this point, you must reduce the complexity of the task. If going from A to B isn’t working, you’ve got to “break it down” and go from A1 to A2 to A3, before going on to B.

You must translate concepts into actions. In analysis, music can be broken down into conceptual components, but actual musical skills are comprised of behaviors. This is really the step in the learning process where the rubber meets the road—and those aspiring musicians who have the will to work through the process time and time again are the ones who get to experience their intentions coming to life.

Remember: Reduce the complexity of your practice by breaking down skills into manageable component behaviors, and practicing to automaticity.

### Vehicles for Refining

Take a look at this Interlude, excerpted from Ray Charles' version of Leon Russell's *A Song For You*.



This can be a difficult passage for developing pianists to learn. There are thirty-two notes in two bars, wide intervals, and three flats in the key signature. And because the notes are sixteenth notes, even at a ballad tempo it requires relatively speedy piano technique. With all of these variables at play, this is a passage that invites mistakes. And a passage that invites mistakes is a passage that necessitates refining practices.

Let's walk through three vehicles for refining this passage.

#### 1) Practice fewer notes

Rather than try to play all thirty-two notes, practice the first two.



How many times does it take you to play those two notes correctly? Two, three at the most? Then play them correctly again, and again, and again, and again. By the time you've done that, your fingers are probably feeling very comfortable with the interval of C to A b.

Play the next two notes in the passage:



Play those correctly until they are automatic.

Then try to play the first four notes together.



This kind of practice may feel tedious. But how long has it taken to get those first four notes more or less automatic? 2 or 3 minutes? 5 minutes? You could easily have spent 5 minutes just trying to get through the thirty-two notes a few times and making multiple mistakes each time through. The discipline it takes to practice effectively is so worth it.

## 2) Practice at a slower tempo

Go through the whole line, but go *slowly*. Slowly enough that you can play each note correctly. Take your time, you can speed it up soon enough. When you speed it up, you want to be doing it correctly.

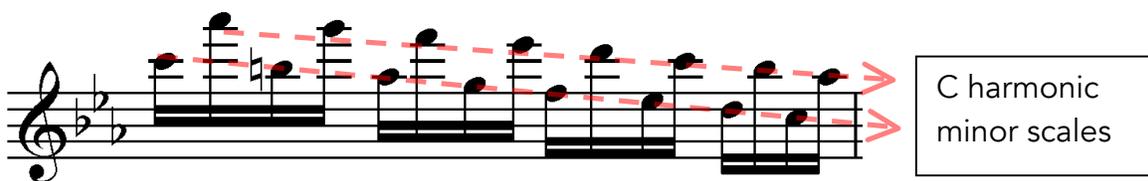
## 3) Find patterns, group notes

As you go through the line, a few notes at a time or at a very slow tempo, if you're paying close attention you may notice patterns. Almost all memorable melodies have some kind of identifying patterns in them.

In this passage, there is an intervallic pattern of sixths. Once you recognize the pattern, you can group notes according to the pattern—then, rather than thinking of thirty-two notes, you can think of a repeating pattern. You may conceive of that pattern as a shape or a finger sequence, or you might identify it by a theoretical concept.

## 4) Utilize a theoretical understanding

This passage is made of sixths descending through a C harmonic minor scale. If you are at the point where it is not mentally taxing to picture a C harmonic minor scale, you can use that knowledge to guide your refining practice.



Ultimately, the point of refining is to make what you're doing on the piano easy. You don't want to be thinking about every note. You need the mental space to be thinking ahead to what happens next in the song. If you can turn off your "thinking brain" and just enjoy playing (correctly), then you've got it. Once you've got it, you are ready to expand on what you've got.

## Expand

In the section of my previous book that I referred to above, I wrote “5 Axioms” in regard to learning music. The third and fourth axiom relate to the process of expansion as I conceive of it. Let’s review:

### Axiom 3: FREE YOUR MIND

Following the skillful execution or refinement of skills, you should somehow expand the practice. Expanding practice necessitates the application of concrete skills in a variety of ways. For instance, once an arpeggio is learned, it can be inverted, played in high or low registers, at slow or fast speeds, and with varying dynamics, etc. I might play a similar arpeggio in different keys, over different chords, and in any number of creative ways. In this sense, “expanding” refers to increasing the number of possible applications of any specific concrete skill(s). When learning to play songs, expanding can be as simple as playing a whole phrase or a whole song instead of an excerpt, or playing with both hands instead of one.

But expanding also refers to the awareness experienced by the performer. Even when a student has major instrumental limitations that constrain what he or she can play, there are no such physical limitations on his or her awareness. Novice or expert, a musician can play a note with the contracted awareness of the note name, theory, instrumental fingering, and the like, OR he can play the same note with the expanded awareness of musical principles and strategies, or dare I say, feelings. In this sense, expanding refers to the increasingly abstract cognitive experience of what is being played.

For expert performers, abstract thinking initiates the skillful execution of meaningful musical expressions. Having that experience does not depend on having all the skills of an expert. Rather, it depends on freeing up the requisite attentional capacity to direct actions with thinking that is more strategic and intuitive than detail-oriented and analytical.

Conscious, detail-oriented, analytical brain function is flat-out detrimental to the enjoyable experience of performing music. So, you absolutely must free your mind. Do so by automatizing the skills you will employ, and by thinking strategically, emotionally, intuitively, as you play.

Expanded experience examples:

“Here comes the transition to the Bridge. . .” (Anticipation, structural thinking)

“This part is so sad. . .” (Emotion, narrative thinking)

“I’m in the flow, I’m feeling it. . .” (Intuitive experience, no thinking)

### Axiom 4: GO AHEAD, TRY IT!

Working stuff out in the practice room is one thing, and playing it on the bandstand or in a jam session is another entirely. This is because there are SO many more contextual variables at play. And of course, the reality of no “do-overs” can evoke anxiety, judgment, and a slew of other internal pitfalls. Performers have to be brave—sometimes even if it means appearing foolish—to play in front of varying audiences and in varying circumstances time and time again.

Performance is the ultimate test of readiness. I have learned lesson after lesson from performing, and most of those lessons are learned the hard way—failing in one way or another. Those lessons are often painful, but always valuable.



Can you play these chords? Perhaps this level of expanding is exciting for you. Perhaps it's overwhelming.

Assess your ability honestly, and understand what it takes for you to expand your practice of this progression. How far *can you*, and how far *do you want to push it*?

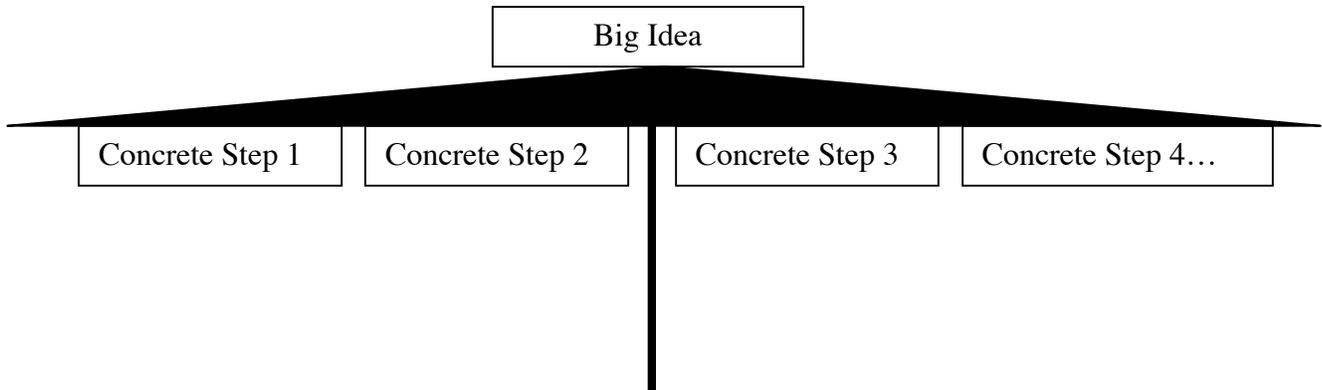
## 2) Think in Big Ideas

Thinking in big ideas is so important that it should really be infused into every musical goal. Big ideas reflect the intention and the feeling that is driving the music. All of the concrete details of theory and instrumental execution exist to serve the more abstract big ideas. The symbiosis between the concrete and the abstract in music is akin to the nature/nurture relationship. It is our nature to connect to music on an abstract level—to feel the emotion in it, to enjoy the expressiveness of performance, to dig the groove, to appreciate the virtuosity, to get immersed in an abstract story and taken on a journey through expectations fulfilled and unfulfilled. As creating musicians, however, if we want to be able to evoke those experiences we must nurture the concrete details that act as delivery vehicles for those big ideas. This is why we study, and practice, again and again and again.

And yet, if we become so immersed in the details that we lose our connection to the big ideas, our musical output or experience gets cut off from the very things that give it meaning. So it is imperative that we continually return our awareness to the big ideas.

The problem is that as we develop our concrete musical skills through study and practice, we fill up our brains with stuff to think about. And then we have no room left for the big ideas, because we're thinking about what note is the seven of the four chord on the fifth measure of the twelve bar blues!

The big idea as an umbrella:



### 3) Creative Applications

Practice really pays off when you're able to apply what you've worked on creatively. You have to be able to synthesize the skills you've developed in the context of a product—an arrangement or a composition—or in the context of a performance—interpreting the melody, shaping an accompaniment, or improvising.

When you apply expanding tools, you can transform a bland piano part into a rich, unique musical statement.

For instance...

A musical score for piano in E-flat major, 4/4 time. The score consists of three measures. Above the staff, the chords are labeled: A♭maj7, Eb/G, Fm7, Eb/G, and A♭maj7. The right hand plays block chords, and the left hand plays a simple bass line with quarter notes.

...can become:

A musical score for piano in E-flat major, 4/4 time, showing an expanded version of the previous piece. The score consists of three measures. Above the staff, the chords are labeled: A♭maj7, Eb(add2)/G, Fm7(add9), A13(#11), and A♭maj7. The right hand plays more complex chords, and the left hand plays a more active bass line with eighth and sixteenth notes.

A simple part may be what the music calls for, but it's good to have options. And if you're going to be a professional in the music industry, you want to play simply because *you choose to*, not just because that's all you can do.

Expanding practices test your abilities; they push you to your threshold and beyond. When you reach that challenge threshold, you know you have to go back into refining mode. Over the course of a practice session, the back and forth of refining and expanding may happen once or twice, or it may happen again and again. You might be refining for 30 seconds, expanding for 1 minute, refining for 10 seconds, expanding for 5 minutes, and then refining for 5 minutes. Ultimately it's up to you to focus your self-awareness and control the flow of your practice so that you stay in a zone of optimal learning as much as possible.

## Refining 7<sup>th</sup> Chords

The figure below shows a group of 7<sup>th</sup> chords with the RH playing a 7-3-5 voicing. If you're not comfortable finding any one of these four types of 7<sup>th</sup> chords in every key, I recommend that you spend time reviewing that before moving forward.

The image shows four musical staves, each representing a different voicing of a C7 chord. Above each staff is a label: C<sup>maj7</sup>, C<sup>7</sup>, C<sup>min7</sup>, and C<sup>dim7</sup>. Each staff consists of a treble clef and a bass clef. In all cases, the right hand (RH) plays a 7-3-5 voicing. The left hand (LH) plays a single bass note: C for C<sup>maj7</sup>, Eb for C<sup>7</sup>, F for C<sup>min7</sup>, and Ab for C<sup>dim7</sup>.

### Practicing in 12 Keys

You can practice in 12 keys in many ways, including chromatically (moving up or down by half steps), or around the circle of 5ths (C "is the 5 of" F which is the 5 of B $\flat$ , which "is the 5 of E $\flat$ ," etc.). While these two might be the most popular ways to get through the 12 keys, I actually recommend two different methods—1) through the shape groups, and 2) through a random distribution of the 12 keys.

### Shape Groups

By grouping three keys into one shape group, you can create a cognitive shortcut and circumvent a considerable amount of tedium in your practice. These shape groups are based on the root position major triads.

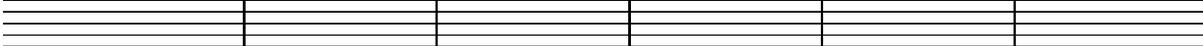
Group 1	Group 2	Group 3	Group 4
<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> D $\flat$	<input type="checkbox"/> B
<input type="checkbox"/> F	<input type="checkbox"/> E	<input type="checkbox"/> E $\flat$	<input type="checkbox"/> F $\sharp$
<input type="checkbox"/> G	<input type="checkbox"/> A	<input type="checkbox"/> A $\flat$	<input type="checkbox"/> B $\flat$

## Random Distribution of the 12 Keys

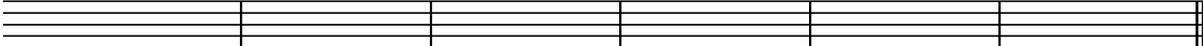
Transposing randomly tests your ability to access information outside of a predictable context. This prepares you to read music on the spot, when you're not able to anticipate or memorize what is coming next.

1.

E                      G                      A $\flat$                       C                      F                      E $\flat$



B                      B $\flat$                       D $\flat$                       A                      D                      G $\flat$



2.

B $\flat$                       E $\flat$                       E                      F                      B                      D $\flat$



A                      G $\flat$                       D                      A $\flat$                       C                      G



## Assignment

Choose a 7<sup>th</sup> chord type (maj7, min7, etc.) and play through the random distributions above using a 7-3-5 voicing in your RH, and a 1-5-8 pattern (see example below) in your LH.

Example:



C $\flat$ min7                      E $\flat$ min7

# Expanding 7<sup>th</sup> Chords

Once you've established your ability to plant your fingers on a 7<sup>th</sup> chord with little hesitation in most or all keys, you are ready to expand on what you've got. My previous book addressed voicing 7<sup>th</sup> chords in 7-3-5 shapes. This section will now address expanding your 7<sup>th</sup> chord toolbox by adding and altering notes.

## Adding the 9

Play through each chord in the following worksheet, and transpose to at least one key from each shape group.

### 7<sup>th</sup> (add9) Chords in the 7-(9)-3-5 Area Code

**C<sup>maj7</sup>**                      **C<sup>7</sup>**                      **C<sup>min7</sup>**                      **C<sup>dim7</sup>**

#### Common Minor Variations

**C<sup>min7(b5)</sup>**                      **C<sup>min6</sup>**                      **C<sup>min(maj7)</sup>**

#### Common Dominant Variations

**C<sup>7(b5)</sup>**                      **C<sup>7(#5)</sup>**                      **C<sup>7(add13)</sup>**

#### Common Major Variations

**C<sup>maj7(b5)</sup>**                      **C<sup>maj7(#5)</sup>**                      **C<sup>maj7(add13)</sup>**

The above chord symbols can be written with or without the text, (add9). For example: C<sup>min7</sup> or C<sup>min7(add9)</sup>. Sometimes, the symbols are condensed into simply C<sup>min9</sup>. In that case, the 7 is assumed to be present.

### Altering the 9

The voicings shown above show the most common variations on 7<sup>th</sup> chords with natural nines. Each voicing variation has its own flavor, whether it's a #5 or b 5 or something else. Minor chords, for instance, can be played with either a major 7, a b 7, or a 6. In dominant 7<sup>th</sup> chords, unlike minor and major, there is the additional opportunity to alter the nine.

Altered nines are either going to be b 9 or #9 (or both!). When you combine the three possible types of nines and the b 5, #5, #5, as well as the 13, there are quite a few permutations of dominant 7<sup>th</sup> chord voicings. Below are four common alterations of the dominant 7<sup>th</sup> chord with altered nines.

### Common Alterations of Dominant 7th Chords in the 7-(9)-3-5 Area Code

The image displays four musical staves, each representing a different voicing of a dominant 7th chord with an altered 9th. The chords are labeled above each staff: C<sup>7(b9)</sup>, C<sup>13(b9)</sup>, C<sup>7(b9#9)</sup>, and C<sup>7(#9)</sup>. Each staff shows a treble clef with a G-clef and a bass clef with an F-clef. The notes are arranged in a shape group, with the bass clef notes being lower than the treble clef notes. The first staff (C<sup>7(b9)</sup>) has notes G, Bb, D, F, Ab, G. The second staff (C<sup>13(b9)</sup>) has notes G, Bb, D, F, Ab, B. The third staff (C<sup>7(b9#9)</sup>) has notes G, Bb, D, F, Ab, B, C#. The fourth staff (C<sup>7(#9)</sup>) has notes G, B, D, F, Ab, B, C#.

Play through these voicings in multiple keys, using either the shape groups or random distributions.

### Expanding your Thinking

The information presented above could take years to assimilate fully. If you're a jazz musician who will be making arrangements and composing in the future, you should put in the time to be able to utilize all of these variations in all keys. If your goals are limited to social performing or folk or pop songwriting, I would recommend that you choose one or two voicings whose sound resonates with you, and practice towards automaticity for just your chosen voicing(s).

Whatever your ambition, you want to be able to use new skills like this without mentally slogging through "figuring it out" every time. Besides practicing to automaticity, you need to conceive of these new voicings in big ideas. In this case, the big idea is "altered."

Instead of thinking of “the flat nine and the flat five on a C7 are D flat and G flat,” and then looking for those notes and plugging them into your C7 voicing, you should think of “an altered 7<sup>th</sup> chord,” and then be able to grab one of your favorite voicings.

In fact, chord symbols sometimes reflect this train of thought. Instead of spelling out the exact alterations, such as C7(#9,#5), a chord symbol can be written as C7<sup>alt.</sup>, leaving the alterations up to the performer.

**Expanding by Applying**

There are a number of contexts in which you might apply altered 7<sup>th</sup> chords and add9 voicings. Have you talked about add9 voicings before? Perhaps in an earlier workbook? You might want to review what that means. The most common context would be in a V – I progression (or in minor: V – i).

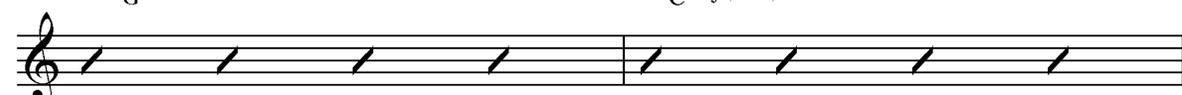
Choose an altered 7<sup>th</sup> chord for your V, and use an add9 voicing for your I major or i minor chord.

**Assignment 1:** Play through the following progressions, reading the chord symbols.

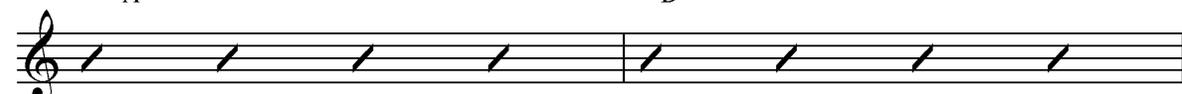
1. C7<sup>alt.</sup> Fmin7(add9)



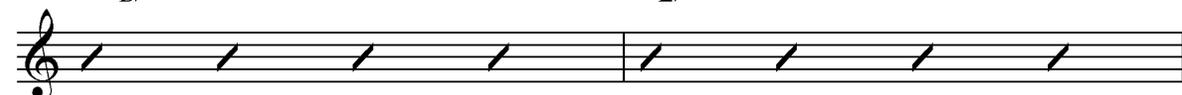
2. G7<sup>alt.</sup> Cmaj7(add9)



3. A7<sup>alt.</sup> Dmin7(add9)

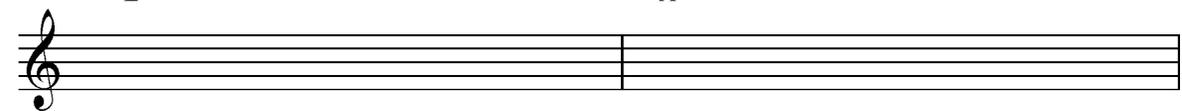


4. Bb7<sup>alt.</sup> Ebmaj7(add9)



**Assignment 2:** Write the notes of your RH chords (assuming the root in the LH).

E7<sup>alt.</sup> Amin7(add9)



**Assignment 3:** Create your own four bar chord progression, utilizing at least one V - I (or i) progression.

1.



2.



3.



4.



**Assignment 4:** Choose your favorite progression and record it into LogicPro. Create a track with keyboard, bass, and drums. Repeat your four bars four times to create a sixteen bar track.

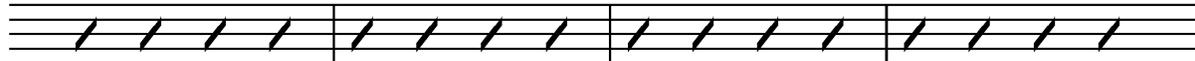
# Expanding Technique

Writing chord progressions can be fun, but to actually turn a progression into something that sounds like a song takes instrumental technique and style. How do you make something sound funky, or jazzy, or like Coldplay, or like Little Richard? Every identifiable musical sound is created by a technique. Once you identify the technique, you can learn how to perform, arrange, or compose with it. (Note: all the examples below are assumed to be in a 4/4 time signature)

## Advanced LH-RH Independence

Take a look at the chord progression below. The musical examples below it represent various techniques that can be used to create different stylistic “feels.”

D<sup>min7</sup>(add9)      C<sup>min7</sup>(add9)      B<sup>b</sup>ma<sup>7</sup>(add9)      A<sup>7</sup>alt.



### 1) Piano Pad

Play through this progression with the LH on the root of the chords and the RH playing the chords in whole notes. If you have a synth pad sound at your disposal, play it with that sound. This is the technique you would use to play a Sade ballad, or Sting’s “Fields of Gold.”

### 2) Funky Bass Line

For a tune like Freddie Hubbard’s jazz fusion classic, “Red Clay,” you would want a more active technique.

Tempo: J=80

D<sup>min7</sup>(add9)      C<sup>min7</sup>(add9)      B<sup>b</sup>ma<sup>7</sup>(add9)      A<sup>7</sup>alt.



### 3) Hip Hop

To create a Hip-Hop track out of this progression, you'd probably want to utilize double-time chunking in the RH, and a more punchy bass line.

Tempo: ♩=85

Musical notation for Hip Hop style. The piece is in 4/4 time with a tempo of ♩=85. The right hand (RH) features double-time chunking, playing eighth-note chords in pairs. The left hand (LH) has a punchy bass line with eighth notes and rests. The chord progression is: Dmin(add2), Cmin(add2), B♭maj7, and A<sup>aug</sup>.

As you play this example, you will see that I simplified the chords a bit. Although some Hip-Hop artists have sampled or infused jazz chords and grooves into their music, the majority of Hip-Hop music tends to use more triads than 7<sup>th</sup> chords. And there's nothing wrong with that. Triads—especially chunking triads—give the music a more crisp and tightly structured sound that works very well as background beneath rappers' flow.

### 4) Jazz

If you want to play this as a jazz tune, you'll probably need a walking bass line along with syncopated rhythms in your RH comping.

Tempo: ♩=110

Musical notation for Jazz style. The piece is in 4/4 time with a tempo of ♩=110. The right hand (RH) features syncopated rhythms with chords. The left hand (LH) has a walking bass line with eighth notes. The chord progression is: Dmin7(add9), Cmin7(add9), B♭maj7(add9), and A<sup>7alt.</sup>.

### 5) Pop

This progression is probably more harmonically complex than most pop songs will dare to venture. However, pop songs often have harmonic complexity in them by virtue of overlapping parts or chords that create tension and release. Slash chords can effectively be used in these scenarios.

Tempo: ♩=80

Musical notation for Pop style. The piece is in 4/4 time with a tempo of ♩=80. The right hand (RH) features overlapping parts with chords. The left hand (LH) has a walking bass line with eighth notes. The chord progression is: Dmin7(add9), Dmin7(add9)/C, Dmin7(add9)/B♭, and A<sup>7alt.</sup>.

An even more scaled-back version of this progression for pop music might look something like this:

Dmin(add2)                      Dmin(add2)/C                      B $\flat$ (add2)                      C(add2)                      C(add2)/A

In the above example, there is no Cmin7, and no A7alt. We're left with only the add2's adding tension and release. This is a technique we could call **add2 broken chords**.

### 6) Salsa (Afro-Cuban "Latin Jazz")

This progression could easily be found in a Latin Jazz style as well. Below, I have simplified the chord progression in order to accommodate a piano **montuno**. *Montunos* are arpeggiated patterns, and sometimes include broken chord patterns as well as chromatic passing tones. This pattern has a chromatic passing tone leading through the progression.

Tempo: J=135

Dmin                      Cmin                      B $\flat$                       A

### 7) Samba (Brazilian "Latin Jazz")

The Brazilian rhythmic feel is quite different than the Afro-Cuban style. Chords are rarely arpeggiated in accompaniment patterns, although chromatic passing tones are common. This example uses chromatic passing tones moving from the A<sup>13(add9)</sup> to the A<sup>7alt</sup>.

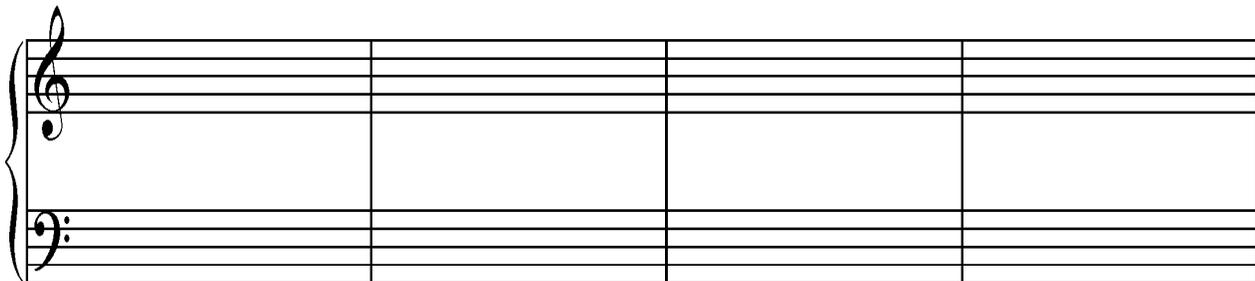
Tempo: J=125

Dmin7(add9)                      Cmin7(add9)                      B $\flat$ maj7(add9)                      A<sup>13(add9)</sup>                      A<sup>7alt</sup>.

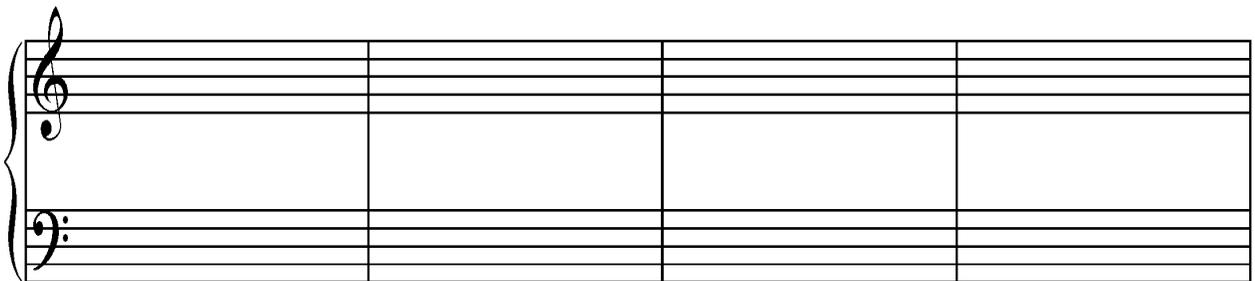
**Assignment:**

Choose at least two of the above stylistic techniques to transpose, and practice them up a half-step and down a half-step. If and when you are ready for more, transpose to more keys and/or practice other techniques.

1) Write out one transposition of your favorite technique, with grand staff notation and chord symbols above:



2) Write your own stylistic variation. You can use the progression from the above examples, or one of the four bar progressions you composed in the previous section, or something brand new.



# Incorporating Melody

The piano can be used as an accompaniment instrument or as a solo instrument, as a chordal instrument, or as a melodic instrument. This is a big part of what makes the piano really awesome, and really challenging. As you venture more into solo piano techniques and melodic techniques, you will need to expand your technique toolbox even further. This section offers an introduction to advanced LH accompaniment patterns and LH chords as vehicles for expansion that will facilitate the incorporation of melody into your playing.

## Advanced LH Accompaniment Patterns

### 1) 1-5-9-10 Variations

Play through the examples below, and get an idea of the many possible LH techniques. These examples are all closely related to the more basic 1-5-8 patterns that you should be used to by now. The added complexity, however, is the stretch beyond an octave to a 9<sup>th</sup> and/or 10<sup>th</sup>.



## 2) Stylistic Variations

There are many possibilities in any given context—enough to get overwhelming quickly. The following techniques should be used as an “entry point” into specific styles. These techniques can be generalized to most any chord type, tempo, meter, or key.

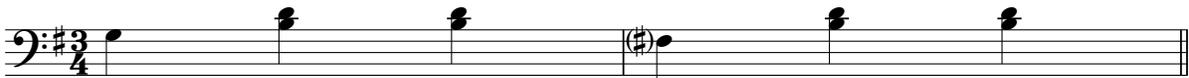
### Arpeggios



### Arpeggio Permutations (1-5-3-5), aka "Alberti bass"



### Broken Chord



### Standard Boogie



### Texas Boogie



### Simple Stride



### Complex Stride



### Contemporary Jazz Stride



Once your LH can play patterns like this, you are on your way to being able to abandon some (or all) of the chord tones in the RH in favor of melodies.

**Assignment: Transposition with Melody**

All of the above examples are in the key of G major. Choose one that you like and transpose it. Again, at least transpose up a half step and down a half step.

Now choose one of your transposed examples and write it out twice (four bars total) below. Then write a four bar melody above it in the treble clef.

Example:

Arpeggio Permutations (1-5-3-5)

Transposition with Melody #1:

Transposition with Melody #2:

## LH Chords

The piano is a fantastically versatile instrument—one of the only instruments, along with the guitar, that can be played in either a solo or ensemble context. The problem with this versatility is the technical challenge of adapting to those various contexts. As a singer/songwriter, producer, composer/arranger, vocal accompanist, church musician, or band member, playing chordal accompaniment in contemporary commercial music settings is the most important skill-set you can develop. However, in certain settings, the lower register of the piano is unnecessarily redundant because of the bass. It can clutter the low end of the music. Also, the RH needs to play in the upper register sometimes—either to play melodies, or to extend the range of the accompaniment.

The standard jazz ensemble is a good example of a context in which the lower register of the piano is largely unnecessary. Since the advent of Bebop and other small group jazz settings, the typical technique used by pianists migrated from stride piano into a more interactive LH “comping” and RH melodic function. This frees up jazz bassists to become more creative and interactive as well. An active lower register on the piano inevitably, sometime obnoxiously, clutters up the sound.

But it’s not just in jazz music that the lower register of the piano is sometimes not useful or desirable. Any time that pianists find themselves in an ensemble with a bass player, it is crucial that they use their LH tastefully, whether that means doubling a bass line or playing chords.

To begin playing LH chords, you just need to replace your RH with your LH. It’s as simple—and as tricky—as that. Play any chordal accompaniment, such as this one:

*Happy Birthday*

The musical notation for "Happy Birthday" is presented in 3/4 time. It consists of two staves: a treble clef staff and a bass clef staff. Above the treble staff, the following chords are indicated: C, G, G, C, C, F, C/G, G, C. The treble staff shows the right hand playing chords, while the bass staff shows the left hand playing a simple bass line. A brace on the left side groups the two staves together.

Now imagine you have a bass player (or use the Happy Birthday play-along mp3, and actually experience having a bass player). Your LH would be redundant and unnecessary. Instead, play the treble clef chords with your LH.

With your RH, now free from covering the chords, you can play the melody. Meanwhile, the bass player can play the bass notes (pictured in the bass clef below). Notice, however, that in order to accommodate the LH chords, your RH melody will have to move up an octave (8va) from where it might otherwise have played.

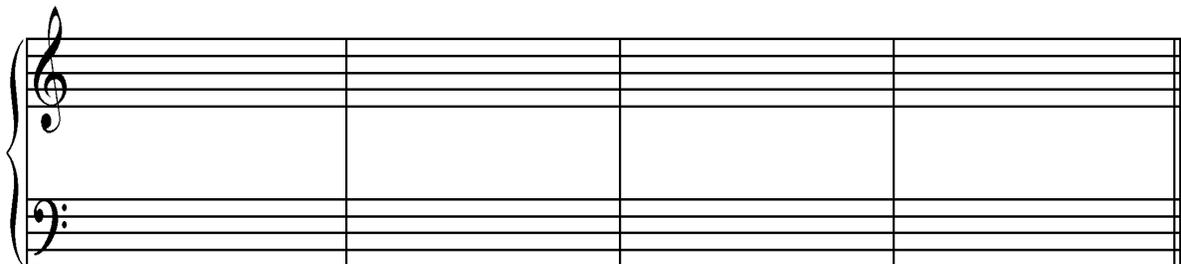
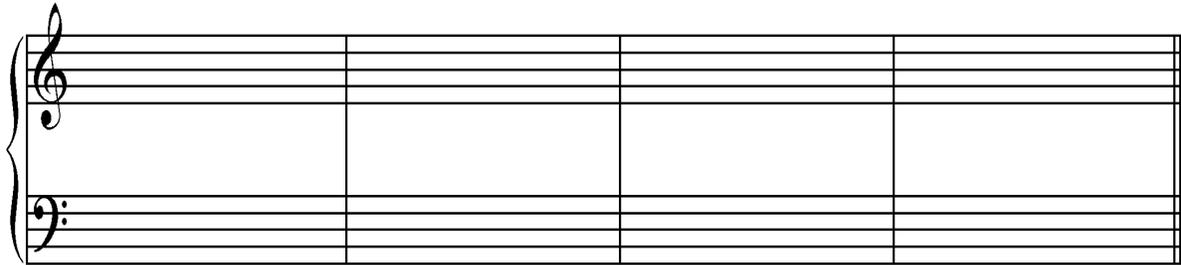
In a jazz setting, you're likely to use more complex chord voicings. Check out the 12-bar blues below, using 3-7-9 and 7-3-5 chord voicings (in the LH). This is Duke Ellington's "C Jam Blues."

### Composition

Write a couple of four-bar melodies and chord progressions.

Play and write the melody for your RH, and chord voicings for your LH.

Write chord symbols above your melody.



### LogicPro Application

Now is a good opportunity to create a track with LogicPro. Record your favorite four-bar composition in LogicPro, adding a bass and drum track as well.

## LH-RH Interactive Strategies

Once you open the LH Chords can of worms, you enter a world of interactive and expressive possibilities. For students with an interest in jazz or related styles of music with improvisation, the following strategies can be used to guide your LH-RH interaction:

### 1) Play Together

Just as in the Duke Ellington blues example above, LH chords can be very effective reinforcing the rhythms of RH melodies.

Musical notation for the 'Play Together' strategy. The piece is in 4/4 time with a key signature of three sharps (F#, C#, G#). The right hand (RH) plays a melody consisting of quarter notes and eighth notes. The left hand (LH) provides harmonic support with chords and rhythmic patterns. Chord changes are indicated above the staff: E7(#9) at the start, A13 in the second measure, and E7(#9) at the end. The notation shows a strong rhythmic alignment between the RH melody and the LH accompaniment.

### 2) Call and Response

Other times, the LH can be used in a more conversational manner with the RH. Below is an example from another 12-bar blues (that I wrote), demonstrating LH comping in a call and response fashion.

Musical notation for the 'Call and Response' strategy. The piece is in 4/4 time with a key signature of one flat (Bb). The right hand (RH) plays a melody with rests, while the left hand (LH) plays chords in response. Chord changes are indicated above the staff: F7, Bb7, F7, Cmin7, and F7(b9). The LH comping is rhythmic and responsive to the RH's melodic lines.

### 3) Add Emphasis

There are also times when it's nice to just play a chord at the beginning or end of a line. Or perhaps emphasize specific notes in the middle of a line.

Musical notation for the 'Add Emphasis' strategy. The piece is in 4/4 time with a key signature of two flats (Bb, Eb). The right hand (RH) plays a melody with eighth and quarter notes. The left hand (LH) provides harmonic support with chords and rhythmic patterns. Chord changes are indicated above the staff: Dmin7, G7alt., Cmin7, F7, and Bbmaj7. The LH accompaniment emphasizes specific notes and rhythms throughout the line.

# Expanding Chord Voicings

## Spread Voicings

There is one more way to incorporate melody that is both useful and aesthetically beautiful, and that is with “spread voicings.” Essentially, spread voicings are chords that use wide intervals between chord tones. Spread voicings have at least one interval that is a fifth or larger. The majority of chord voicings you have used in my books have been playable by one hand. But spread voicings require both hands because the chord tones are so *spread* out. The increased distance between notes actually creates more sonic space for each note’s wave to vibrate in. Tenths sound different than thirds. A fifth sounds more resonant without a third stuck in the middle of it.

Below are two templates for spread voicings. In my previous book, I presented these voicings with variations of progressions that could be played using them. Below, I offer examples of songs that use these voicings. Some are used to play melodies, others just to voice chord progressions.

### 1) *A Thousand Years* (David Hodges, Christina Perri)

The image shows the first four measures of the piano accompaniment for 'A Thousand Years'. The key signature is B-flat major (two flats) and the time signature is 12/8. The chords are: Bb (measure 1), F/A (measure 2), Gmin7 (measure 3), F5 (measure 4), Eb (measure 5), Bb/F (measure 6), and F(sus4) (measure 7). The notation features wide intervals between notes, characteristic of spread voicings.

Examine the voicing of the first chord. The B ♭ has the 1 in the LH and the 5 and 3 in the RH. Let’s deconstruct this.

1. Play a root position B ♭ major triad.

The image shows a root position Bb major triad in the treble clef, 4/4 time signature. The notes are Bb, D, and F.

2. Play the root in the LH.

The image shows a Bb major triad in the treble clef, 4/4 time signature, with the root (Bb) in the bass clef. The notes are Bb in the LH and D and F in the RH.

3. Move the 3 up an octave.



Voila! A spread voicing of a B  $\flat$  major triad.

In a similar way, most spread voicings can be achieved by moving one of the voices, or chord tones, from the inner part of the chord an octave up or down to create wider more resonant intervals.

NOTE: Spread voicings are different than inversions. While inversions change the intervals in a chord, they retain the succession of notes in their closest positions to each other. An inversion of a triad will never have an interval wider than a fourth, whereas spread voicings *will always*, by their nature, have at least one interval that is a fifth or larger.

## 2) *Abide With Me* (William Henry Monk)

Chord symbols above the staff:  $E\flat$ ,  $B\flat^7$ ,  $C^{\text{min}}$ ,  $E\flat/G$ ,  $A\flat$ ,  $B\flat^7$ ,  $A\flat(\text{add}2)/C$ ,  $B\flat^7/D$ ,  $E\flat$

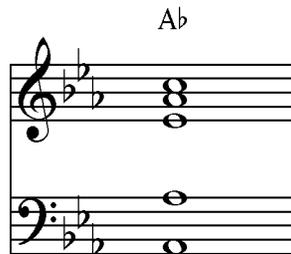
Examine the voicings in this classic hymn. Notice that there are two notes in each hand (except in the last bar). These are “chorale”-style spread voicings. In other words, they work well for a choir. But they also work well for the piano.

Let’s deconstruct one of the chords.

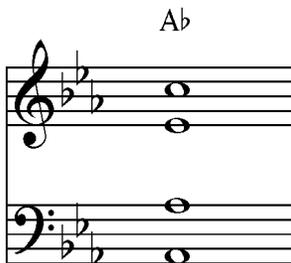
1. Play an A $\flat$  major triad in your RH and an octave root in the LH.



2. Play an inversion of A $\flat$  so C is the top note.



3. Take out the A $\flat$  from the RH chord to create the more resonant interval of a 6<sup>th</sup> in the RH, and eliminate redundancy.



This example reinforces the concept that spread voicings are created by moving—or in this case, eliminating—one note out of a triad (and covering that note in the other hand). After all, with ten fingers available, our two hands should be able to cover the three or four chord tones in any given chord and spread them out in endlessly creative ways.

### 3) The Sesame Street Theme (Joe Raposo)

Examine these voicings. They have a common tone, C, running throughout both in the top and bottom notes. So it is the “inner voices” that have the motion and create the chord progression.

Without deconstructing the voicing back into a triad, number the chord tones relative to the chord.

Identify this voicing by its numbers: 1-5, 3-8. This is a classic example of a spread voicing, so make a mental note of this formula.

One differentiator amongst spread voicings is the LH notes. Is the LH playing 1-5, or is it 1-8 (an octave)? These open intervals act as **shells**. The other chord tones (e.g. 3-5) theoretically could be placed in the LH, but instead they have moved up to the RH and spread out.

### Assignment

Play through the Two Hand Pop Piano Voicings worksheets below.

# Two Hand Pop Piano Voicings

Moving Inner Voices with Pedal

I - IV - I

Musical notation for the I - IV - I progression. The right hand (treble clef) plays a sequence of chords: I (C4-E4-G4), IV (F4-A4-C5), and I (C4-E4-G4). The left hand (bass clef) plays a sequence of chords: I (C2-E2-G2), IV (F2-A2-C3), and I (C2-E2-G2). The inner voices (3rd and 4th notes) move stepwise between chords. A pedal point is indicated by a long horizontal line under the final I chord in both hands.

I - IV - I<sup>7</sup>

Musical notation for the I - IV - I<sup>7</sup> progression. The right hand (treble clef) plays a sequence of chords: I (C4-E4-G4), IV (F4-A4-C5), and I<sup>7</sup> (C4-E4-G4-Bb4). The left hand (bass clef) plays a sequence of chords: I (C2-E2-G2), IV (F2-A2-C3), and I<sup>7</sup> (C2-E2-G2-Bb2). The inner voices move stepwise. A pedal point is indicated by a long horizontal line under the final I<sup>7</sup> chord in both hands.

I - IV - ii - I

Musical notation for the I - IV - ii - I progression. The right hand (treble clef) plays a sequence of chords: I (C4-E4-G4), IV (F4-A4-C5), ii (D4-F4-A4), and I (C4-E4-G4). The left hand (bass clef) plays a sequence of chords: I (C2-E2-G2), IV (F2-A2-C3), ii (D2-F2-A2), and I (C2-E2-G2). The inner voices move stepwise. A pedal point is indicated by a long horizontal line under the final I chord in both hands.

I - IV - V - IV - I

Musical notation for the I - IV - V - IV - I progression. The right hand (treble clef) plays a sequence of chords: I (C4-E4-G4), IV (F4-A4-C5), V (G4-B4-D5), IV (F4-A4-C5), and I (C4-E4-G4). The left hand (bass clef) plays a sequence of chords: I (C2-E2-G2), IV (F2-A2-C3), V (G2-B2-D3), IV (F2-A2-C3), and I (C2-E2-G2). The inner voices move stepwise. A pedal point is indicated by a long horizontal line under the final I chord in both hands.

**Skills:**

- 4 note "spread voicings"
- diatonic progressions & substitutions
- non-traditional ii-Vs

## Two Hand Pop Piano Voicings

### Key of C

System 1: C, Dmin7, C/E, F, C/E, Dmin7, C

System 2: C, Dmin7, C/E, F, C/E, D7, G7(sus4), C

System 3: C, Dmin7, C/E, Fmin, C/E, Amin7, D7, G7(sus4), C

### Key of Db

System 1: Db, Ebmin7, Db/F, Gb, Db/F, Ebmin7, Db

System 2: Db, Ebmin7, Db/F, Gb, Db/F, Eb7, Ab7(sus4), Db

System 3: Db, Ebmin7, Db/F, Gbmin, Db/F, Bbmin7, Eb7, Ab7(sus4), Db

## Different Spread Voicings: LH Shells in Jazz

In jazz music, LH shells are used commonly. Because of the more complex makeup of jazz chords—mostly 7<sup>th</sup> chords, often with additions and alterations—there are more notes to account for, and LH shells help make that possible.

The example below is an excerpt from a beautiful jazz ballad, “Blue in Green,” written by Miles Davis and Bill Evans. Work your way through these chords, and then we will examine how they are constructed.

### 4) *Blue in Green* (Miles Davis, Bill Evans)

The image shows a musical score for the first six measures of 'Blue in Green'. The chords are: Gmin7(add9), A7alt., Dmin7(add9), Db7(add9), Cmin7(add9), and F13(b9). The notation includes a treble clef with a key signature of two flats and a bass clef. The first measure shows the Gmin7(add9) chord with a bass line starting on G and a treble line with notes G, Bb, and D. The second measure shows the A7alt. chord with a bass line on A and a treble line with notes A, C#, and E. The third measure shows the Dmin7(add9) chord with a bass line on D and a treble line with notes D, F, and Ab. The fourth measure shows the Db7(add9) chord with a bass line on Db and a treble line with notes Db, F, and Ab. The fifth measure shows the Cmin7(add9) chord with a bass line on C and a treble line with notes C, Eb, and G. The sixth measure shows the F13(b9) chord with a bass line on F and a treble line with notes F, Ab, and C. A 'Ped.' marking is present under the fifth measure.

These voicings are formed using LH shells, either 1-3 or 1-7. Examine the first chord.

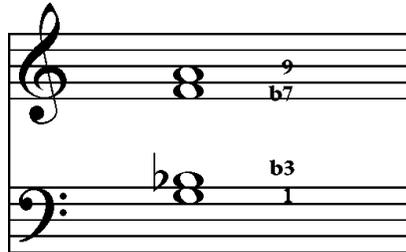
1. Play the LH shell alone: 1-3 on a Gmin7(add9) is G-B b.
2. What notes are still missing? The 5 and 7. Add those in the RH.

The image shows a musical staff with a treble clef and a bass clef. The bass line has a G note. The treble line has a G note and a Bb note. The first step shows the LH shell (G-Bb) in the treble clef. The second step shows the addition of the 5th and 7th notes (D and Ab) in the bass clef, with the 7th note labeled as b7 and the 5th note labeled as 5. The bass clef also has a b3 label and a 1 label.

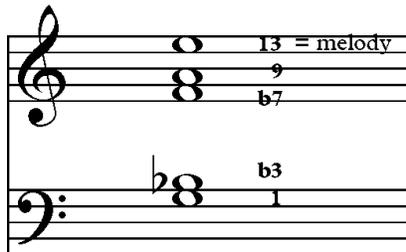
3. And don't forget the 9.

The image shows a musical staff with a treble clef and a bass clef. The bass line has a G note. The treble line has a G note, a Bb note, and a 9 note. The first step shows the LH shell (G-Bb) in the treble clef. The second step shows the addition of the 5th and 7th notes (D and Ab) in the bass clef, with the 7th note labeled as b7 and the 5th note labeled as 5. The bass clef also has a b3 label and a 1 label. The final step shows the addition of the 9th note (A) in the treble clef.

4. The 5 is the least consequential note in a min7 chord, as it doesn't contribute much information about the quality of the chord. So you can drop it out of the voicing.



5. Now you're left with the 7 and 9 in the RH. And this gives you the ability to reach up and grab the melody note, which is E.



If you're overwhelmed by information at this point, fantastic. You should be. The analysis of these techniques gets complicated—WAY more complicated than just showing it to you. And just seeing it and putting your fingers on the right notes is a huge part of successfully learning this stuff. The theoretical analysis, however, offers you the ability to control and manipulate the music—to *create with intention*. If you're using these skills in a professional setting, you don't want to be guessing. You want to really know what you're doing.

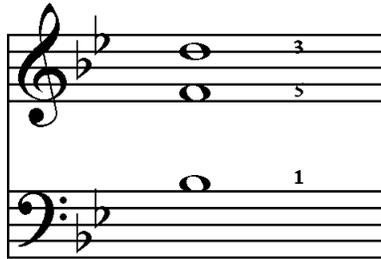
That said, you cannot function effectively in real time if you have to think through all these steps and details. Forget about it! So, now that you've worked through some of the details, your next step has to alleviate the need for you to actively think about those details. You need motor skills that have been refined to automaticity, and expanded to be accessible in various keys and contexts.

# Two-Hand Voicings Practice

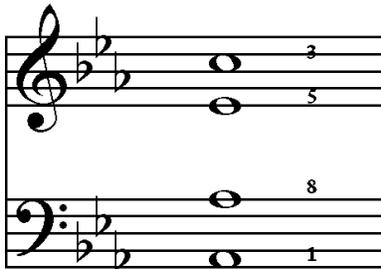
Each of the four examples above represents a variety of two-hand voicing templates. Below, you can practice each template in various keys, and then try to voice melodies as well.

## Spread Voicings of Triads

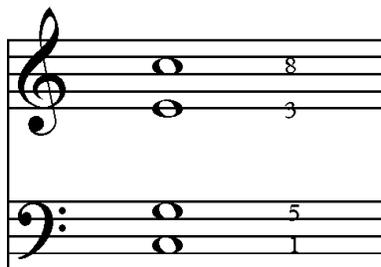
Template 1)



Template 2)



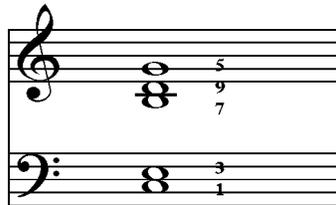
Template 3)



## Spread Voicings of 7<sup>th</sup> Chords

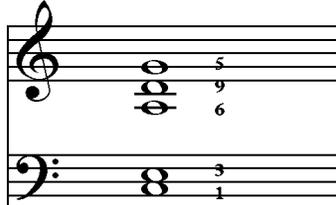
Template 1) LH 1-3, RH 7-9-5

Cmaj7(add9)



1a) "6/9" Variation

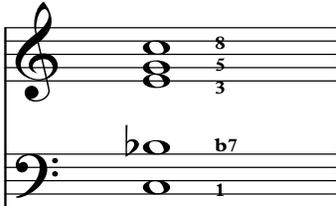
C%



Template 2) LH 1-7, RH 3-5-8

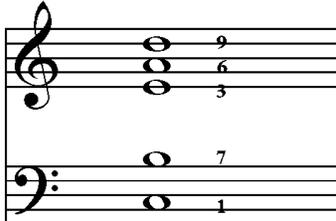
(NOTE: The 8 can be replaced by the 9. To voice a major 7<sup>th</sup> chord, you would typically avoid the 1-7/3-5-8 spread because of the resulting minor 9<sup>th</sup> interval. But the 1-7/3-5-9 spread sounds great on dominant, minor, and major 7<sup>th</sup> chords.

C<sup>7</sup>



2a) "6/9" Variation

C%



## Spread Voicings of 6<sup>th</sup> Chords

Template 1) LH 1-6, RH 3-5-8

(NOTE: The 8 can be replaced by the 9)

C<sup>6</sup>

Musical notation for C<sup>6</sup> chord using Template 1. The treble clef has notes G4, B4, and D5 with fingerings 3, 5, and 8. The bass clef has notes C3 and G2 with fingerings 1 and 6.

Template 2) LH 1-3-6, RH 9-5-8

C<sup>6</sup>

Musical notation for C<sup>6</sup> chord using Template 2. The treble clef has notes G4, B4, and D5 with fingerings 9, 5, and 8. The bass clef has notes C3 and G2 with fingerings 1, 3, and 6.

## Jazz Combo Spread Voicings

Template 1) LH 7-3-5, RH 5-9-5

(NOTE: The 5 can be replaced by the 13, aka 6)

C<sup>7</sup>(add9)  
8<sup>va</sup> - 1

Musical notation for C<sup>7</sup>(add9) chord using Template 1. The treble clef has notes G4, B4, and D5 with fingerings 5, 9, and 5. The bass clef has notes C3, G2, and F2 with fingerings 7, 3, and 13.

Template 2) LH 3-7-9, RH 5-9-5

C<sup>7</sup>(add9)

Musical notation for C<sup>7</sup>(add9) chord using Template 2. The treble clef has notes G4, B4, and D5 with fingerings 5, 9, and 5. The bass clef has notes C3, G2, and F2 with fingerings 3, 7, and 9.

## Organize Your Practice

You should attack these new voicings from the direction that is most meaningful for you. If you're a singer-songwriter, start with the triad spread voicings. If you want to play solo piano show tunes and jazz standards or accompany singers, start with the 7<sup>th</sup> chords and 6<sup>th</sup> chords. If you want to play in a jazz combo, small or large, start with the jazz combo spread voicings.

In order to gain some mastery over this material, you should practice these voicings in at least three ways:

- 1) In the context of meaningful repertoire (i.e., learn a song!)
- 2) In structured progressions (e.g. diatonic scale up and down, i i -V -I)
- 3) Through 12 keys (either by shape group or random distributions)

## Assignment

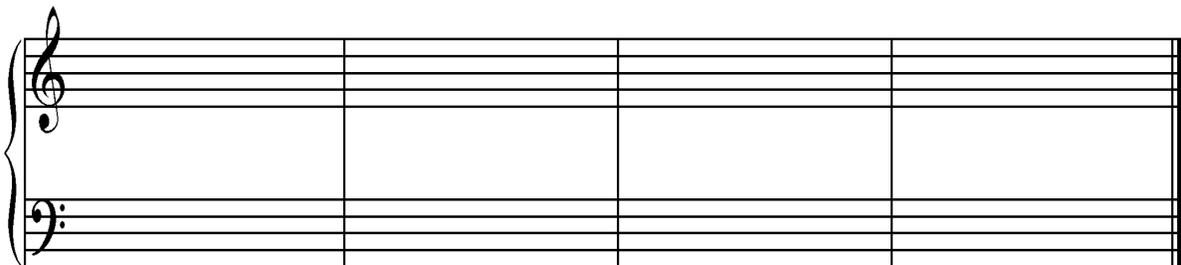
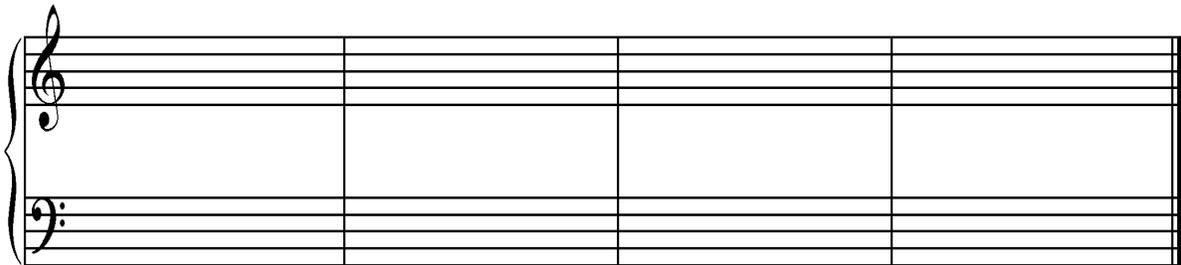
Choose a chord type—major, minor, etc.

Choose a voicing template.

In a steady tempo, play it through all 12 keys.

## Composition

Using one of your favorite voicing templates, compose at least two four bar progressions. Write both the notes on the staff and the chord symbols.



## Spread Voicings for *i i - V* Progressions

If you really are serious about playing jazz tunes or show tunes, you've got to spend some time getting your spread voicings for *i i - V* progressions together as well. Just as you can voice 7<sup>th</sup> chords with a LH shell of 1-3 or 1-7, you can start your *i i - V* progressions in either of those shapes.

The example below is the A section from another classic Duke Ellington standard, "Satin Doll."

This uses *i i - V* progressions starting in a LH 1-3 shell. Play through this piece and the worksheets that follow, in order to develop some proficiency with *i i - V* progressions using spread voicings with LH shells.

### Satin Doll (Duke Ellington)

(Note: for authenticity, this must be played with "swing" eighth notes)

Tempo: ♩=100

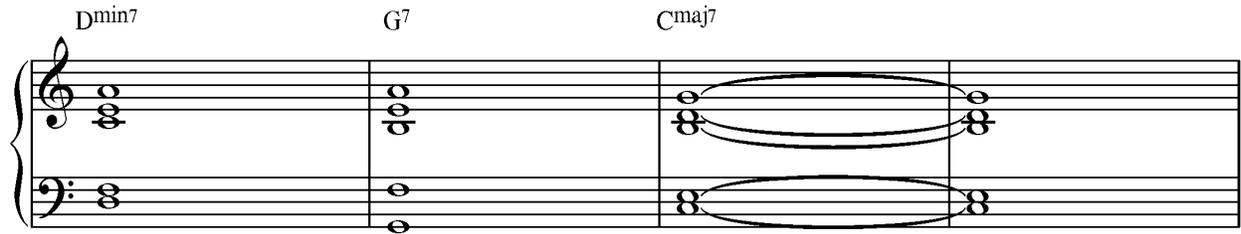
The musical score for "Satin Doll" is presented in two systems, each with a treble and bass clef staff. The key signature has one flat (Bb) and the time signature is 4/4. The first system consists of four measures. The first two measures are in the key of D minor, with chords D<sup>min</sup>7 and G<sup>7</sup>. The next two measures are in the key of E minor, with chords E<sup>min</sup>7 and A<sup>7</sup>. The second system consists of seven measures. The first two measures are in the key of A minor, with chords A<sup>min</sup>7 and D<sup>7</sup>. The next two measures are in the key of Bb minor, with chords Ab<sup>min</sup>7 and Db<sup>7</sup>. The final three measures are in the key of C major, with chords C<sup>maj</sup>7, F<sup>7</sup>, and E<sup>min</sup>7 A<sup>7</sup>(b9). The bass line uses a 1-3 shell for the first two notes of each chord, and the treble line uses a 1-7 shell for the first two notes of each chord.

# Major ii-V-I progressions

2 hand voicings - LH shells 1-3, 1-7

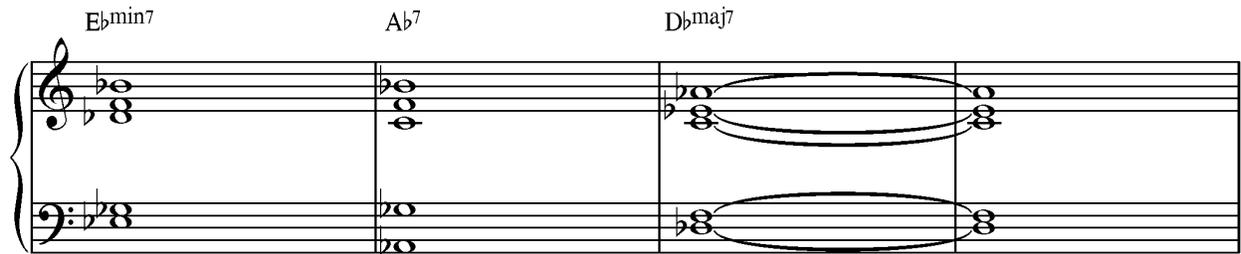
in C:

D<sup>min7</sup>                      G<sup>7</sup>                      C<sup>maj7</sup>



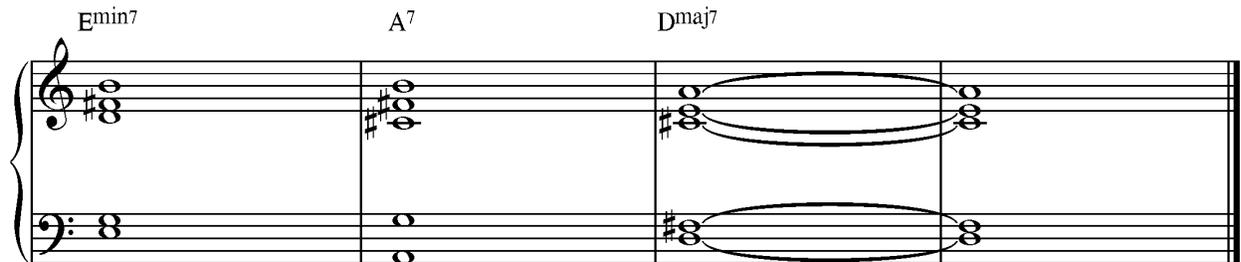
in Db:

E<sup>b</sup>min<sup>7</sup>                      A<sup>b</sup>7                      D<sup>b</sup>maj<sup>7</sup>



in D:

E<sup>min7</sup>                      A<sup>7</sup>                      D<sup>maj7</sup>



## Assignment

Download the play-along tracks and play through these progressions multiple times in a jazz style. Be creative with your rhythm, and try to swing!

# Major ii-V-I progressions

2 hand voicings - LH shells 1-7, 1-3

in C:

D<sup>min7</sup>                      G<sup>7</sup>                      C<sup>maj7</sup>

in Db:

E<sup>b</sup>min7                      A<sup>b</sup>7                      D<sup>b</sup>maj7

in D:

E<sup>min7</sup>                      A<sup>7</sup>                      D<sup>maj7</sup>



## Voicing the Melody in Classical Music

Classical music almost always incorporates melody in the piano, even in accompaniment parts. Below are examples of master composers Beethoven and Mozart voicing melodies in two well-known pieces.

### *Sonata in A major* (W.A. Mozart)



With the 3 in the RH melody, Mozart uses a 1-5 shell in the LH. He follows the contour of the RH melody with the lowest note in the LH, creating a beautiful harmonic progression. The last four chords use a different technique to voice the melody—RH triads over LH bass notes. The final four chords analyzed with contemporary chord theory are: B<sup>min</sup>/D, A/E, E<sup>7</sup>, A. But it is the voicing of the melody that makes that progression work so nicely.

### *Moonlight Sonata* (L.V. Beethoven)



Beethoven maintains a simple LH throughout this piece, while the RH plays the melody *and* three-note arpeggios. This means that the RH pinky has to grab the melody note while the other fingers navigate the arpeggios. This is *not* an easy technique on the piano. It requires a wide stretch and independent movement between fingers. But this is what sophisticated pianists can do—turn two hands into a melody, accompaniment, and bass part simultaneously.

# Shapes and Sounds in Structures: Composing

You have developed a fairly diverse arsenal of piano techniques. You have played many contextualized examples—excerpts from popular repertoire—as well as explored composing your own short examples utilizing specific techniques and progressions. Well-constructed four bar loops underlie the vast majority of Hip-Hop and Top 40 Pop music today. But I want you to be able to take your music to a level of sophistication far beyond that. You are the next generation—it's up to you to make music that is worthy of the future! In order to do this, you need to expand your concepts of composition and arranging.

## **Destinations and Directions**

Chord progressions are pathways from one sound to another. Each time you play a chord, you create a set of expectations. Our brains have taken in music throughout our lives, and constructed these expectations. As a composer/arranger, you have the opportunity to fulfill *or not fulfill* these expectations, and in so doing, you can draw in a listener's attention.

Imagine driving on a road lined with trees. You're going uphill toward a vista point where you know that all of a sudden the horizon will open up and you will have some kind of expanded view. What will you see?

Will it be like this?



Or like this?



Imagine your surprise if you encountered a giant burning garbage dump instead of a beautiful panoramic vista!

Music has the power to create “vista point” moments, and composers/arrangers have the power to create the view however they desire. A well-timed rhythmic break, a change in instrumentation, a sustained melody note—these are just a few examples of musical effects that create a vista point moment.

On the piano, you can use a change in technique or a change in harmony to create a vista point moment. Sometimes the change is subtle, such as moving to a higher or lower register, or borrowing a minor chord in place of an expected major chord. Sometimes the change is seismic, such as changing from chunking triads to broken 7<sup>th</sup> chords, or modulating to an entirely new key.

When you use standard chord progressions in compositions, you take listeners to familiar destinations. You could follow obvious directions—take the highway and get off at the right exit—or you could take a scenic route to show the listener something they may have never “seen.” Or perhaps you just want to take a little detour here or there to change things up.

As you go deeper into composing and arranging, you need to listen carefully to the music you appreciate. How predictable is the harmonic progression? Where are the little or big detours? Where are the vista point moments, and does the music do what you expect it to?

### **The “A – A – B – A” Song Form**

One tried and true way to create a musical detour, or vista point, is by incorporating a contrasting section into a song form. And probably the most common of these song forms is A – A – B – A.

Countless jazz tunes use A – A – B – A forms. Below are two examples of popular songs that also use variations on A – A – B – A forms—*A Song For You*, and *Yesterday*.

Examine these two songs, and identify instances of the following:

- 1) Extra sections (e.g. Intro, Interlude)
- 2) Unexpected chords at the beginning or end of sections

# A Song For You (Leon Russell, as played by Ray Charles)

## Intro

8va

G7

## A

Cm G7/B Cm/Bb Cm/A

Abmaj7 Eb/G Fm7 Eb/G Abmaj7 Eb/Bb Ab/Bb Eb G7/D

## A

Cm G7/B Cm/Bb Cm/A

Abmaj7 Eb/G Fm7 Eb/G Abmaj7 Eb/Bb Ab/Bb Eb G7/D

## B

Cm G7/B Cm/Bb Cm/A Abmaj7 Eb/Bb Ab/Bb Eb G7/D

Cm G7/B Cm/Bb Cm/A Abmaj7 Eb/G F7 Ab/Bb

## Interlude

G7

## A

Cm G7/B Cm/Bb Cm/A

Abmaj7 Eb/G Fm7 Eb/G Abmaj7 Eb/Bb Ab/Bb Eb

# Yesterday (Paul McCartney\*)

## Intro

F<sup>5</sup>

## A

F<sup>5</sup> Em<sup>7</sup> A<sup>7</sup> Dm /C B<sup>b</sup>maj<sup>7</sup> C<sup>7</sup>

F<sup>5</sup> /E Dm<sup>7</sup> G<sup>7</sup> B<sup>b</sup> F<sup>5</sup>

## A

F Em<sup>7</sup>(b<sup>5</sup>) A<sup>7</sup> Dm Dm/C B<sup>b</sup>maj<sup>7</sup> C<sup>7</sup>

B<sup>b</sup>/F F F /E Dm<sup>7</sup> G<sup>7</sup> B<sup>b</sup> F F

## B

G/A A<sup>7</sup> Dm /C /B<sup>b</sup> /A Gm<sup>7</sup> C<sup>7</sup> F

G/A A<sup>7</sup> Dm /C /B<sup>b</sup> /A Gm<sup>7</sup> C<sup>7</sup> F<sup>5</sup>

## A

F Em<sup>7</sup>(b<sup>5</sup>) A<sup>7</sup> Dm Dm/C B<sup>b</sup>maj<sup>7</sup> C<sup>7</sup>

B<sup>b</sup>/F F F /E Dm<sup>7</sup> G<sup>7</sup> B<sup>b</sup> F F

Repeat to B, play thru last A, tag last 2 bars

\*Officially credited to Lennon-McCartney, Yesterday is known to have been written almost exclusively by McCartney.

Did you identify the following?

- 1) Extra sections (e.g. Intro, Interlude)
  - A Song For You*: Intro and Interlude
  - Yesterday*: Intro and repeat to B section (A-A-B-A-B-A)
- 2) Unexpected chords at the beginning or end of sections
  - A Song For You*: last bar of B section,  $F^7$  is unexpected; 1<sup>st</sup> bar of Interlude, expected chord would be  $E \flat$  major.
  - Yesterday*: 1<sup>st</sup> bar of B section,  $G/A$  is unexpected; 6<sup>th</sup> & 7<sup>th</sup> bar of A sections,  $G^7$  leading to  $B \flat$  is unexpected.

### Toying with the Tonic

Both of the above songs alternate between relative major and minor tonal centers. You can create this kind of contrast—not only between the relative major and minor keys, but between *any two keys*—simply by inserting **cadences**, such as  $V-I$  and  $ii-V-I$ .

In *Yesterday*, McCartney migrates from F major to the relative minor of D by inserting a  $ii-V$  to D minor:  $E^{\text{min}7} - A^7 - D^{\text{min}}$ .

In *A Song For You*, Leon Russell uses  $A \flat / B \flat$  to transition to  $E \flat$  major. In the key of  $E \flat$ ,  $A \flat / B \flat$  is a  $V^{\text{sus}4}$  chord. And he uses the  $V^7$  of C minor— $G^7$ —to travel back to the relative minor.

### Assignment

- 1) Complete the following progression with  $V$  chords or  $ii-V$  progressions that lead to the chords they precede.

Example:

The example staff shows a sequence of chords:  $G^{\text{min}}$ ,  $D^7_{\text{alt.}}$ ,  $G^{\text{min}}$ ,  $C^{\text{min}7} F^7_{\text{alt.}}$ ,  $B \flat \text{maj}^7$ ,  $A \flat / B \flat$ ,  $E \flat \text{maj}^7$ ,  $D^7_{\text{alt.}}$ , and  $G^{\text{min}}$ . The assignment staff shows:  $A^{\text{min}}$ , a box,  $F^{\text{maj}7}$ , a box,  $D^{\text{min}}$ , a box, and  $C^{\text{maj}7}$ .

2) Now complete the following progression using a V or i i-V to lead to a tonic of your choice. Discard the theory of what "works," and use your ear.

F<sup>min7</sup>    B<sup>b7alt.</sup>    E<sup>bmin</sup>    E<sup>bmin/D<sup>b</sup></sup>    C<sup>min7</sup>       

3) Compose an original chord progression using V chords or i i-V progressions to lead to expected and unexpected places.

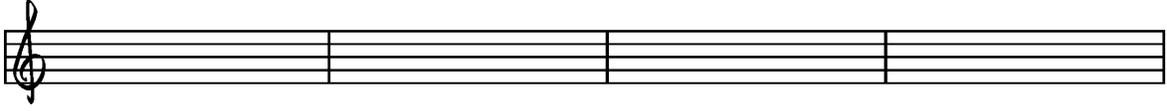
**Composition**

Now compose two eight-bar sections, one which will be your A section, and the other your B section. Create contrast by inserting cadences and unexpected chords.

**A**

**B**

On the following page, write out a full lead sheet with chord symbols above the staves. Add at least one extra section, such as an Intro or Interlude.



## LogicPro Application

Record your song into LogicPro. Create a demo version with no melody. Record a track with piano accompaniment, a bass line, and a drum track. Bounce to an mp3 so you can listen now.

Also save your LogicPro project, so that you can add a melody track later.

## Reflect and Refine

Spend some time listening to your mp3. Do your progressions have the effect you intended? Do you enjoy listening to it? Is there a specific place that doesn't do what you want it to?

Go back to your tracks and fix anything you want to fix. Fix small mistakes in parts, change a chord you don't like, slow the tempo down if it seems too fast, etc.

## Compose a Melody

If you've done a lot of composing before, just take this opportunity to be creative. If you haven't, then start simple. Here are some ideas:

- 1) Identify what key you're in, and use notes from the pentatonic scale.  
e.g. Key = C major, Pentatonic scale = C, D, E, G, A  
e.g. Key = C minor, Pentatonic scale = C, E ♭, F, G, B ♭
- 2) Use long notes to create a simple melody from notes in the chords.

Example:



- 3) If you can sing, hum, or whistle a melody. . . . Listen to your demo recording and sing/hum/whistle along with it. Come up with a melody you can repeat. Then figure it out on the piano.
- 4) If you play another instrument, figure out a melody on that instrument.

Once you have composed a melody, write it down in your lead sheet. Then record it into LogicPro on a separate track. Assign a sound—you can use acoustic piano, or another sound such as strings, synth, organ, guitar, etc. Bounce your LogicPro project to an mp3, and listen to it closely.

Make any last refinements—raise or lower the volume of individual tracks, fix a wrong note, etc.—and bounce again. Congratulations, you have a demo!

# Changing Shapes, Sounds, and Structures: Arranging

In the following sections, I will guide you through my arrangement of John Lennon's *Imagine*, examining various possibilities for interpreting the melody, re-harmonizing the chords, and tweaking the song form. Then you can make your own arrangement of a song of your choice.

## **Interpreting Melody**

Composers write melodies, and performers bring them to life. The way a performer interprets a melody often plays a significant role in defining their musical personality. The appropriateness of melodic phrasing and variations depends largely on the musical context. Classical musicians have typical ways of stretching phrases and articulating, whereas jazz musicians have very different but well-established ways of phrasing and accenting rhythms. The amount of interpretive freedom a performer has also depends on musical context. In ensembles such as a big band or a symphony orchestra, the director (or conductor) guides melodic interpretation within largely concrete guidelines of thru-composed music. But in a small-group or solo context, a performer might feel free to “do their own thing” at any time. On the far end of the spectrum, a jazz musician might play the same standard tune every night on a tour with huge differences every time—differences in melodic phrasing, tempo and rhythmic feel, and harmonic interpretation.

## **Assignment**

- 1) Play through the examples on the following page, writing your own melodic variations at the bottom.
  
- 2) Choose a song you love and learn the first melodic phrase—two to four bars long, ideally. Apply techniques from the worksheet. Be prepared to interpret the melody live, and explain the interpretive choices you make.

# Interpreting Melody

First Phrase of "Imagine"

Musical notation for the first phrase of "Imagine" in C major. The melody is written on a treble clef staff. The first measure contains a quarter rest followed by a quarter note G4, an eighth note A4, an eighth note B4, and a quarter note C5. The second measure contains a quarter note B4, a quarter note A4, a quarter note G4, and a quarter note F4. The third measure contains a quarter note F4, a quarter rest, and a whole rest. The chord C is indicated above the first measure, and the chord F is indicated above the second measure.

Interpreting the Rhythm of the Melody: Contract, Stretch

Musical notation for interpreting the rhythm of the melody. The melody is written on a treble clef staff. The first measure contains a quarter rest, a quarter rest, and a quarter note G4. The second measure contains an eighth note A4, an eighth note B4, and a quarter note C5. The third measure contains a quarter note B4, a quarter note A4, and a quarter note G4. The fourth measure contains a quarter note F4, a quarter note G4, and a quarter note A4. The fifth measure contains a quarter note B4, a quarter note A4, and a quarter note G4. The sixth measure contains a quarter note F4, a quarter note G4, and a quarter note A4. The chord C is indicated above the first measure, and the chord F is indicated above the fourth measure.

Interpreting the Notes of the Melody: Diatonic Approach Tones

Musical notation for interpreting the notes of the melody using diatonic approach tones. The melody is written on a treble clef staff. The first measure contains a quarter rest, a quarter note G4, an eighth note A4, an eighth note B4, and a quarter note C5. The second measure contains a quarter note B4, a quarter note A4, a quarter note G4, and a quarter note F4. The third measure contains a quarter note F4, a quarter rest, and a whole rest. The chord C is indicated above the first measure, and the chord F is indicated above the second measure.

Interpreting the Notes of the Melody: Chromatic Approach Tones

Musical notation for interpreting the notes of the melody using chromatic approach tones. The melody is written on a treble clef staff. The first measure contains a quarter rest, a quarter note G4, an eighth note A4, an eighth note B4, and a quarter note C5. The second measure contains a quarter note B4, a quarter note A4, a quarter note G4, and a quarter note F4. The third measure contains a quarter note F4, a quarter rest, and a whole rest. The chord C is indicated above the first measure, and the chord F is indicated above the second measure.

Interpreting the Melodic Phrase Freely

Musical notation for interpreting the melodic phrase freely. The melody is written on a treble clef staff. The first measure contains a quarter rest, a quarter note G4, an eighth note A4, an eighth note B4, and a quarter note C5. The second measure contains a quarter note B4, a quarter note A4, a quarter note G4, and a quarter note F4. The third measure contains a quarter note F4, a quarter rest, and a whole rest. The fourth measure contains a quarter note G4, a quarter note A4, a quarter note B4, and a quarter note C5. The fifth measure contains a quarter note B4, a quarter note A4, a quarter note G4, and a quarter note F4. The sixth measure contains a quarter note F4, a quarter note G4, a quarter note A4, and a quarter note B4. The seventh measure contains a quarter note A4, a quarter note G4, a quarter note F4, and a quarter note E4. The eighth measure contains a quarter note D4, a quarter note C4, and a quarter note B3. The chord C is indicated above the first measure, and the chord F is indicated above the fourth measure. A triplet of eighth notes (G4, A4, B4) is marked with a '3' below it in the fourth measure.

Interpreting the Melodic Phrase: \_\_\_\_\_

A blank musical staff in treble clef, divided into two measures, for interpreting the melodic phrase.

Interpreting the Melodic Phrase: \_\_\_\_\_

A blank musical staff in treble clef, divided into two measures, for interpreting the melodic phrase.

## Re-harmonizing

Drastically changing harmonies is something many jazz musicians love to do. As a harmony junkie myself, I'm guilty as charged. But re-harmonizing doesn't necessarily mean making a song suddenly "jazzy," nor does it mean making it terribly complicated or inaccessible for listeners. Re-harmonizing is just another vehicle to catch listeners' attention, to pique their interest, to take them in an unexpected direction, to an unexpected destination.

Start by exploring these three specific strategies for re-harmonizing.

- Create tension and release to a harmonic goal.
- Use the melody note as an anchor and substitute different chords.
- Use parallel chords.

### First Phrase of "Imagine"

The image shows a musical staff with a treble clef and a 7/8 time signature. The melody consists of the following notes: C4 (quarter), E4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), C4 (quarter). Above the staff, three chords are indicated: C (above the first bar), C<sup>maj7</sup> (above the second bar), and F (above the third bar). The first bar contains the notes C, E, G, and B. The second bar contains the notes C, E, G, and F. The third bar contains the notes F, A, and C.

In order to re-harmonize effectively, you must consider two relationships at all times:

- 1) How the melody note(s) relate(s) to the chord(s), and
- 2) How the preceding chord(s) relate to the following chord(s).

In the original version of *Imagine*, as notated above, you can analyze these relationships easily. They are strong, recognizable relationships.

- 1) The melody notes are all chord tones.  
In the first bar, E = 3, G = 5, B = 7 in relation to C major.  
A = 3 in relation to F major.
- 2) F is the IV chord in relation to C.

The C<sup>maj7</sup> is a chord that really adds a spice to this progression—it is one of the defining unique characteristics of an otherwise predictable progression. But if you wanted to add more spice, there are nearly endless possibilities.

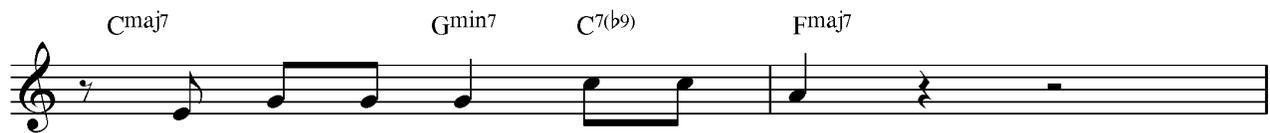
In order to **create tension and release to a harmonic goal**, you can approach the F major chord (the goal) from different angles—by inserting chromatic leading chords, or by inserting functional cadences.

**Functional Cadences:**

1) Leading Tone Slash Chord: C/E leads to F



2) ii-V-I: G<sup>min7</sup> - C<sup>7</sup> leads to F



**Chromatic Approaches:**

3) Chromatic from below: E<sup>7</sup> leads up to F



4) Chromatic from above: G<sup>b7</sup> leads down to F

NOTE: If you're going to use a G<sup>b7</sup>, the B<sup>♯</sup> melody note won't work without adjusting something. One possibility is to change the melody to C.



When you use the melody note as an anchor and **substitute different chords**, or use **parallel chords**, you have a Pandora's box of possibilities. It really is a dangerous box to open, because many possibilities don't actually sound that great. You have to explore and use your ear carefully. Over time, you can develop some "go-to" substitutions and progressions. And you might find re-harmonization strategies that you like by transcribing and analyzing other artists' music.

### Substitute Chords:

1)

2)

### Parallel Chords:

3)

4)

Why do these re-harmonizations work? Which ones, if any, do you like? What voicings sound best? Can you analyze the relationship between notes and chords? In order to get control over these strategies, it's going to be important to answer these questions. To demonstrate your learning, complete the assignment on the following page.

## Assignment

Play through the four-bar example below. Using the re-harmonization strategies outlined in the preceding pages, create two new chord progressions over the same melody.

B $\flat$  C $\flat$ min7 B $\flat$ /D E $\flat$ maj7 A $\flat$ 7 B $\flat$  G $\flat$ min7 C7 F7(sus4) B $\flat$



1)



2)



In a few sentences, describe your re-harmonization choices. Why did you choose those chords? Did you make changes? Do you like the end result?

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## **Tweaking Song Form**

Arrangers deal with many more elements than melody and harmony. In fact, oftentimes arranging is simply about changing the instrumentation (e.g., reducing a song to a solo piano version, or arranging a piano piece for string ensemble, etc.). Other times, arranging is simply about changing the stylistic and rhythmic feel (e.g., changing a pop tune into a jazz tune, or changing a singer-songwriter tune into a hip-hop track, etc.). Another vehicle for arranging is to tweak the song form—add an introduction, interlude, or outro, add or subtract bars, insert an improvisation section, etc.

In my arrangement of *Imagine*, I changed the form a bit, because the redundancy of the melody doesn't translate well to music without lyrics. I don't repeat the Verse before going on to the Chorus. Also, I added a solo section for instrumental improvisation over a repeating four-bar chord progression. And coming out of that solo section, I modulated the next verse to the key of A  $\flat$ . Finally, to tie the added harmonic elements together, I add four bars to the end of the form.

To summarize, you can tweak song form by:

- 1) Changing the order or length of sections
- 2) Adding new sections
- 3) Altering the musical content of sections (e.g., modulating)
- 4) Adding (or subtracting) bars

See the two-page chart on the following pages for reference.

## **Arrangement**

In your arrangement project, you will choose a simple song from any genre. (Note: You must be able to obtain accurate sheet music of the original version.)

- 1) Analyze the song form and harmony (chord progressions) of the song.
- 2) Decide what, if any, stylistic or rhythmic changes you want.
- 3) Apply re-harmonization strategies as you desire, changing at least one chord in each section.
- 4) Tweak the song form as you desire, adding or altering at least one section.

Write out a lead sheet of your arrangement and record a demo in LogicPro, just as you did for your composition.

Solo piano Intro - 4 bars  
Bass and Drums Enter Bar 9 1st Verse

# Imagine

John Lennon  
arr. PJS

Verse

Cmaj7(add2) (Fdim7) F Fmaj7/G Cmaj7(add2) (Fdim7) F

Cmaj7/E F/A Dmin7 Db7alt. C7(sus4) C13(b9) Drum Fill . . .

Bass and Drums in

F Am/E F/D F/C G G7

Chorus

F F#m11 Cmaj7/G E7alt/G# Am9 B7(sus4) B7alt. Em11 A7

Dmin7 D#dim7 C(add2)/E E7 F Fmin(maj7) 1. C /G /A /B

Piano Solo - open till cue

2. C/E Am9 Bbm9 Eb7(sus4)

on cue

Verse

Ab Db/Ab Ab Db/Ab

Ab/C Db/F Ab/Eb Dmin7 C/E

# Imagine p2

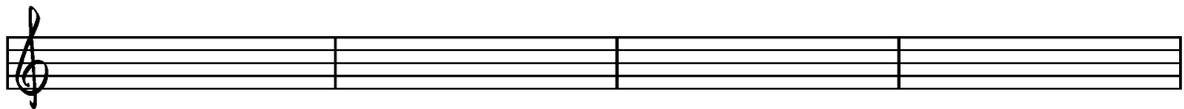
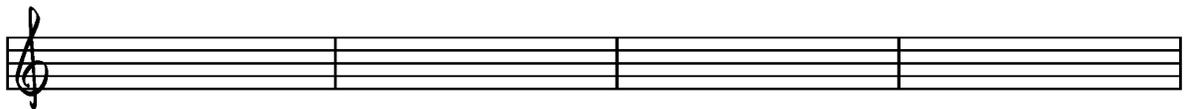
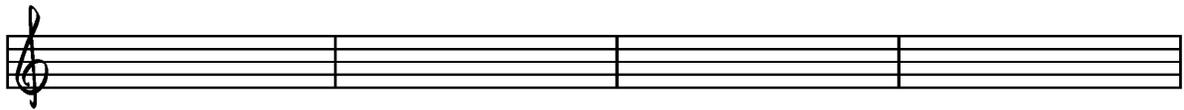
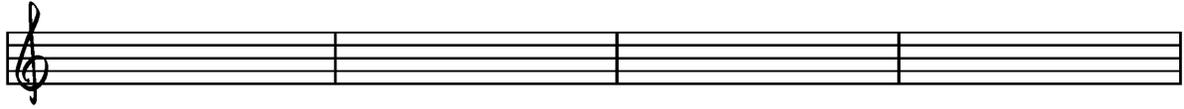
F Am/E F/D F/C G G<sup>7</sup>

Chorus

F F#m<sup>11</sup> Cmaj<sup>7</sup>/G E<sup>7</sup>alt./G# Am<sup>9</sup> B<sup>7</sup>(sus4) B<sup>7</sup>alt. Em<sup>11</sup> A<sup>7</sup>

Dmin<sup>7</sup> D#dim<sup>7</sup> C(add2)/E E<sup>7</sup> F Fmin(maj7)

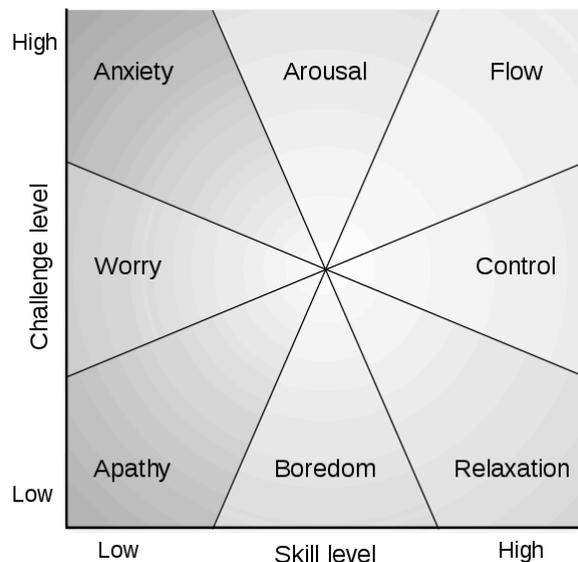
C/E Am<sup>9</sup> Bbm<sup>9</sup> ritard... Eb<sup>7</sup>(sus4) C(add2)



# Improvising

There is nothing quite like the experience of improvisation. Whether improvising on an instrument, in a comedy sketch, in the kitchen, or on a basketball court, the challenge and the thrill of spontaneous creativity is one of the great human pursuits. Audiences will pay significant prices to witness highly skilled improvisers, and other professionals often gather to admire their skilled peers as well. The mastery of improvisation is rare. It is neither just a technical craft that can be refined, nor an art that requires ineffable creativity—satisfying improvisation requires the cognitive agility that results from a combination of precise execution and big idea thinking. With this cognitive agility in mind, we will come full circle and return to the practice of **refining** and **expanding**.

The best improvisation happens in the “flow state,” a cognitive state in which challenge and skill are balanced, attention and activity are merged, and inhibition and anxiety are replaced by confidence and joy. Mihaly Csikszentmihalyi, the psychologist who introduced the term “flow” to popular, clinical and academic discourse, published this diagram to show the interaction between psychological states, skill level and challenge level.



Most importantly, this diagram reflects the benefit of performing tasks that one has attained a high level of skill in executing. It may be easy to look at this diagram and feel discouraged if you feel like you haven't attained a high

level of skill. However, it is extremely important that you realize that a high level of skillful execution can be reached at any level of complexity.

Even a beginner can experience “flow” given the right balance of challenge and skill. With this in mind, let’s push forward into an introductory study of improvisation. Whether you’re new to improvisation or a lifelong jazz aficionado, if you can refine your skills to automaticity and expand your thinking in performance, you can have a fulfilling experience improvising.

The following list outlines different aspects of improvisation:

### **Language**

In the same way that humans speak different dialects and languages with varied accents, an improviser learns to understand the musical language(s) he or she desires to converse in. As you become steeped in music, you develop the ability to speak and to “think” in the language, just as you do with your native language now.

### **Instrumental skill**

Technical execution on the instrument must become automatized and implicitly controlled (i.e., able to do it “without thinking about it”). Just as you can ride a bike, swim, or drive a car without thinking through each behavior involved, skilled improvisers can “do their own thing” with a piece of music without rehearsing or analyzing the music ahead of time.

### **Formal knowledge**

There are endless branches of music theory that can be applied to the study of improvisation. But formal knowledge (e.g., scales, voicings, analyses, etc.) must become procedural knowledge (i.e., they must be things you know how to do, not just things you know). If you have solid formal knowledge, you can analyze music to understand it. From there, you can apply that knowledge to refine and expand your skills. If you can transfer your skills to various keys and repertoire, you are on the right track.

### **Personal voice**

All great improvisers develop a recognizable personal voice—a combination of their instrumental skill and the ways in which they choose to speak the musical language. As you develop improvisation skills, your

musical preferences should direct you to figure out the language that you want to be able to speak, and build the instrumental skills to execute it. Your personal voice should ultimately become the driving force in generating ideas.

### **Expressive vehicle**

Improvisation also represents a vehicle for self-expression. Regardless of whether you understand the theory, whether you are steeped in a particular musical language, whether you have well-developed instrumental skill, or not, you can improvise with sincere expression. Even “Pete the Elephant” improvises over the blues, banging his trunk on the keyboard with gusto. When your improvisation is infused with expressive intention, audiences are drawn in, band members are energized, and the meaningfulness of the music is elevated.

### **Practicing Improvisation**

Your goal is to both refine your skills to automaticity and expand your thinking so that you are approaching improvisation strategically and creatively.

In the practices that follow you will:

- Learn phrases that are part of the “common language” of jazzy and bluesy piano playing.
- Practice as many of these phrases to automaticity as your ability and ambition allows.
- Analyze the phrases in order to be able to transfer similar musical ideas to different musical contexts.
- Integrate the phrases into your personal musical voice, and perform them expressively.
- Improvise in an authentic context, as if you were playing with a band.

## Common Language Phrases

These one-bar phrases are all in the key of C, and typically played in a bluesy/jazzy song over a C<sup>7</sup> chord.

The image displays four musical staves, each representing a one-bar phrase. Each staff consists of a treble clef, a key signature of one sharp (F#), and a 4/4 time signature. The first staff shows a melodic line starting with a sharp sign, followed by a rhythmic pattern of eighth notes. The second staff shows a melodic line with a triplet of eighth notes, followed by a rhythmic pattern of eighth notes. The third staff shows a melodic line with a flat sign, followed by a rhythmic pattern of eighth notes. The fourth staff shows a melodic line with a sharp sign, followed by a rhythmic pattern of eighth notes.

## Assignment

Take your time to play each phrase with your RH, figure out a comfortable fingering, and build up speed to where you can play at a steady medium tempo. If the phrases feel too difficult, just choose one to start with. Once you are confident playing the phrases with your RH, add your LH.

You can play LH chords using rootless voicings: 7-3-5 or 3-7-9.

You can play LH chords using shell voicings: 1-7 or 1-3-7.

Or you can play a LH accompaniment pattern such as one of the stride variations or boogie woogie patterns.

Play phrase(s) with your eyes closed to test automaticity.

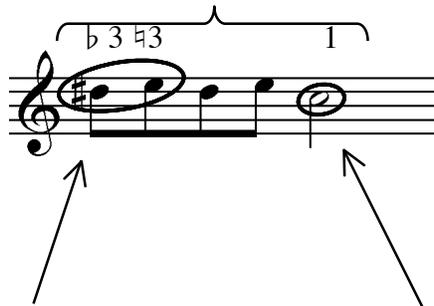
## Analyzing a Phrase

You can analyze a phrase by:

- 1) Contour and Intervals
- 2) Note numbers relative to a key or to a chord
- 3) Rhythm and Structure (e.g., long/short, rests, harmony)

For example:

This five-note phrase is an example of standard phrasing using five (or often nine) eighth notes that resolve to a strong beat ("1" or "3").



Single chromatic approach from below to the 3. This is a typical phrase from the Swing era, *going up from the minor third to the major third*. Note that you will almost never hear a major third going *down* to the minor until post-bebop jazz.

The phrase resolves down to C, but it could resolve satisfyingly to many other notes, in particular G or A.

## Assignment

- a) Choose another common language phrase to analyze.
  - 1) Explain the intervals and contour.
  - 2) Number the notes.
  - 3) Identify the landing note and discuss other possibilities.
  - 4) Identify the rhythmic characteristics of the phrase.
- b) Transpose the phrase into as many other keys as you are able. Write it and then play it.

## **Integrating Phrases**

Choose one phrase. Play it, and then sing it.

Sing it while you play it.

Sing it, and then play it.

Really sing it like you mean it. It doesn't matter if your singing is awesome or terrible—you need to be able to generate this phrase with your voice, with full intention. Whether you're comfortable playing one phrase or all eight of them, you can do this.

Once you can sing it, then try altering it. Just a tiny bit. Change the last note, change the first note, drag the phrasing out so it lasts longer, or start it early and make it more syncopated, etc. Your goal is to *play with* this phrase. Not just play it, but toy with it, enjoy it. Dig in and be mean. Lighten up and make it quirky. Whatever you want—it's *your* phrase now.

Once you feel like you pretty much own this phrase, transpose it to other keys. Repeat the process of singing and altering the phrase. Then choose another phrase, and repeat the entire process of integrating it into your personal voice.

## **Authentic Contexts**

If you have a band, or you can get in on a jam session, you can really try this out in authentic contexts. Until then, use the play along tracks to jam with.

One track is a standard jazz style, at the tempo of quarter note = 115.

The other track is a funk or jam band style, in a half-time groove at quarter note = 75.

Both tracks have a lead instrument (vibraphone on the jazz, clavinet on the funk) playing through the eight phrases two times. Try to play in unison with them. Then there is space for improvisation. If you want a challenge, add chords in your LH, but otherwise just play RH phrases.

Play it perfect, play it sloppy, play it your own way. . . have fun!

Improvisation always tests the balance between execution and intuition. The more phrases you master and integrate into your personal musical voice, the less your brain will have to consciously search for and organize musical information in the moment of playing. Then your brain can access a more conceptual space of big ideas, and you can enjoy being in the flow as you play.

# Expanding Improvisation

If you're interested in taking your jazz skills to the next level, practice the following worksheet, using LH rootless voicings and RH lines. Having vocabulary that works over ii-V-I progressions is a crucial piece of being a jazz musician. This section is really intended only for students with an affinity for standard jazz, and the desire to dig in deeper.

I have two play-along tracks for you to practice with. They follow the chord progression through all twelve keys, as in the exercises below.

- 1) Starting on A<sup>min7</sup> D<sup>7</sup> G<sup>maj7</sup>, slow medium tempo
- 2) Starting on A<sup>min7</sup> D<sup>7</sup> G<sup>maj7</sup>, medium up tempo

## Jazz ii-V-I Common Language LH rootless voicings, RH lines

**Assignment:**  
Play each line through all 12 keys

Line 1

Musical notation for Line 1, showing a ii-V-I progression in A major. The right hand (RH) features a melodic line with eighth notes and triplets. The left hand (LH) provides rootless voicings for the chords: A<sup>min7</sup>, D<sup>7</sup>, G<sup>maj7</sup>, G<sup>min7</sup>, C<sup>7</sup>, and F<sup>maj7</sup>. The progression is: A<sup>min7</sup> (3) D<sup>7</sup> | G<sup>maj7</sup> | G<sup>min7</sup> (3) C<sup>7</sup> | F<sup>maj7</sup>.

Line 2

Musical notation for Line 2, showing a ii-V-I progression in A minor. The right hand (RH) features a melodic line with eighth notes and quarter notes. The left hand (LH) provides rootless voicings for the chords: F<sup>min7</sup>, B<sup>b7</sup>, E<sup>b</sup>maj<sup>7</sup>, E<sup>b</sup>min<sup>7</sup>, A<sup>b7</sup>, and D<sup>b</sup>maj<sup>7</sup>. The progression is: F<sup>min7</sup> B<sup>b7</sup> | E<sup>b</sup>maj<sup>7</sup> | E<sup>b</sup>min<sup>7</sup> A<sup>b7</sup> | D<sup>b</sup>maj<sup>7</sup>.

Line 3

Musical notation for Line 3, featuring a treble clef staff with a melodic line and a bass clef staff with chords. The key signature has three sharps (F#, C#, G#). The bass staff includes a circled '8' and chord symbols: C#min7, F#7, Bmaj7, Bmin7, E7, and Amaj7.

Line 4

Musical notation for Line 4, featuring a treble clef staff with a melodic line and a bass clef staff with chords. The key signature has two flats (Bb, Eb). The bass staff includes circled '3' symbols and chord symbols: Bbmin7, Eb7, Abmaj7, Abmin7, Db7, and Gbmaj7.

Line 5

Musical notation for Line 5, featuring a treble clef staff with a melodic line and a bass clef staff with chords. The key signature has three sharps (F#, C#, G#). The bass staff includes a circled '8' and chord symbols: F#min7, B7, Emaj7, Emin7, A7, and Dmaj7.

Line 6

Musical notation for Line 6, featuring a treble clef staff with a melodic line and a bass clef staff with chords. The key signature has three sharps (F#, C#, G#). The bass staff includes a circled '8' and chord symbols: Dmin7, G7, Cmaj7, Cmin7, F7, and Bbmaj7.

## Personal intention

Learning contemporary popular music on the piano is fun and rewarding—just remember to keep it in perspective. Make time to reflect on your life. A strong personal intention should be the driving force in your decision-making, your practice, and your career. Align your goals with your personal intention. When you are passionate about your long-term goals, you are more likely to persevere through hard work. And research has shown that those who persevere are most likely to succeed<sup>1</sup>. You aren't going to study piano for two years and be a polished pro. It's a lifelong journey.

Apply refining and expanding practices to optimize your learning process, and you will be able to make progress consistently and without insurmountable frustration. It's easier said than done. Optimizing your practice is a practice in itself. You have to have enough desire to progress that the hard work is worth it. If you are reading this, you definitely have the ambition to succeed in a musical career.

I wish you success in learning, enjoyment playing the piano, and the grit to keep it going.

---

<sup>1</sup> Duckworth, A., Peterson, C., Matthews, M. D., Kelly, D. R. (2007). *Grit: Perseverance and Passion for Long-term Goals*. *Journal of Personality and Social Psychology*, (92, 6), 1087-1101.

# Outcomes Review

## **FUNDAMENTALS**

- Practice techniques and chords systematically in 12 keys on the piano. (p11-12)
- Utilize advanced harmonic concepts and execute advanced stylistic piano techniques intentionally in performances and compositions. (p45-51)
- Apply fundamental principles of effective learning and musical cognition in practice and performance. (p2-9)

## **KNOWLEDGE, SKILL, & REPERTOIRE**

- Harmonize, or “voice,” melodies from contemporary song charts and jazz standards. (p34, 40, 43-44)
- Perform and compose diatonic and non-diatonic chord progressions using borrowed chords, modulations, altered chords, and substitutions. (p55-62)
- Perform using more complex RH techniques, and LH techniques such as complex bass lines, boogie woogie patterns, or rootless voicings. (p17-19, 21-28)
- Play various types of 7<sup>th</sup> chords in both 7-9-3-5 voicings. (p34-35)
- Play LH-RH two hand spread voicings using LH shells. (p40-42)
- Perform and compose using standard 7<sup>th</sup> chord progressions such as the ii – V – I, and variations (including sus chords and altered dominants) in multiple keys. (p47-51)
- Perform and compose using more complex RH techniques, such as *montunos*, RH melody and improvisation, and LH techniques such as walking bass lines and stride. (p17-22)
- Review and apply standard components of song form in composition, including different ways of labeling sections, typical lengths of sections, common places to repeat sections, modulate, and vary the form. (p45-52)

## **MUSICALITY**

- Perform repertoire using appropriate solo piano techniques, ensemble or accompanist techniques. (p17-19, 21, 22, 25, 27, 31, 34, 40, 43, 47, 48, 66, 69)
- Play with relaxed wrists, appropriately curved fingers, and easeful upright posture.
- Use sustain pedal effectively.

**Appendix D: Sight-Reading & Scales Workbook**

**Sight-Reading & Scales Workbook**

## Introduction

I learned to play the piano as a young child almost entirely by ear. I used notation as a reference, but for the most part I was memorizing the music by watching and listening to my teacher. It's no wonder that teacher told my parents I was going to need to improvise. Sure enough, at ten years old, I wanted to quit classical piano lessons, and thankfully, my parents found a wonderful jazz teacher for me. I learned some boogie woogie transcriptions and some thru-composed jazz arrangements, but I mostly learned a chord-based approach to jazz piano, reading lead sheets, playing melodies and improvising with my right hand (RH) and chords in my left hand (LH). My sight-reading skills and scales were always on the back burner. During my teenage years, my mother walked me through some sight-reading exercises occasionally, which I resisted fervently. Taking weekly lessons for seven-plus years, I developed into a serviceable jazz pianist—enough to be in the Massachusetts All-State Jazz Band in my senior year of High School. But when I entered Berklee College of Music, I still couldn't play major scales in all 12 keys effectively. And I couldn't sight-read grand staff piano music worth a dime.

I'll never forget the experience of learning my scales for my freshman year piano jury. It was excruciating. But I did the work. And all of a sudden, my piano "chops" were on a completely new level. I could execute RH lines that had previously been a struggle. I could play a Bach *Invention* without wanting to chop off the fingers of my LH. Looking back on those years, my technical studies were a classic example of realizing *why* I should do something *after* I actually do it.

Sometimes, when you care enough about something, you're willing to do what someone says you should do, even if you don't want to in the moment. Developing instrumental technique in music is often like this. It's not nearly as fun or immediately rewarding as learning repertoire.

You can learn repertoire without theory knowledge or sight-reading skills—it's ultimately about physical execution and sound. But part of studying music is becoming a well-rounded musician, and part of becoming a well-rounded musician is understanding the symbolic representations of music (i.e., becoming musically literate). So we *must* work on sight-reading.

As for scales, you won't need the technique that scales unlock until you are playing melodies and/or improvising. But even a beginning pianist will

benefit from seeing the shapes of the twelve major keys on the instrument. There is no way to really know each key other than through scales.

So whatever your proclivity and ambition is as a musician or pianist, you can be assured that you will take away valuable skills and knowledge from learning your scales and practicing sight-reading. How far you take it is up to you. You have to do the work. But I offer you these methods in hopes that you will have an easier path than I did. May your sight-reading and scales practice be efficient and effective, and may you experience the fruits of your labor in your ability to learn and execute the repertoire you are passionate about.

## Sight-Reading Method

One of the most common disparities between students' abilities in piano classes is in the area of sight-reading. You might be used to learning everything by ear, or you might have studied classical piano for years and be able to read Mozart sonatas. Maybe you never touched a piano before you started this class, or maybe you're a great sight-reader on the trumpet, but you've never even looked at bass clef, let alone tried to read treble and bass clef together. Somehow, in spite of these differences, fifteen or more individuals have to coexist and learn piano skills together.

Now, depending on your teacher and your interest, you may learn a lot of music via sheet music, or by chord charts, or you may learn mostly by rote (i.e., just by doing it again and again until you've got it down).

Your primary goal is to execute the music on the piano. If you can sight-read, then you know what it feels like to look at notes on a staff and then put your fingers on the piano and have music come out. It's a very cool experience. Good sight-readers look at the sheet music and play without even looking at the piano.

If sight-reading is a challenge, though, here's what I want you to do:

- 1) Learn to execute the music however you learn best.
- 2) Once you are putting your fingers in the right place at the right time, look at the sheet music, and correlate what you're playing to the visual representation of the notes. Do the same thing with chord symbols. Begin with execution, and then stop looking at the keyboard and start looking at the symbols on the page.

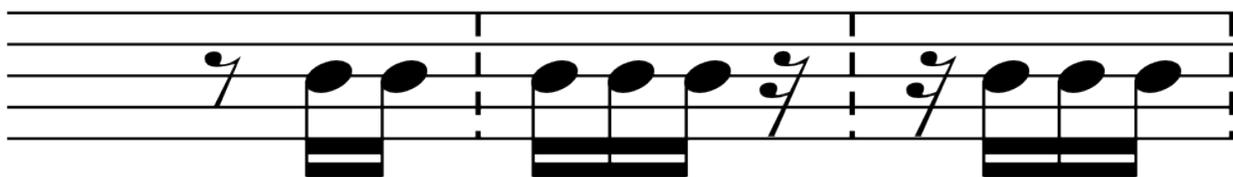
During my doctoral studies, a colleague completed a literature review on research into the effectiveness of various sight-reading methods. I'll never forget her presentation, because it surprised me so much. If you're trying to improve sight-reading, the method doesn't matter—the only thing that seems to matter is how much you sight-read. So whatever level you're at, if you just consistently read music the best you can, you'll get better and better at it. That said, learning to sight-read is a cognitive feat that can be approached more strategically than haphazardly.

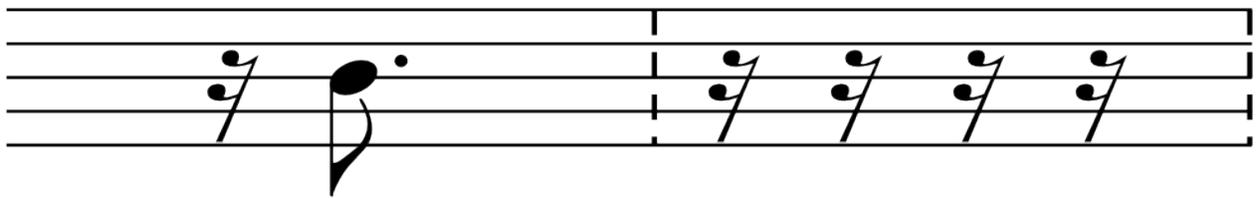
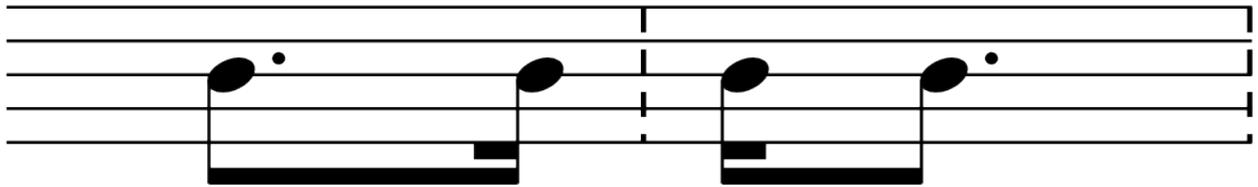
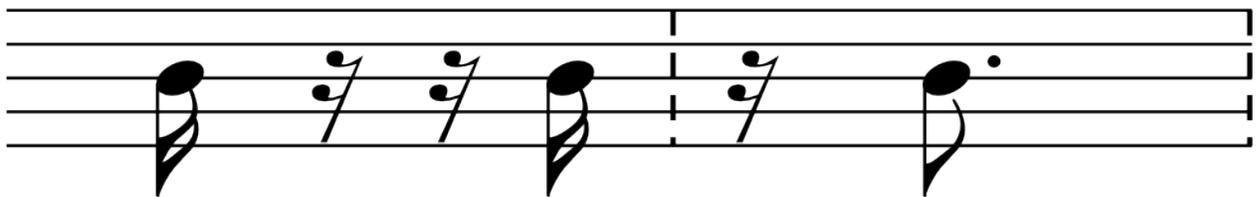
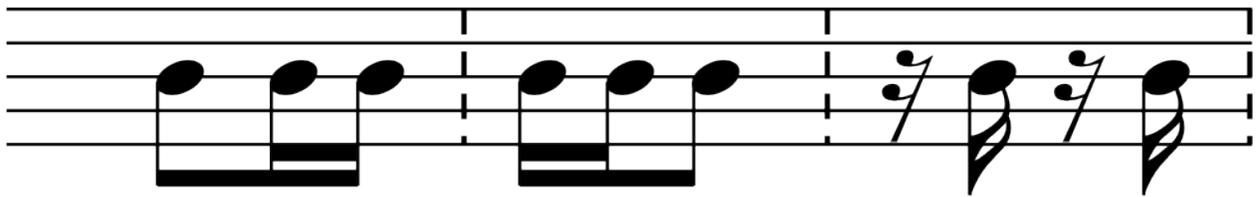
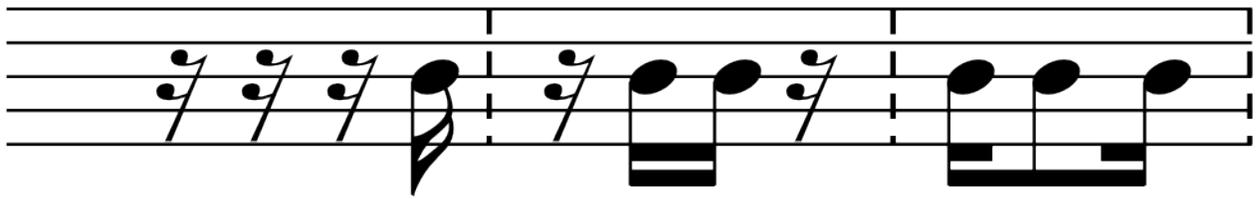
The following method for learning to sight-read is borrowed directly from my piano guru, the late great Charlie Banacos. Charlie was a true genius, and the underground legend of Boston's jazz education scene for three decades. When he taught me this method of improving sight-reading, I was already a professional pianist, but I was still a pathetic sight-reader. See, I learned everything by ear and by rote, and eventually by chord charts. I could read single lines in treble clef, because most jazz charts are written that way. But even that was often a struggle. Learning piano music like Bach Inventions or Chopin Etudes was laughably painstaking for me. I did it, piecing things together one little chunk at a time. I still struggle to sight-read grand staff piano music in real time, but the method Charlie gave me revolutionized my relationship to sight-reading, and over time I developed a level of competence that is respectable, at least.

I can promise you that you will establish a strong foundation for sight-reading on the piano if you follow this method and practice consistently. Combine the practices with actual sight-reading of piano music in tempo. If you want to be thorough, you should combine it with rhythm reading as well (I worked on rhythm flash cards for two years with Charlie Banacos). To work on the rhythm flash cards, start with these cards of rhythms you can fit into one quarter note. Shuffle your cards and lay them down in groups of four, tap a steady tempo, and sing the rhythms on a "tah."

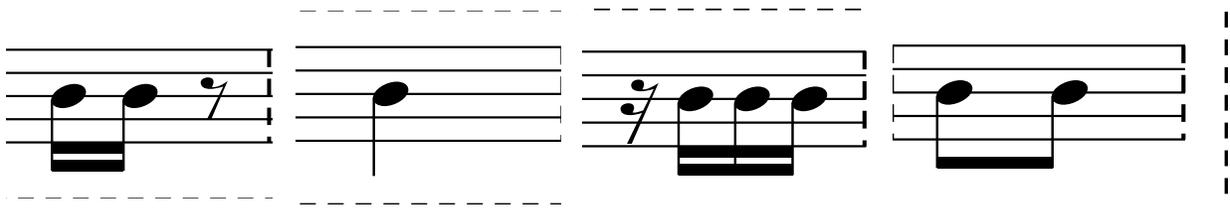
# Rhythm Flashcards

**Assignment:** Cut between each system horizontally, and then cut vertically through the dotted bar lines to create one-beat rhythm flashcards. Then shuffle your cards and lay them out in random order horizontally. Lay them in groups of 4 to begin.





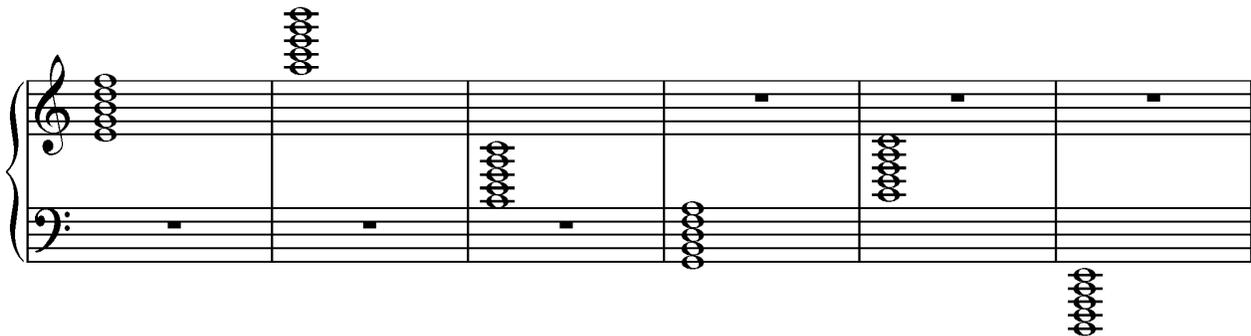
One line of rhythm flashcards could look like this:



Now, on to the Banacos method for note reading. . .

The awesome thing about this method is that it programs your brain to do precisely what it needs to do in sight-reading, which is to translate the visual stimuli (notes on the staff) into finger motions. Did you get that? When you sight-read, it's about translating visual into physical. You don't have to think about what the names of the notes are, what key you're in, or what chord you're playing... You're basically a human "player piano." The motions of your hand correlate directly to the dots on the page. In fact, I want you to *not* think of the note names when you do this.

Sight-reading is about putting your fingers in the right place—it's geography! Each line and space on the staff represents a note on the piano. Not just a note name, but an actual note—for instance, "middle C" is the first ledger line *below the treble clef staff*, and the first ledger line *above the bass clef staff*. Those aren't just Cs anywhere on the piano, those notes are *middle C*.



There are three things to play with your RH followed by three with your LH. These are the geographical areas of piano sight-reading—the staff (treble clef and bass clef), and the ledger lines above and below. Play these through in order once or twice every time you sit down at the piano. Every single time.

This will program your brain to send your hand to that geographical area when it sees notes there. You will be amazed at how much of a difference this makes in sight-reading. Instead of seeing notes and going through a whole thinking process, figuring out the note names and looking for them on the piano—perhaps in the wrong octave—your hand will be moving to the right place automatically.

NOTE: If you can play all five notes—with five fingers—awesome! Most people can't, though. In which case you just need to arpeggiate the "chord" (i.e., play one note at a time). Just do it quickly, so it feels like a group of notes, not one deliberate note at a time. This is *not* about every good boy does fine.

Do this practice religiously. It may take five or even ten minutes the first time. But eventually, you should be able to go through the six "chords" in five to ten seconds. That's your goal. Make it easy.

### Random Note Heads Reading Practice



You can read these notes in tempo or out of tempo. You can read one or two bars, or a whole system. You can read them in treble clef (RH) or bass clef (LH). You can apply a key signature, and read them with one flat, or two sharps, etc. You can even turn the page on its head and read them backwards if they get too familiar.

Don't think of the note names! You're programming your brain to translate the visual input into motor actions—visual to physical. Double check your hand to make sure you're in the right octave.

Do this practice religiously also. You may need to start with one bar, and then two bars. Your end goal is to play any one of these lines, RH or LH, in less than 30 seconds. Don't spend more than 5 minutes on this practice, but do it every time you sit down at the piano. Every single time.

As you progress through the Banacos method, you can read the worksheet of random note-heads in the ledger lines. After that, you can read the thirds in the staff, and then thirds in ledger lines. You can continue and make your own worksheets of fourths, fifths, sixths, octaves, and seconds and sevenths. You can make triad shapes as well. There's no limit to what shapes you use—the point is for your brain to learn to recognize the music and move your fingers to the right place at the right time. Remember that you are programming your eye-brain-finger coordination. Practice regularly, and you *will* progress.

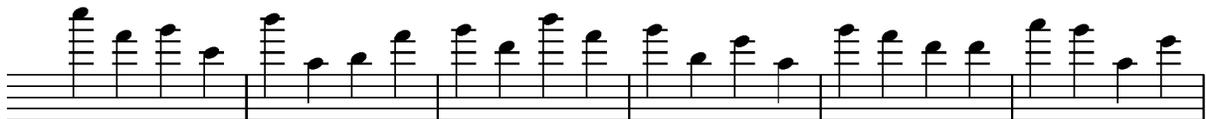
**Assignment:**

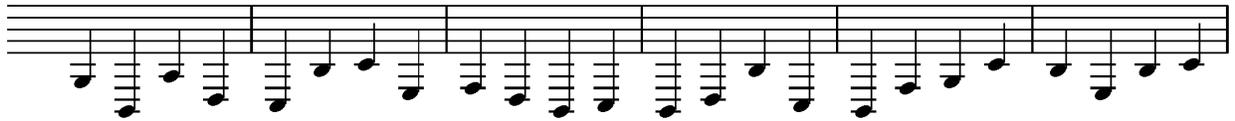
Challenge yourself to practice the reading worksheet every day for four weeks in a row.

No more than 5 minutes each time! Set a timer if you're going over.

<b>Wk 1</b>	<b>Wk 2</b>	<b>Wk 3</b>	<b>Wk 4</b>
<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1	<input type="checkbox"/> 1
<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2	<input type="checkbox"/> 2
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# Ledger Lines



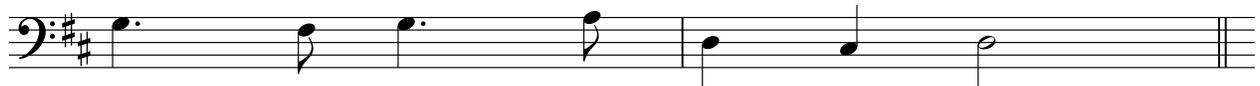


# Thirds





# One Staff at a Time





## Adding Ledger Lines



## Grand Staff

### Pop Chunking

A(add2)      A(add2)/C#      Dmin      F      G

### Funky Piano Riff

### Churchy Spread Voicings

C      G/B      Amin      F7/A      Bb      G/B      C(sus4)      C

Jazz Etude  
Grand Staff Reading  
with Chord Symbols

Dmin7 G7 Emin7 A7 Fmin7 Bb7 Emin7 A7

Dmin7 G7 Emin7 A7(b9) Ebmin7 Ab7(b9) Dbmaj7

The examples on the following pages are from the tests used to place out of piano classes at CU Denver. Choose one line, set a timer, and see how long it takes you to be able to play it all the way through accurately. Challenge yourself to read it faster over time.

# CU Denver Piano Lab Proficiency Reading Examples

## *Note Reading*

**Piano I** - single line, treble clef & bass clef

**Piano II** - single line, treble clef & bass clef + ledger lines

**Piano III & IV** - grand staff, stylistic context

Songwriter

Jazz Piano

Classical Piano

*Chord Reading: Roman Numerals & Chord Symbols*

**Piano I** - diatonic progressions, slash chords, diminished...

I                                  V                                  vi                                  IV



G/B                                  C                                  D                                  D#°                                  Em

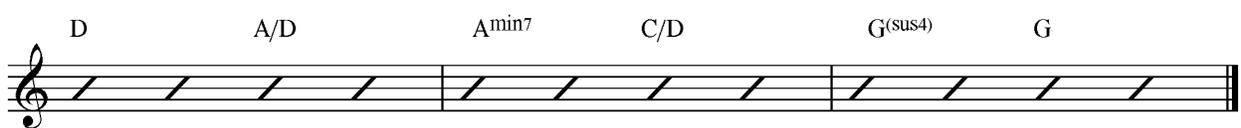


**Piano II** - diatonic & non-diatonic progressions, sus chords, 7th chords...

I                                  vi                                  IV                                  bVII



D                                  A/D                                  Amin7                                  C/D                                  G(sus4)                                  G

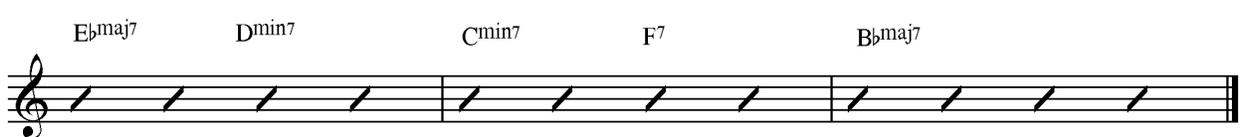


**Piano III** - 7th chords and ii-V progressions

I maj7                                  bIII maj7                                  bVI maj7



Ebmaj7                                  Dmin7                                  Cmin7                                  F7                                  Bbmaj7

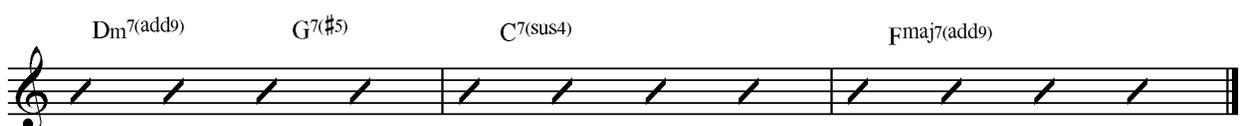


**Piano IV** - alterations, extensions, and substitutions

ii min7                                  V7                                  bII maj7                                  I maj7



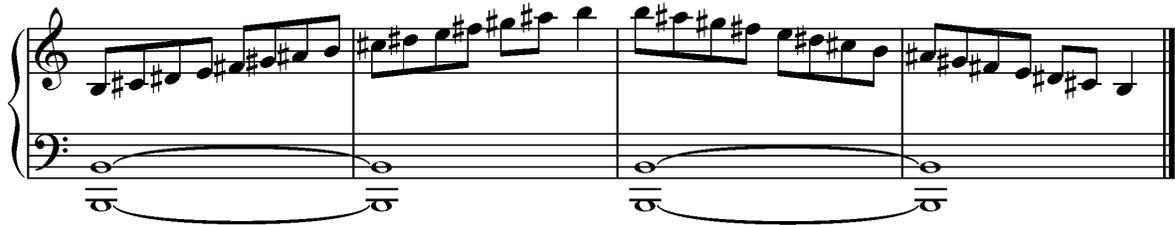
Dm7(add9)                                  G7(#5)                                  C7(sus4)                                  Fmaj7(add9)



# Learning To Play Scales

To begin learning scales, learn one major scale from each shape group—B, C, D  $\flat$ , and D.

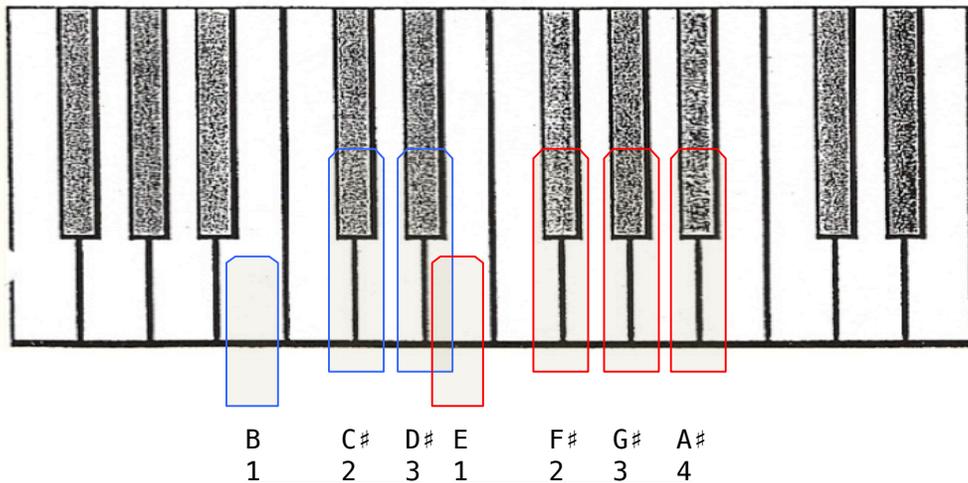
## B major scale – RH two octaves up and down, LH hit and hold the tonic



## Shapes in a Scale

Let's take a visual and physical approach to the scale now.

There are always two finger patterns in a major scale—a 1-2-3 and a 1-2-3-4. That's thumb-index-middle, thumb-index-middle-ring. I repeat, there are *always* those two finger patterns in a major scale. Once you find them, and practice them systematically, scales in every key become manageable. Take a look at the visual below:



## Four Step Process

### Step 1 - Clusters

In this case, I think it actually helps to have the black notes in the scale. Look at how nicely that all falls under the fingers, with the thumb on B, and then on E again. Take your 1-2-3 fingers and hold them in front of you. Now play B-C#-D# simultaneously as a three-note cluster. Then add the ring finger so you

have your 1-2-3-4 fingers and hold those in front of you. Now play E-F#-G#-A# simultaneously as a four-note cluster. Program the two shapes into your fingers. Play them up and down the piano. Recognize that these are the notes in the key of B major.

When you shift up and down the keyboard, your hand should be like a typewriter—moving horizontally. Don't lift your hand way up in the air. Don't wiggle your fingers around searching for notes. Just hold your cluster shape(s) and move left or right.

Can you take your hand off the keyboard, turn away, clear your mind, and then turn back to the keyboard with the intention of playing the notes in the key of B and play those two cluster shapes right away? Once you can do that, move on to Step 2.

### **Step 2 – Scale Clusters**

Now play the three-note group one note at a time. You can conceive of the notes as:

- 1-2-3
- Do-Re-Mi
- B-C#-D#
- Thumb-Index-Middle

Ideally, you can mentally toggle between these ways of conceiving the notes. But ultimately, all that really matters is what you do. Are your fingers playing the right notes? Can you replicate it on demand? Once the answer is yes, move on to Step 3.

But first, play the 1-2-3-4 group one note at a time as well.

After you have played each group alone a few times, play 1-2-3, pause, and 1-2-3-4, pause, 1-2-3, pause, 1-2-3-4. Up two octaves and finish with your RH pinky on B.

Then you have to practice going down: 4-3-2-1, 3-2-1, 4-3-2-1, 3-2-1. Don't skip this step. Going down feels different than up the scale, and those shapes need to be in your fingers (and in your ears).

### **Step 3 – Bridging the Gaps**

Everyone wants to skip Step 3. Don't do it. I promise you, if you follow the steps in order, the scales will become easy for you with consistent practice,

and you won't have to think through every note. You will have the shapes in the scales programmed for automaticity. And then you can just enjoy playing.

Step 3 is just adding one note to each cluster, in order to conquer the challenge of crossing fingers over and under. This is where the typewriter thing really comes into play. The ideal crossover does not stretch or contort the fingers or wrist. Your whole hand just slides horizontally. The crossover happens, but the other fingers just whip right into place, and your wrist rotates minimally compared to what you might do otherwise. This is one of those things that really needs a demonstration. Watch the video of me walking you through the four steps of learning scales.

#### **Step 4 – Playing through it**

At this point, you should be ready to play the whole scale. Everyone wants to start at this step. But I'm telling you, if you discipline your practice to go step by step, every scale will become relatively easy.

Step 4 is just playing the scale from the bottom to the top and back down again, smoothly and with good hand position. Make the notes as even as you can. I recommend practicing these scales with a metronome, beginning with a tempo goal of: quarter note = 72.

#### **Fulcrums**

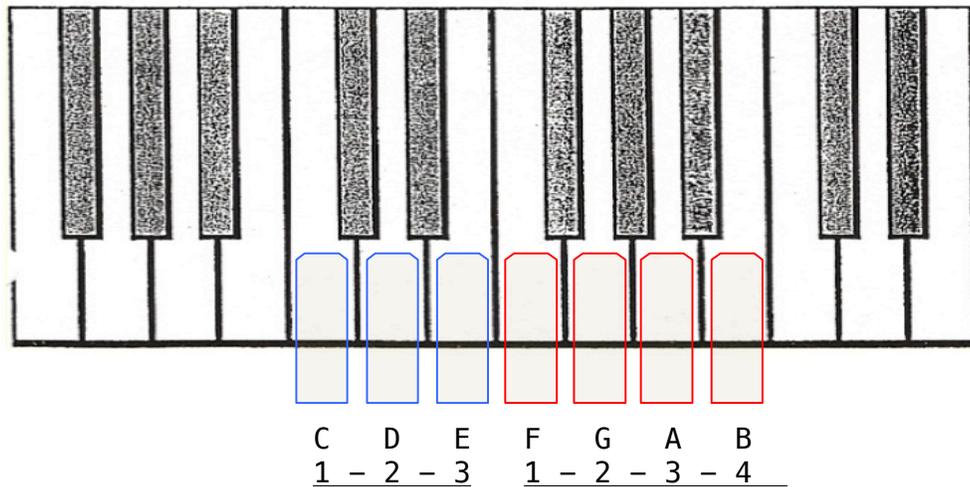
While we're on the topic of mechanics, we need to cover fulcrums. Fulcrums are what give you power on the instrument. Power without strain. I wish someone had showed me this before I blew out my chops and got tendonitis when I was 20 years old. But that experience certainly provided me with the motivation to change, and to seek wise counsel.

The fulcrum concept comes from the legendary piano pedagogue, Abby Whiteside, and her tome, "The Indispensables of Piano Playing." The 1-2-3, 1-2-3-4 application of it comes from the late great Charlie Banacos, Boston's jazz guru for three decades. Charlie completely transformed my relationship to the instrument with this practice.

Don't take it lightly. This is piano Jedi stuff.  
It will take consistent repetition over time to master.

We're going to do this practice using the C major scale.

Just like you did in the key of B, find your 1-2-3 and 1-2-3-4 clusters. Remember, 1-2-3 means thumb-index-middle finger, and so on.



Now, hold out your 1-2-3 finger group in front of you. Starting with your RH thumb on middle C, play the three notes consecutively on the piano in one quick motion. Do the same thing with the 1-2-3-4 group. This exercise is just to be played in one octave at first, but you can expand it to two or three once you get the hang of it. It shouldn't sound like a scale. It's more like two short runs, with a breath in between.

The most important aspect of this exercise is actually not the notes or the fingering, per se. The most important thing is the motion of your arm, from your shoulder all the way to your fingers.

- 1) The driving force should be coming from the rotation of your shoulder
- 2) The rotation of your shoulder pushes your arm forward
- 3) The forward motion of your arm makes your wrist bend slightly upward
- 4) Maintain a relaxed wrist and good hand position, while letting the power transfer all the way from the shoulder through the arm to the fingers

The larger the fulcrum, the greater the power. Look at your finger fulcrums (aka knuckles). They're so much smaller than the wrist, which is smaller than the elbow, which is smaller than the shoulder. The larger the fulcrum, the greater the power. In fact, the largest fulcrum is the waist. Consciously or not,

many great pianists sway at the waist while playing. Done correctly, this can access even greater power—the entire torso propels energy into the fingers!

For now, though, just focus on getting the arm to push forward as the shoulder rotates, and channel that force into your fingers. Done correctly, this will take most of the strain off of your fingers, and open up your body's ability to play with power, precision, and ease.

In addition to the practice above, you can approach the C major scale in the same manner as B major.

Step 1 – clusters

Step 2 – scale clusters

Step 3 – bridging the gaps

Step 4 – the whole thing

### **Fingerings**

Take a look at the D  $\flat$  major scale now. The most significant difference between it and the B, C, and D, is that it starts on a black note. And RH thumbs don't take kindly to black notes. In fact, when playing scales, you want to pretty much avoid thumbs on black notes altogether. No thumbs on black notes.

Note: there are plenty of instances when you will play black notes with your thumb, just not in scales. At some point, if you're studying to become a virtuoso pianist, you may want to play all 12 scales with the same fingering. But that's a long way from here. So. . . no thumbs on black notes.

This means that a D  $\flat$  major scale doesn't start with the thumb! Uh-oh.

But D  $\flat$  still has a 1-2-3 and 1-2-3-4. Can you find them?

Remember, thumb goes on white notes.

Ok, so the 1-2-3 is actually C-D  $\flat$  -E  $\flat$  . And the 1-2-3-4 is F-G  $\flat$  -A  $\flat$  -B  $\flat$  . So the scale starts with 2—your index finger. Still, you should practice your D  $\flat$  major scale in the same way as B and C.

Step 1 – clusters

Step 2 – scale clusters

Step 3 – bridging the gaps

Step 4 – the whole thing

When you get to Step 4, just don't play the C with your thumb—start the scale on D  $\flat$  with your index finger, and you're off and running.

The D major scale is back in the familiar 1-2-3, 1-2-3-4 group where the thumb actually begins the scale. Don't forget to practice Step 3 with care on *the way down* the scales as well. The 4-3-2-1 crossover trips a lot of people up. I've seen many a fingering fall apart on the way down a scale.

# Major Scales

**Assignment:** Find the 1-2-3 and 1-2-3-4 groups, and practice each scale in the manner outlined above.

Musical notation for the C major scale. The treble clef staff shows the ascending and descending scale: C4-D4-E4-F4-G4-A4-B4-C5 (ascending) and C5-B4-A4-G4-F4-E4-D4-C4 (descending). The bass clef staff shows the left hand accompaniment with two measures of a whole note chord (C4-E3) and two measures of a whole note chord (F3-A2).

Musical notation for the F major scale. The treble clef staff shows the ascending and descending scale: F4-G4-A4-Bb4-C5 (ascending) and C5-Bb4-A4-G4-F4 (descending). The bass clef staff shows the left hand accompaniment with two measures of a whole note chord (F4-A2) and two measures of a whole note chord (C4-E2).

Musical notation for the G major scale. The treble clef staff shows the ascending and descending scale: G4-A4-B4-C5 (ascending) and C5-B4-A4-G4 (descending). The bass clef staff shows the left hand accompaniment with two measures of a whole note chord (G4-B2) and two measures of a whole note chord (D4-F2).

Musical notation for the D major scale. The treble clef staff shows the ascending and descending scale: D4-E4-F#4-G4-A4-B4 (ascending) and B4-A4-G4-F#4-E4-D4 (descending). The bass clef staff shows the left hand accompaniment with two measures of a whole note chord (D4-F#2) and two measures of a whole note chord (A4-C#2).



First system of a musical score. The treble clef staff contains a melodic line with a key signature of two flats (B-flat and E-flat) and a series of eighth notes. The bass clef staff contains a sustained accompaniment of two notes, B-flat and E-flat, held across the four measures.

Second system of a musical score. The treble clef staff contains a melodic line with a key signature of two sharps (F# and C#) and a series of eighth notes. The bass clef staff contains a sustained accompaniment of two notes, F# and C#, held across the four measures.

Third system of a musical score. The treble clef staff contains a melodic line with a key signature of two flats (B-flat and E-flat) and a series of eighth notes. The bass clef staff contains a sustained accompaniment of two notes, B-flat and E-flat, held across the four measures.

Fourth system of a musical score. The treble clef staff contains a melodic line with a key signature of two sharps (F# and C#) and a series of eighth notes. The bass clef staff contains a sustained accompaniment of two notes, F# and C#, held across the four measures.

# Melodic Minor Scales

**Assignment:** Find the 1-2-3 and 1-2-3-4 groups, and practice each scale in the manner outlined above.

First system of musical notation for the C melodic minor scale. The treble clef staff shows the ascending and descending scale: C4-D4-E4-F4-G4-A4-B4-A4-G4-F4-E4-D4-C4. The bass clef staff shows the harmonic accompaniment with a C4 octave pedal point and a sustained chord of C4-E4-G4.

Second system of musical notation for the D melodic minor scale. The treble clef staff shows the ascending and descending scale: D4-E4-F4-G4-A4-B4-A4-G4-F4-E4-D4. The bass clef staff shows the harmonic accompaniment with a D4 octave pedal point and a sustained chord of D4-F4-A4.

Third system of musical notation for the E melodic minor scale. The treble clef staff shows the ascending and descending scale: E4-F4-G4-A4-B4-A4-G4-F4-E4. The bass clef staff shows the harmonic accompaniment with an E4 octave pedal point and a sustained chord of E4-G4-B4.

Fourth system of musical notation for the F melodic minor scale. The treble clef staff shows the ascending and descending scale: F4-G4-A4-B4-A4-G4-F4. The bass clef staff shows the harmonic accompaniment with an F4 octave pedal point and a sustained chord of F4-A4-C4.

First system of a musical score. The treble clef staff contains a complex melodic line with many accidentals (flats and naturals) and a chromatic descending scale. The bass clef staff features a simple harmonic accompaniment with two long, horizontal lines, each consisting of two half notes tied across two measures.

Second system of a musical score. The treble clef staff continues the melodic line with a chromatic descending scale. The bass clef staff features a simple harmonic accompaniment with two long, horizontal lines, each consisting of two half notes tied across two measures.

Third system of a musical score. The treble clef staff continues the melodic line with a chromatic descending scale. The bass clef staff features a simple harmonic accompaniment with two long, horizontal lines, each consisting of two half notes tied across two measures.

Fourth system of a musical score. The treble clef staff continues the melodic line with a chromatic descending scale. The bass clef staff features a simple harmonic accompaniment with two long, horizontal lines, each consisting of two half notes tied across two measures.

First system of musical notation. The treble clef staff contains a melodic line with eighth and sixteenth notes, including accidentals (flats and naturals). The bass clef staff contains a simple accompaniment of half notes with a slur across the first two measures.

Second system of musical notation. The treble clef staff continues the melodic line with similar rhythmic patterns and accidentals. The bass clef staff continues the accompaniment with half notes and a slur.

Third system of musical notation. The treble clef staff continues the melodic line. The bass clef staff continues the accompaniment with half notes and a slur.

Fourth system of musical notation. The treble clef staff continues the melodic line with more complex rhythmic patterns. The bass clef staff continues the accompaniment with half notes and a slur.

## Two Hand Scales

Adding your LH makes scales 100% more difficult. But understanding the scale learning method, and knowing the notes of scales in all keys mitigates the difficulty to some extent.

The LH can learn scales with exactly the same four-step process as the RH. However, the LH is looking for 3-2-1 and 4-3-2-1 clusters on the way up the scale. And they do not correlate with the RH clusters in any easy-to-remember way. Below, I have labeled the clusters in the RH and LH.

Note: Many LH scales start on the 4 (ring finger) or 5 (pinky) by necessity. But in the second and third octave, that becomes the 1 (thumb).

I recommend that you note the clusters on the page as you learn your scales. Happy practicing!

1- 2- 31- 2- 3- 4

(5) 4- 3- 2- 1 3- 2- 1

1-2-3-4 1- 2- 3

3- 2- 1 4- 3- 2- 1

1- 2- 31- 2- 3- 4

(4) 3- 2- 1 4- 3- 2- 1

First system of musical notation, consisting of a treble and bass clef staff. The key signature has two flats (B-flat and E-flat). The melody in the treble clef features a series of eighth and sixteenth notes, with some accidentals (sharps and flats). The bass clef accompaniment consists of a steady eighth-note pattern.

Second system of musical notation, consisting of a treble and bass clef staff. The key signature has three sharps (F#, C#, G#). The melody in the treble clef continues with eighth and sixteenth notes. The bass clef accompaniment follows a similar eighth-note pattern.

Third system of musical notation, consisting of a treble and bass clef staff. The key signature has two flats (B-flat and E-flat). The melody in the treble clef features a series of eighth and sixteenth notes. The bass clef accompaniment consists of a steady eighth-note pattern.

Fourth system of musical notation, consisting of a treble and bass clef staff. The key signature has two flats (B-flat and E-flat). The melody in the treble clef features a series of eighth and sixteenth notes, with some accidentals. The bass clef accompaniment consists of a steady eighth-note pattern.

Fifth system of musical notation, consisting of a treble and bass clef staff. The key signature has three sharps (F#, C#, G#). The melody in the treble clef continues with eighth and sixteenth notes. The bass clef accompaniment follows a similar eighth-note pattern.

First system of musical notation, consisting of a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature has two flats (B-flat and E-flat). The music features a complex, chromatic melodic line in the treble clef and a more rhythmic accompaniment in the bass clef.

Second system of musical notation, consisting of a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature has two sharps (F-sharp and C-sharp). The music features a complex, chromatic melodic line in the treble clef and a more rhythmic accompaniment in the bass clef.

Third system of musical notation, consisting of a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature has two flats (B-flat and E-flat). The music features a complex, chromatic melodic line in the treble clef and a more rhythmic accompaniment in the bass clef.

Fourth system of musical notation, consisting of a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The key signature has two sharps (F-sharp and C-sharp). The music features a complex, chromatic melodic line in the treble clef and a more rhythmic accompaniment in the bass clef.

## Additional Materials & Song Charts

Additional materials and song charts will be distributed by teachers as they deem appropriate for instruction.

## Instructional Videos

For my Instructional Video Playlist (YouTube): <http://goo.gl/i2Vita>

Or scan this QR code with your mobile device:



## Contact

Email me at [peter.stoltzman@ucdenver.edu](mailto:peter.stoltzman@ucdenver.edu) with requests or questions.

## Appendix E: Multimedia Examples

### Public Access url:

<https://drive.google.com/folderview?id=0B03HLvfQJi11SWZtMk9xN190Ske&usp=sharing>

### Folders:

#### Play Along Materials

- Two Hand Pop Piano Voicings pdf and mp3
- Add, sus, LT slash chords pdf and mp3
- Minor 7<sup>th</sup> Chord Play Along pdf
- Play Along Hip Hop Jazz mp3
- 7<sup>th</sup> Chord 7-3-5 Play Along pdf and mp3
- Jazz ii-V Play Along mp3
- Jazz Play Along C7 mp3
- Funky Jam Band Play Along C7 mp3

#### Repertoire Supplementary Materials – Charts, Play Along mp3s, Videos

- Imagine pdf, mp3, classroom instructional video
- How to Save a Life pdf, mp3, instructional video
- Isn't She Lovely pdf, mp3, classroom instructional video

#### Instructional Video Examples

- Scales – Four Step Process
- 7<sup>th</sup> chords – 7-3-5 introduction
- ii-Vs & the secret formula

## References

### PRINT AND ONLINE REFERENCES

- Abrahams, F. (2005). Transforming classroom music instruction with ideas from critical pedagogy. *Music Educators Journal*, 92(1), 62-67.
- Allsup, R. E. (2003). Mutual learning and democratic action in instrumental music education. *Journal of Research in Music Education*, 51(1), 24-37.
- American University Audio Technology Degree Program. Retrieved from <http://www.american.edu/cas/performing-arts/BS-ATEC.cfm>
- Amoriello, L. (2010). *Teaching undergraduate class piano: a study of perspectives from self, students, and colleagues* (Doctoral dissertation, Teachers College, Columbia University).
- Arizona State University Arts Entrepreneurship Certificate. Retrieved from [http://herbergerinstitute.asu.edu/institute/initiatives/arts\\_entrepreneurship\\_certificate/](http://herbergerinstitute.asu.edu/institute/initiatives/arts_entrepreneurship_certificate/)
- Arizona State University Bachelors Degree in Music. Retrieved from <http://music.asu.edu/about/degrees.php>
- Arrau, C. (1983). Class piano and theory—a partnership. *Clavier*, 22(6), 23.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barrow, W. (2009). *Learn & Master Piano with Will Barrow* (2<sup>nd</sup> Edition). Nashville, TN: Legacy Learning Systems.
- Bastien, J. (1973). *How to teach piano successfully*. (2nd ed.). Park Ridge, IL: General Words and Music Co.
- Beilock, S. L., Carr, T. H., MacMahon, C., Starkes, J. L. (2002). When paying attention becomes counterproductive: impact of divided versus skill-focused attention on novice and experienced performance of sensorimotor skills. *Journal of experimental psychology. Applied*. 8(1), 6-16.
- Beilock, S. L., Wierenga, S. A., Carr, T. H. (2002). Expertise, attention, and memory in sensorimotor skill execution: impact of novel task constraints on dual-task performance and episodic memory. *The Quarterly Journal of Experimental Psychology Applied*. 55(4), 1211-40.

- Beilock, S. L., Bertenthal, B. I., McCoy, A. M., & Carr, T. H. (2004). Haste does not always make waste: Expertise, direction of attention, and speed versus accuracy in performing sensorimotor skills. *Psychonomic Bulletin & Review*, *11*(2), 373-379.
- Beilock, S. L., & Gonso, S. (2008). Putting in the mind versus putting on the green: expertise, performance time, and the linking of imagery and action. *Quarterly Journal of Experimental Psychology*, *61*(6), 920-932.
- Belmont University Music Courses. Retrieved from <http://www.belmont.edu/catalog/undergrad2010jun/cvpa/som/musiccourses/performance.html>
- Berklee College of Music Facts and Statistics. (2014). Retrieved from <http://www.berklee.edu/about/facts-and-statistics>
- Berklee College of Music Piano Courses. Retrieved from <http://www.berklee.edu/piano/piano-courses?page=3>
- Berklee College of Music Mission Brochure. (2006). Retrieved from <http://www.berklee.edu/sites/default/files/pdf/pdf/president/mission.pdf>
- Bogard, D. M. (1983). *An exploratory study of first year music theory, ear training/sight singing, and piano class: an interrelated approach* (Doctoral Dissertation, University of Colorado at Boulder).
- Brook, J. (2007). *An on-line digital video library of piano teaching: a case study with five teachers* (Master's Thesis, University Of Ottawa). Retrieved from <http://www.ruor.uottawa.ca/en/bitstream/handle/10393/27572/MR41619.PDF?sequence=1>
- Bruner, J. S., & Goodman, C. C. (1947). Value and need as organizing factors in perception. *The journal of abnormal and social psychology*, *42*(1), 33.
- Bruner, J. S. (1964). The course of cognitive growth. *American psychologist*, *19*(1), 1.
- Bruner, J. (1985). Models of the learner. *Educational Researcher*, *14*(6), 5-8.
- Buchanan, G. (1964). Skills of piano performance in the preparation of music educators. *Journal of Research in Music Education*, *12*(2), 134-138.
- Cameron, J., & Pierce, W. D. (1994). Reinforcement, reward, and intrinsic motivation: A meta-analysis. *Review of Educational research*, *64*(3), 363-423.

- Campbell, P. & Hebert, D. (2000). Rock music in American schools: Positions and practices since the 1960s. *International Journal of Music Education*, 36, 14-22.
- Cavitt, M. E. (2003). A descriptive analysis of error correction in instrumental music rehearsals. *Journal of Research in Music Education*, 51, 218-230.
- Chin, Huei Li (2002). *Group piano instruction for music majors in the United States: A study of instructor training, instructional practice, and values relating to functional keyboard skills* (Doctoral dissertation, Ohio State University).
- Choate, R. A. (Ed.). (1968). *Documentary Report of the Tanglewood Symposium*. Washington, DC: Music Educators National Conference.
- Chronister, R. (1976). The challenge of group teaching. *Clavier*, 15 (7), 40.
- Class Piano Resource Center (2003). Retrieved from <http://www.classpiano.org/schools/belmont/belmontresources/proficiency1.html>
- Colorado State University Music Education Degree Requirements. Retrieved from <http://www.music.colostate.edu/docs/checksheet-ed-instr-year.pdf>
- Colorado State University Music Therapy Degree Requirements. Retrieved from <http://www.music.colostate.edu/docs/checksheet-therapy-year.pdf>
- Colorado State University Jazz Studies Degree Requirements. Retrieved from <http://www.music.colostate.edu/docs/checksheet-perf-jazz-year.pdf>
- Colorado State University Music Composition Degree Requirements. Retrieved from <http://www.music.colostate.edu/docs/checksheet-comp-year.pdf>
- Colorado State University Music Undergraduate Student Handbook. Retrieved from <http://www.music.colostate.edu/docs/undergrad-handbook13-14.pdf>
- Covach, J. (2013). University of Rochester, Institute for Popular Music. Retrieved from <http://www.rochester.edu/popmusic/about.html>
- Colprit, E. J. (2000). Observation and analysis of Suzuki string teaching. *Journal of Research in Music Education*, 48, 206-221.
- Curt, M. L. (1970). *The use of electronic pianos to facilitate learning in seventh grade general music classes* (Doctoral dissertation, University of Kansas, Music Education).

- Cutietta, R. A. (1991). Popular music: An ongoing challenge. *Music Educators Journal*, April, 26.
- Cutietta, R. (2007). Content for music teacher education in this century. *Arts Education Policy Review*, 108 (6), 11-18.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125, 627-668.
- Deci, E. L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78.
- Dickey, M. R. (1992). A review of research on modeling in music teaching and learning. *Bulletin of the Council for Research in Music Education*, (113), 27-40.
- Diehl, L. P. (1980). *An investigation of the relative effectiveness of group and individual piano instruction on young beginners in an independent music studio utilizing an electropiano laboratory* (Doctoral dissertation, University of Southern California).
- Dominick, R. F. (1956). A plan for developing musicianship at the keyboard (Doctoral dissertation, Columbia University).
- Drexel University Music Industry Degree Requirements. Retrieved from <http://www.catalog.drexel.edu/undergraduate/collegeofmediaartsanddesign/musicindustry/#degreerequirementstext>
- Drexel University Entertainment and Arts Management Degree Requirements. Retrieved from <http://catalog.drexel.edu/undergraduate/collegeofmediaartsanddesign/entertainmentartmgmt/#degreerequirementsbstext>
- Dunbar-Hall, P., & Wemyss, K. (2000). The effects of the study of popular music on music education. *International Journal of Music Education*, 1, 23-34.
- Durik, A. M., & Harackiewicz, J. M. (2007). Different strokes for different folks: How individual interest moderates the effects of situational factors on task interest. *Journal of Educational Psychology*, 99(3), 597.
- Duke, R. A. (2000). Measures of instructional effectiveness in music research. *Bulletin of the Council for Research in Music Education*, 143, 1-48.

- Duke, R. A. (2006). Beautiful teaching. *American Music Teacher*, October/November, 22-24.
- Duke, R., & Benson, C. (2004). Steering from the caboose: Setting the pace of group piano instruction according to the least skilled students in the class. *UPDATE: Applications of Research in Music Education*, 23(1), 41-53.
- Duke, R. A., & Buckner, J. J. (2009). Watching learners learn. *MTNA e-Journal*, 1, 17-28.
- Duke, R. A. & Simmons, A. L. (2006). The nature of expertise: narrative descriptions of 19 common elements observed in the lessons of three renowned artist-teachers. *Bulletin of the Council for Research in Music Education*. Fall(170), 7-20.
- Duvall, D. C. (2008). *Real-time MIDI performance evaluation for beginning piano students* (Master's thesis, Clemson University). Retrieved from [http://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=1438&context=all\\_theses](http://tigerprints.clemson.edu/cgi/viewcontent.cgi?article=1438&context=all_theses)
- Eisenberger, R., & Cameron, J. (1996). Detrimental effects of reward: Reality or myth? *American Psychologist*, 51, 1153-1166.
- Feltovich, P. J., Prietula, M. J., & Ericsson, K. A. (2006). Studies of expertise from psychological perspectives. In K. A. Ericsson, N. Charness, P. J. Feltovich & R. R. Hoffmann (Eds.), *Cambridge handbook of expertise and expert performance* (pp. 41-68). New York: Cambridge University Press.
- Fidlon, J. (2011). *Cognitive dimensions of instrumental jazz improvisation* (Doctoral dissertation, The University of Texas at Austin).
- Fowler, C. B. (1970). The case against rock: A reply. *Music Educators Journal*, 57(1), 38-42.
- Frazier, F. I. (1977). *An integrated curriculum for first year music theory, ear training, and class piano* (Doctoral dissertation, University of Colorado at Boulder).
- Garcia, S. (2012). eNovativePiano. Retrieved from [www.enovativepiano.com](http://www.enovativepiano.com)
- Gholson, S. (1998). Proximal positioning: A strategy of practice in violin pedagogy. *Journal of Research in Music Education*, 46(4), 535-545.
- Gipson, A. M. (2005). Group lessons = positive results. *The American Music Teacher*, 55, 18-21.

- Gipson, A. M. (2009). Teaching each student with a purpose. *American Music Teacher*, 59(3), 53.
- Giroux, Henry, as quoted by Williams, L. (1999). What is critical pedagogy? Retrieved from <http://www.perfectfit.org/CT/giroux2.html>
- Goals and Objectives for Music Education. (1970). *Music Educators Journal* 57(4), 24-25.
- Graff, C. A. (1984). *Functional piano skills: a manual for undergraduate non-keyboard music education majors at Plymouth State College* (Doctoral dissertation, University of Northern Colorado).
- Green, L. (2005). Musical meaning and social reproduction: a case for retrieving autonomy. *Educational Philosophy and Theory*, 37 (1), pp. 77-92.
- Haack, P. (1995). The study of the use of keyboard skills in music teaching. *New Ways in Music Education*, 11(1).
- Harackiewicz, J.M., Barron, K.E., Tauer, J. M., Carter, S. M., & Elliot, A. J. (2000). Short-term and long-term consequences of achievement goals: Predicting interest and performance over time. *Journal of Educational Psychology*, 92, 316-330.
- Haston, W. (2007). Teacher modeling as an effective teaching strategy. *Music Educators Journal*, 93(4), 26-30.
- Hayne, H., Barr, R., Herbert, J. (2003). The effect of prior practice on memory reactivation and generalization. *Child Development*, 74, 1615-1627.
- Henley, P. T. (2001). Effects of modeling and tempo patterns as practice techniques on the performance of high school instrumentalists. *Journal of Research in Music Education*, 49(2), 169-181.
- Hilley, M., & Olson, L. F. (2006). *Piano for the developing musician (6<sup>th</sup> edition)*. Independence, KY: Cengage Learning.
- Indiana University Keyboard Proficiency. (2013). Retrieved from [http://www.music.indiana.edu/departments/academic/piano/documents/Proficiency\\_requirements.pdf](http://www.music.indiana.edu/departments/academic/piano/documents/Proficiency_requirements.pdf)
- Indiana University Recording Arts Degree Requirements. Retrieved from <http://music.indiana.edu/degrees/undergraduate/files/requirements/AUDIOBS.pdf>

- Isbell, D. (2007). Popular music and the public music curriculum. *UPDATE, Fall-Winter*, 53-63.
- Johns Hopkins University Music Entrepreneurship and Career Center. Retrieved from <http://peabody.jhu.edu/conservatory/mecc/>
- Johns Hopkins Bachelor of Music Degree. Retrieved from [http://www.peabody.jhu.edu/se/util/display\\_mod.cfm?MODULE=/se-server/mod/modules/semod\\_printpage/mod\\_default.cfm&PageURL=/conservatory/academicaffairs/bm/&VersionObject=E242691A360A73B2D3DF03D84600825F&Template=9392103F99096077D5878A9D71A43D03&PageStyleSheet=5E8B5D86BBC4D99B1AF14F364AD852C4](http://www.peabody.jhu.edu/se/util/display_mod.cfm?MODULE=/se-server/mod/modules/semod_printpage/mod_default.cfm&PageURL=/conservatory/academicaffairs/bm/&VersionObject=E242691A360A73B2D3DF03D84600825F&Template=9392103F99096077D5878A9D71A43D03&PageStyleSheet=5E8B5D86BBC4D99B1AF14F364AD852C4)
- Kuzmich Jr., J. (1991). Popular music in your program: growing with the times. *Music Educators Journal*, 77(8), 50-55.
- Lancaster, E. L., and Kenon, D. (2008). *Alfred's Group Piano for Adults*. Van Nuys, CA: Alfred Publishing Co, Inc.
- Landes, D. (2011). *Class Piano Resource Materials* (5<sup>th</sup> edition). Nashville, TN: Smith Creek Music.
- Leonard, M., Strachan, R., Green, L., Levy, C. (2003). Popular music education. *Continuum Encyclopedia of Popular Music of the World, Volume 1*. International Publishing Group Ltd., 308-312.
- Lindeman, C. A. (2007). *PianoLab: An introduction to class piano*. Independence, KY: Cengage Learning.
- Loyola University at New Orleans Music Industry Studies. Retrieved from <http://cmfa.loyno.edu/music-industry-studies/bachelor-music-music-industry-studies>
- Loyola University at New Orleans Music Industry Studies Degree Course List. Retrieved from [http://2013bulletin.loyno.edu/sites/2013bulletin.loyno.edu/files/B.M.%20Music%20Industry%20Studies%20DPCL%202013-14\\_4.pdf](http://2013bulletin.loyno.edu/sites/2013bulletin.loyno.edu/files/B.M.%20Music%20Industry%20Studies%20DPCL%202013-14_4.pdf)
- Lusted, D. S. (1984). *The status of keyboard harmony in NASM-approved colleges in the southeastern United States* (Doctoral dissertation, Louisiana State University and Agricultural and Mechanical College).
- MacCluskey, T. (1979). Peaceful coexistence between pop and the classics. *Music Educators Journal*, 65(8), 54-57.

- Mach, E. (2010). *Contemporary Class Piano (seventh edition)*. Oxford University Press.
- Mantie, R. (2013). A comparison of “popular music pedagogy” discourses. *Journal of Research in Music Education*, 61(3), 334-352.
- Manus, M. (1996). A question for publishers: how is your adult method different from your children's method? *Keyboard Companion*, 7(1), 32.
- March, W. A. (1988). *Study of piano proficiency requirements at institutions of higher education in the state of Oregon as related to the needs and requirements of public school music teachers* (Doctoral dissertation, University of Oregon).
- Mark, M. L. (1999). *MENC: Tanglewood to the present*. Retrieved from <http://musiced.nafme.org/files/2012/06/MENCFromTanglewood.pdf>
- Maris, B. E. (2000). Teacher training for the pianist in preparation for the 21<sup>st</sup> century. *American Music Teacher*, 49(6), 32-34.
- Martinez, H. R. (1975). *The development and investigation of a piano curriculum for improving music reading skills in a general music class* (Doctoral dissertation, Florida State University).
- Maslow, A. H. (1973). *On dominance, self-esteem, and self-actualization*. Maurice Bassett.
- Mcallester, D. (1968). The substance of things hoped for. In R. Choate (Ed.), *Documentary Report of the Tanglewood Symposium* (pp. 96-99). Washington, DC: MENC.
- McCalla, D. C. (1989). *The status of class piano instruction in the public secondary schools of Florida* (Doctoral dissertation, University of Miami).
- McNally Smith College of Music Courses. Retrieved from [http://www.mcnallysmith.edu/wp-content/uploads/2011/06/12-13\\_MSCM\\_CourseCatalog\\_AD\\_WEB.pdf](http://www.mcnallysmith.edu/wp-content/uploads/2011/06/12-13_MSCM_CourseCatalog_AD_WEB.pdf)
- Meichang, L. (2010). *Principal themes and intellectual structure of research in piano pedagogy: the mapping of doctoral and masters' research* (Doctoral dissertation, Hong Kong Baptist University).
- Middle Tennessee State University. Retrieved from [http://catalog.mtsu.edu/mime/media/10/2801/Music\\_MusicIndustryEntrepreneurship.pdf](http://catalog.mtsu.edu/mime/media/10/2801/Music_MusicIndustryEntrepreneurship.pdf)

- Middle Tennessee State University Student Handbook. Retrieved from <http://www.mtsu.edu/music/pdf/studenthandbook.pdf>
- Miller, G. A. (1956). The magical number seven, plus or minus two: some limits on our capacity for processing information. *Psychological review*, 63(2), 81.
- Milne, E. (2013, March 10). Pedagogy Saturday and permission: a sober MTNA conference post. [Web log post]. Retrieved from <http://elissamilne.wordpress.com/2013/03/10/pedagogy-saturday-and-permission-a-sober-mtna-conference-post/>
- Milne, E. (2013, March 30). Is the study of piano declining in the United States of America? [Web log post]. Retrieved from <http://elissamilne.wordpress.com/2012/03/30/is-the-study-of-piano-declining-in-the-united-states-of-america/>
- Music Educators National Conference. (2002). *The guide to teaching with popular music*. Reston, VA.
- Music Teachers National Association 2013 Conference. (2013). Retrieved from <https://members.mtna.org/conference2013/Pedagogy.html>
- National Association of Schools of Music. (2012). *Handbook 2011-12*. Reston, VA.
- National Association of Schools of Music. (2014). Retrieved from <http://nasm.arts-accredit.org>
- National Standards for Arts Education. (1994). Music Educators National Conference (MENC). Retrieved from <http://musiced.nafme.org/about/the-national-standards-for-arts-education-introduction/>
- Naudzius, A. K. (1983). *Analysis of class piano books for beginning adults* (Doctoral dissertation, University of Illinois–Urbana-Champaign).
- NYU Music Business Curriculum. Retrieved from <http://steinhardt.nyu.edu/music/business/curriculum/undergraduate>
- NYU Music Technology Undergraduate Requirements. Retrieved from <http://steinhardt.nyu.edu/music/technology/programs/undergraduate/requirements>
- O'Brien, J. P. (1982). A plea for pop. *Music Educators Journal*, 68(7), pp. 44, 50-54.
- Pace, R. (1951). *The selection and use of intermediate piano materials to supplement*

- modern elementary piano texts: a report of a type c project* (Doctoral dissertation, Teachers College, Columbia University).
- Pace, R. (1978). Piano lessons: Private or group. *Keyboard Journal* 4(2).
- Parente, T. J. (2011). "*Phases of learning*" and flow experience as instructional strategies for beginning students of college class piano (Doctoral dissertation, Teachers College, Columbia University).
- Pedagogy Saturday. (2012). *Music Teachers National Association 2013 National Conference*. Retrieved from <https://members.mtna.org/conference2013/Pedagogy.html>
- Ponick, F. S. (2000). Bach and rock in the music classroom. *Teaching Music*, 8(3), 22–29.
- Puntambekar, S., & Hubscher, R. (2005). Tools for scaffolding students in a complex learning environment: What have we gained and what have we missed? *Educational Psychologist*, 40(1), 1-12.
- Riggs, K. (2006). Foundations for flow: A philosophical model for studio instruction. *Philosophy of Music Education Review*, 14(2), 175-191.
- Riley-Butler, K. (2001). *Understanding interpretive nuance in piano performance through aural-visual feedback* (Doctoral dissertation, New York University, School of Education).
- Rogers, W. F. (1974). *The effect of group and individual piano instruction on selected aspects of musical achievement* (Doctoral dissertation, Columbia University).
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of personality and social psychology*, 43(3), 450.
- Santella, L. B. (2000). *Pedagogical and performance applications of the musical, "cinderella", an original composition for the beginning pianist with MIDI accompaniment* (Doctoral dissertation, University of Miami).
- Schneider, W., & Shiffrin, R. M. (1977). Controlled and automatic human information processing: I. Detection, search, and attention. *Psychological Review*, 84, 1-66.
- Seifried, S. (2006). Exploring the outcomes of rock and popular music instruction in high school guitar class: A case study. *International Journal of Music Education*, 24, 168–177.

- Skroch, D. (1991). *A descriptive and interpretive study of class piano instruction in four-year colleges and universities accredited by the National Association of Schools of Music with a profile of the class piano instructor* (Doctoral dissertation, The University of Oklahoma).
- Small, M. (2014). Twenty-first-century techniques. *Berklee Today*. Retrieved from [http://www.berklee.edu/bt/161/21st\\_century.html](http://www.berklee.edu/bt/161/21st_century.html)
- Sonntag, W. (1980). *The status and practices of class piano programs in selected colleges and universities of the state of Ohio* (Doctoral dissertation, Ohio State University).
- Springer, D. G., and Gooding, L. F. (2013). Preservice music teachers' attitudes toward popular music in the music classroom. *Update*, 32(1), 25-33.
- Taylor, D. M. (2006). Learned Repertoire for Percussion Instruments in an Elementary Setting. *Journal of Research in Music Education*. 54, 231-243.
- The University of Texas at Austin Undergraduate Degrees. Retrieved from <http://www.music.utexas.edu/admissions/undergraduate/Degrees.aspx>
- Tollefson, M. J. (2005). Rethinking the college piano proficiency. *Piano Pedagogy Forum* 4, (2).
- Trantham, W. E. (1966). *A music theory approach to beginning piano instruction for the college music major* (Doctoral dissertation, Northwestern University).
- Tsai, Shang-Ying (2007). *Group piano in the 21st century: The beginning class at the college level* (Doctoral dissertation, Claremont Graduate College).
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of educational research*, 68(2), 202-248.
- University of Louisiana at Lafayette Music Media Curriculum Map. Retrieved from [http://music.louisiana.edu/curr\\_musicmedia13-15.pdf](http://music.louisiana.edu/curr_musicmedia13-15.pdf)
- University of Louisiana at Lafayette Music Business Curriculum Map. Retrieved from [http://music.louisiana.edu/curr\\_mus\\_bus\\_13-15.pdf](http://music.louisiana.edu/curr_mus_bus_13-15.pdf)
- University of Miami Music Media and Industry Department. Retrieved from [http://www.miami.edu/index.php/academicbulletin/undergraduate\\_academic\\_programs/music/music\\_media\\_industry/](http://www.miami.edu/index.php/academicbulletin/undergraduate_academic_programs/music/music_media_industry/)

- University of Southern California Music Industry Studies. Retrieved from <http://music.usc.edu/departments/industry/bm-music-industry/>
- University of Southern California Popular Music Performance. Retrieved from <http://music.usc.edu/departments/popular-music/>
- University of Southern California Piano Classes. Retrieved from <http://web-app.usc.edu/soc/20133/mpks-150a>
- University of Southern California Music Courses. Retrieved from <http://catalogue.usc.edu/schools/music/courses/mppm/>
- Willis Music. Retrieved from <http://www.willismusic.com/about-us/>
- Wig, J. A., & Boyle, J. D. (1982). The effect of keyboard learning experiences on middle school general music students' music achievement and attitudes. *Journal of Research in Music Education*, 30(3), 163-172.
- Williams, M. K. (2000). *An alternative class piano approach based on selected Suzuki principles* (Doctoral dissertation, Texas Tech University).
- Woody, R. H. (2007). Popular music in school: Remixing the issues. *Music Educators Journal*, 93(4), 32-37.
- Verwey, W. (2003). Effect of sequence length on the execution of familiar keying sequences: Lasting segmentation and preparation? *Journal of Motor Behavior*, 35(4), 343-354.
- “Vision 2020” Housewright Declaration. (1999, September). *National Association for Music Education*. Retrieved from <https://musiced.nafme.org/resources/vision-2020-housewright-declaration/>
- Vygotsky, L. (1962). *Thought and Language*. Cambridge, MA: MIT Press.
- Yarbrough, Cornelia (1999). What should be the relationship between schools and other sources of music learning? Retrieved from <https://musiced.nafme.org/files/2012/06/WhatShouldBetheRelat.pdf>

#### **YOUTUBE CHANNEL REFERENCES**

- Bill Hilton. Retrieved from <http://www.youtube.com/user/billhiltonbiz>
- DRo Music. Retrieved from <http://www.youtube.com/user/DRoMusic>

Dudu Yzhaki. Retrieved from <http://www.youtube.com/user/dududavid>

Jazz Hero. Retrieved from <http://www.youtube.com/user/jazztutorial>

Joe Raciti. Retrieved from <http://www.youtube.com/user/jraciti1>

OnlinePianist. Retrieved from <http://www.youtube.com/user/OnlinePianist>

Piano Couture. Retrieved from <http://www.youtube.com/user/pianocouturetube>

Piano Drew. Retrieved from <http://www.youtube.com/user/pianodrew>

PianoGuyTV. (2007). *How to Play "Lean On Me."* Retrieved from <https://www.youtube.com/watch?v=em4Mx7w5Lxw>

PianoKeyz. Retrieved from <http://www.youtube.com/user/gotitans999>

Starling Sounds. Retrieved from <http://www.youtube.com/user/StarlingSounds>

#### **SOFTWARE REFERENCES**

GarageBand '11. (2012). Version 6.0.5. Apple, Inc.

LogicPro 9. (2012). Version 9.1.8. Apple, Inc.

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