Lessons from
The Musician's Guide to Starting a Revolution

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Do you have an iPad? Download iBooks from the iOS App Store, and then get the entire guide by copying this link into a browser on your iPad:

https://www.dropbox.com/s/705aqjhkxx07wb1/The%20Musician%27s%20Guide%20to%20Starting%20a%20Revolution%20%28FMEA%202013%29.ibooks

BCO 2.0

Sections

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Honoring Tradition

Integrating music technology into your program does not mean abandoning the traditional music ensembles that are the foundation of our field. Quite the contrary, there are several technological tools out there that can enhance the way your band, chorus, orchestra, or other applied music ensemble performs. In this chapter, I will present ways to add music technology to performance based courses in the least “invasive” ways possible for those teachers who wish to move forward without sacrificing the craft they love most.

digital performance portfolio

How will this help me? My students?
A digital performance portfolio is a great way to record student progress throughout the season. You can use it to simply archive achievements, or you can use it as an instant feedback tool for your students during rehearsal. And as more and more districts move to teacher appraisal models of varying methodologies (and accuracy), it may assist you in showing administrators evidence of effective or highly effective instruction.

What do I need?
My suggested setup is an iPad 2 or later, an Apple Camera Connection Kit, and a BlueMic Snowball. You'll also need the FiRe 2 Field Recorder and Dropbox apps (see Chapter Six: Stuff). You can tap these icons to go directly to their descriptions in the App Store:


How much extra time will this take?
Nada

What do I do?
The design here is simple: record anything from your entire ensemble to a single soloist over time. You will use the iPad + Camera Connection Kit + USB microphone and an app called the FiRe 2 Field recorder to capture high quality audio.

How is this different from simply using a handheld recorder or other built-in recording system you may already have in your room? The answer is simple: cloud sharing.

One of the great things about the FiRe 2 Field Recorder (and a number of other great apps on the iOS App Store) is that it has Dropbox integration. Dropbox is just one of several free cloud storage options that are out there for you to use to

store anything from audio files of your group to Microsoft Word documents. But don't just upload to your own personal Dropbox account:

Share.

Share with colleages in your department or with your "feeder" and "feedee" schools. Share with your parents and students and administrators and friends and family members.
You can use Dropbox to produce a public link for people to navigate to online, or you and your department or staff can simply share a Dropbox account - they're free! Then you can all listen to and download the files directly from the app itself or from a downloadable client on your computers (www.dropbox.com).

While it may seem like a simple thing, now that everyone has access to recordings of your students' progressions, you have added a new tool to your arsenal for assessment, improvement, and student achievement. This new technology will assist you in common planning, lesson study, and more.

adjudicator commentary

How will this help me? My students?
This will simulate for your students the effect of receiving adjudication tapes from judges on their performance in class, as well as give them something with which to practice at home.

What do I need?
I would suggest a laptop or iPad, USB microphone (again with Camera Kit if you're using iPads), and a DAW of some kind (GarageBand on either the Mac or iPad will do this).

How much extra time will this take?
A little extra time on your part (and maybe that of your friends)

What do I do?
One thing directors tend to value most at a musical assessment is adjudicator commentary tapes. Sometimes the commentary is good, other times not so much, but either way it tends to open students' and directors' minds to a whole new way of hearing their own performances. I like to do this a couple of different ways:

Director's Notes. I will record the ensemble or entire class period, and then edit clips of full run throughs in a DAW such as GarageBand. I will then go back and create a new track under the recording and make comments as the group is performing. You may have to mix the levels a little bit so the commentary doesn't drown out the performance and vice versa.

Guest Adjudicators. I do the same thing, only I send out the clips of the group to other expert teachers in the area to "adjudicate". Sometimes it helps when kids hear the same stuff you say everyday from a total stranger.

Solo & Ensemble Feedback. I record individual sessions with students working on solo & ensemble and at the end of our

practice time record me playing the accompaniment (or at least playing along with them) so they have something with which to practice. I also do diction with vocal students so they can practice speaking the language with the recording.

expression worksheets

How will this help me? My students?
This will help students become more engaged in the rehearsal, as well as sharpen their critical thinking skills as they analyze music with you in rehearsal.

What do I need?
A music notation program, a printer, and a scanner.

How much time will this take?
Depends on how good you are with Sibelius or Finale

What do I do?
I generally do this at the beginning of the year or as a pull out lesson on a piece we don't intend to perform in a concert. First, enter ONLY the pitches and rhythms of a piece or portion of a piece into a music notation program like Sibelius or Finale. Leave out any and all expressions, dynamics, composer's notes, lyrics, translations, etc. and only give them the notes themselves.

Rehearsal goes pretty much the same as it would if you passed out the original score, except now the students will be writing in all the dynamics, phrasings, breath marks, pronunciations, and other performance notes as you encounter them in class. I think this opens up a huge opportunity to talk about musical decisions (should we crescendo here or decrescendo?), performance practice (what tempo would be appropriate for a piece from this style period?), articulation, dissonance, etc.

It also may serve to train young musicians in the ways of score markings (or get old musicians to actually do it), and introduce them to new terms and musical vocabulary.

As an alternative to this, you could pass a "blank" piece out (later on in the year once they've had some background knowledge) and ask them to pretend they are the conductor. Ask them to "prep the piece for rehearsal" and do their own score

study, making musical decisions about where to put a slur or breath. Then collect them, scan the best ones, and project them for the whole class for discussion. Have them perform the piece in each of the different ways they were marked up and discuss the pros and cons of all the choices made.

electronically enhanced performances

How will this help me? My students?
Bring your performances into the twentieth century.

What do I need?
Depends on what you want to do (see below)

How much time will this take?
Quite a bit I'm afraid

What do I do?
Many ensembles today are adding more and more electronic audio or visual enhancements to their live performances. I'm not talking about autotuner or studio magic. I mean while we're watching the choir sing, we're watching a video on large screens behind or around the choir. While we're watching the band march or get setup to march, we're hearing a pre-recorded narration or ambient sounds that help us establish a setting.

I have to admit, this isn't something I've experimented with as much as I would like to (I've only done this on one concert), but it's something I'm going to be pursuing for the next few years.

Libby Larsen once said, in her plenary address to the National Association of Schools of Music in 1997,

> *"From my point of view, we are only now ending a musical era that has occupied a thousand years of Western culture, and beginning a new era built around acoustic sound. Ladies and gentlemen, I am suggesting that we now have, along side of the core of classical music education, another core, and that is the core of produced sound. I hope to lead you along the path of my thesis and convince you that the future of music education resides in teaching music rigorously and with the highest standards from both the acoustic and produced sound cores."*

It's just one more way to integrate technology into your traditional, performance-based ensemble in a way that will not only be real to your students, but to your audiences as well.

In the future, I hope to expand this section into an entirely separate book, complete with examples of student work.

organization & operation

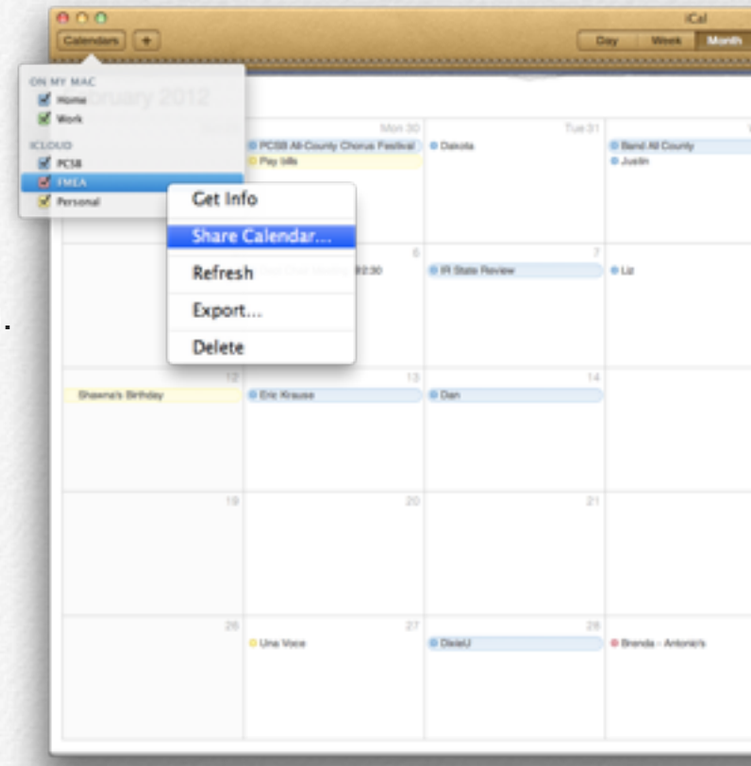
How will this help me? My students?
Less office time, more podium time.

What do I need?
iPhone, iPad, or iPod Touch with iOS 5 or later and a Mac running OS X Lion or later (for all your staff and colleagues)

How much extra time will this take?
Extra? I'm going to *save* you time!

What do I do?
H'okay. So. This section is really just about all the features of using a single OS strategy with the people in your department, articulation chain, and district, and the features a lot of people don't take advantage of within a workgroup.

iCal in iCloud. Sharing a calendar in OS X Lion is as easy as clicking a button. Open iCal on your Mac and click on "Calendars" in the upper-left hand corner of the screen. Then right-click on the calendar you want to share. A pop-up menu appears and you can select "Share Calendar..." from the menu. In the next screen, choose to either share with everyone or only a few people you invite (use their iCloud email addresses). Voila! Everyone now has a shared calendar that they can edit, so now your elementary feeder can put his concert date in just before your department meeting where your choral director will notice the date change on her iPhone. Some districts will even set this up on all their teachers' district-owned iPads with a districtwide calendar that updates when a host makes a change.



FaceTime & Messages. FaceTime and Messages are communication apps that allow video chat (FaceTime) or text chat (Messages) across any Mac or iOS device connected to WiFi (and soon 3G cellular networks). So use FaceTime to chat with the choir on the other bus or the chaperons on the fifth floor. Participate in a meeting that you can't physically make. Use Messages to update other teachers in you department of changes throughout the day or important announcements when an email won't cut it (from your Mac or iPad, of course--we'd never dream of "texting" from our iPhone in class, right?).

And get comfortable with this technology. More and more private lessons (via virtual schools), college auditions, and even job interviews are now being held over video chat lines such as FaceTime. One really creative use of the technology in our district occurred between two middle school bands who actually performed in class together for each other--imagine the virtual collaboration between students in different schools, cities, nations, and around the world!

a la carte

Sections

A Little Taste of Music Technology

If you're not quite willing to jump head first into a music production class, but you'd like to do more than record your chorus or band, these lessons are for you. They are mini-projects you can do as standalone lessons designed for your keyboarding, (non-ensemble) guitar, music appreciation, or any other non-ensemble music class. They are presented here in no particular order, and all require varying degrees of preparation time, background knowledge on the students' part, software (though they all require access to computers--see Chapter Five: Making Lemonade for solutions if this is problematic in your situation), and musical goals. Some of them even seek to achieve extra-musical goals.

Though not formal lesson plans, these are project ideas that I have personally taught at the high school level with some degree of success. You have the benefit of my "trial runs", and most of these ideas are improved from the versions I actually developed based on experiences with my students.

The objectives are pretty similar among them. Students will learn to compose original music using technology and whatever theory you choose to present in your lesson. The evaluation method (in my humble opinion) should be similar for each too: an in class presentation, similar to a recital for a piano or a guitar class. You don't have to put these projects on your Fall Con-

cert (although if you do it right, you should want to!), but all music deserves to be heard.

Please remember, these are only project *ideas*. I find that most teachers dismiss fully fleshed out lesson plans because they inevitably find too many things they'd want to change and decide it isn't worth the effort. So use these ideas to kickstart your planning, but tailor them to fit your students, your available materials, and your needs. Also, I couldn't provide full "methods" sections or directions for any of the lessons, because the technical portions (where to click, how to import or export) would not only vary between what software you choose (did you use GarageBand or Mixcraft?), but which *version* of the software you happen to have (do you have Sibelius 6 or Sibelius 7?).

Finally, if there is a project here you would like to attempt and have technology-related questions, first do a Google search (I'm not even kidding here), and then if that fails, email me and make sure to include what software programs you are using. I'm really excited that you expanding your program to include music for a new population of students at your school, and I genuinely want to do whatever it takes within my power to help you be successful.

exploring form & texture

Focal Concepts
musical form, musical texture and instrumentation

Prerequisites
none

Software Needed
digital audio workstation (DAW)

Prep Time
none, thanks to me

For whatever reason, when you introduce a DAW like GarageBand or Logic to students for the first time, they often run through all the pre-made loops, dragging anything and everything under the sun into the arrange area in wild and random patterns. They tend to pick “sounds they like” and combine them in ways that later on frustrate them. I like to think of this phenomenon as similar to a young child at a buffet bar. Young children will run to the bar grabbing up every food they enjoy: chicken nuggets, cookie dough from the ice cream bar, pepperoni from the salad bar, etc., but it rarely represents a well balanced (or even complementary) meal. They lack the ability and knowledge to think “I like all these foods, but they may not taste good together” or “these foods don’t form a complete meal”.

So to it is with students cast into the wonderful world of professional samples with little to no instruction. In literally minutes they will create a 156 measure work of art with 72 tracks representing their favorite rock drums, hip hop basses, techno synthesizers, and inevitably a smattering of some of the vocal loops that say “yeah” or “unh”.

Unless they find the explosions. Then it’s pretty much just explosions for 20 minutes.

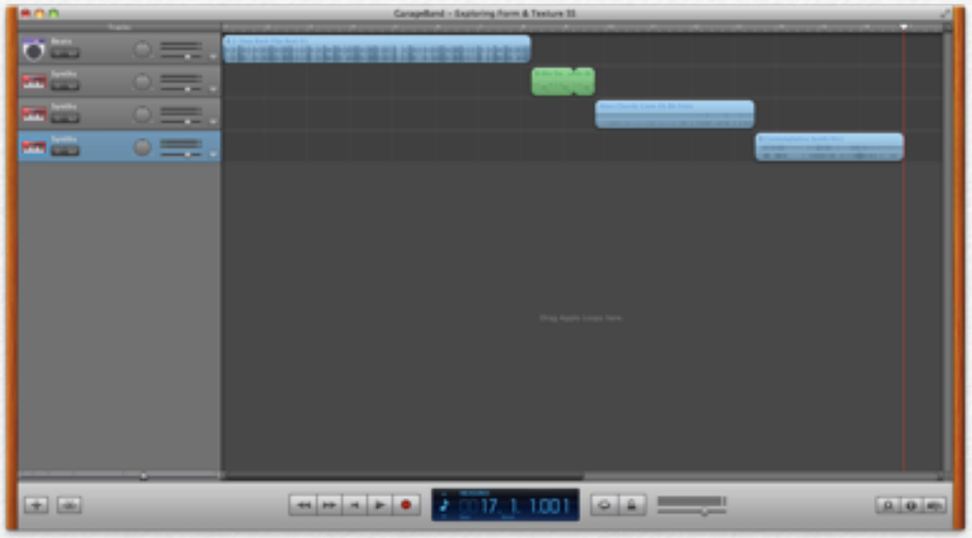
But we have to teach them music typically occurs in multiples of four measures. We have to teach them about song form. We have to teach them about fundamentals of texture. This is where the loops come in handy. I like to start with these simple guidelines:

1. Create a 16 measure phrase that utilizes one beat/ percussion loop, one bass or low-sounding loop, and one treble or high-sounding loop.

2. Four measures into the song, add one more treble loop.

3. Eight measures into the song, add one more treble loop.

They should now try them in different combinations, but you will need to keep an eye on their form and texture. See the screen-shots below to see some common student errors and how to correct them.



Here is what I typically see with new students. None of the loops are aligned to the grid by measure, some are irregular lengths, and the texture is always one solo loop.

Here is what I usually see next. The loops are now aligned in an appropriate form - here, 16 measures long with loops repeating in 4 and 8 measure intervals, but the texture is constant. Additionally, all the instruments in this example are beats / percussion sounds.

Here is the goal: a varied texture, still aligned to the grid by measure in 4 and 8 measure intervals with multiple timbres and a decent form. Now there is a beat, a bass, and three treble instruments with staggered entrances.

melodic study

Focal Concepts
musical phrase, melodic contour, musical consonance and dissonance

Prerequisites
note names on the treble clef, note names on the bass clef, rhythmic durations, meter

Software Needed
digital audio workstation (DAW), notational program

Prep Time
you could probably do this on your planning period

Students will compose the melody for a simple AABA' song. You will provide the chord progression, allowing them to focus on composing an aesthetically pleasing melody. If you choose, you may also wish to provide a poem for lyrics, or allow them to write their own.

Using a DAW, you should compose a background track using a simple, pop-like chord progression. An example:

Am: Am | F | C | G

Your song should be A A B A' or some other simple form. To save time, you can use loops if those are available in the DAW you've chosen. Make it interesting, but keep it simple (we want to hear the melody when it's done!).

Focus on teaching students about elements of melodic contour: what is conjunct vs. disjunct, what makes an interesting contour (or maybe, "what is contour"), what notes belong to the key I have chosen (in my example, A minor), how can I write rhythms that make my melody interesting and also serve the stresses of the lyrics? I believe in listening, and I think the easiest way to approach these questions is to open the lesson by listening to excerpts of pop music you select that aurally illustrate the concepts.

As students listen to your prepared models and each others' work, they may ask "why does my project sound bad (or good)?" This will segue perfectly into a discussion of the concepts of consonance and dissonance.

Avoid associations like “good” or “bad”, but rather draw their attention to “how much dissonance” or “what kind of dissonance” is being used in the music.

Have the students compose their melodies in a notational program, and then export that data as a MIDI file to be combined with the background track you’ve created in a DAW. Finally, present the projects for the group. If you have the capability, allow students to record themselves singing the lyrics or playing an instrument in their song.

cover song

Focal Concepts
recording and editing vocals, improvisation, instrumentation, composing original beats

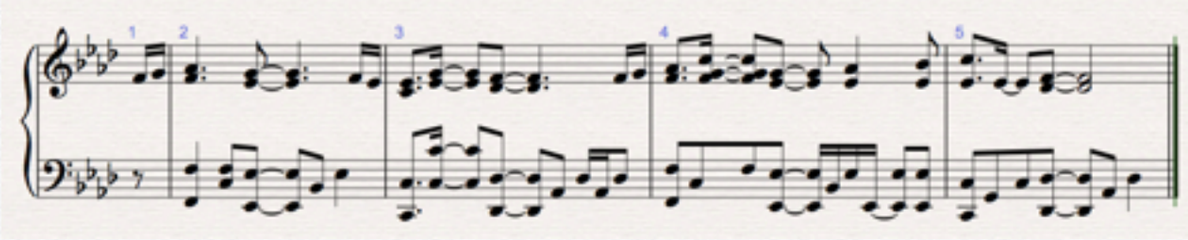
Prerequisites
texture, form, rhythmic notation, steady beat

Software Needed
digital audio workstation (DAW)

Prep Time
eh, maybe a weekend or so? Unless you can play piano. Yeah pianists can do everything faster.

This is one of my students' favorite projects that I use as a gateway project to writing original songs. It is relatively simple, and easy to tailor to your specific goals and students' needs.

I pre-select a handful of pop songs that cover a variety of genres (and yes, I always let the students make suggestions, and then I listen and filter and do the "teacher thing" and pick ones that are appropriate and beneficial to the lesson). I use a MIDI keyboard controller to play a sort of piano reduction from ear. I roughly imitate the chording patterns and outline the melody and bass in my pinkies (and yes I am well aware of how that sounds, but that's the best way I can think of to describe what I do). Here is a screenshot of the MIDI data I recorded for one of our covers:



Next, the students import my recorded MIDI files into the DAW and begin changing the instruments, adding their own bass lines, beats, and recording the vocals (if students insist they are "not singers" I do not fight them on it in this class - I allow them to invite any friend at school to come in and record sung or rapped portions). It works kind of like a molding sculpture project in an art class. At the end of the project, my "mold" must be completely obscured by the new materials they create, if not completely deleted.

I also try to introduce them to a few pairs of originals and covers (my favorites lately have been Beatles songs and their cover counterparts from Across the Universe). The students

should not be trying to create an exact duplicate of the original - they should be *covering* it.

This project does not require much traditional music knowledge in that the song is already written for them, however, it is a great stepping stone for them to their own original song. You could start by requiring them to write their own original lyrics to the song's melody. Then you could have them improvise a new melody or rap for the B-section or verses. Finally, have them compose their own original melodies and songs using chords you provide in a traditional song form pattern.

One of the beneficial side effects to this project is that once the students are finished, they can not only hear, but visually "see" the musical form as it is represented in the DAW's UI. They can count 16 measure phrases and see A and B and the patterns of repetitions in a "real" piece of music.

film scoring

Focal Concepts
advanced composition, orchestration

Prerequisites
tonal harmonization, motivic development, instrumentation, orchestration

Software Needed
DVD encoder (such as HandBrake), linear video editor (such as iMovie), digital audio workstation (DAW), notational program

Prep Time
do this at home (it will take time to prep the video clips)

This seems like such a simple idea, but I cannot begin to tell you the difference this project made for some of my students. The premise is this: rather than use open-ended creativity or poems as a basis for writing a song, we give them a prompt (and a visual one at that).

Select a video clip from a film or movie (trust me on this--it's best if you have the luxury to select a few choices for them or they will all have an "opinion" of the movie you selected). Use a video editor (such as iMovie) to remove the original audio from your selected video clip(s).

I am not going to address the legalities of ripping DVD content or "what's ok for education", but please refrain from uploading entire seasons of your favorite TV show to torrent sites.

Distribute the clips to your students, have them watch the clips and then import the one they choose into a DAW that supports video. I would encourage you to have them compose most of the music in a notation program first, then import that MIDI data into a DAW where the instruments can be edited. If they try to score directly to the video (or worse, play notes into the DAW using a MIDI controller in real time) they will end up progressing more slowly than if they consider the video as more of a "prompt" for their creative inspiration,

rather than a strict framework in which they must force their music to fit.

Have the students compose their melodies in a notational program, and then export that data as a MIDI file to be combined with the background track you've created in a DAW. Finally, present the projects for the group. If you have the capability, allow students to record themselves singing the lyrics or playing an instrument in their song.

cheerleading or winterguard show

Focal Concepts
basic composition

Prerequisites
none

Software Needed
digital audio workstation (DAW), notational program

Prep Time
don't wait until the night before

An alternative to using a scene from a film or movie as a prompt is to use an event or show. The concept is basically the same, except obviously the purpose has changed. Additionally, as most music for these sorts of events leans more towards the "pop" genre (when compared to the film scoring project), you may use this with beginning students or students who have more interest in dance, hip-hop, or techno music.

If you have a great working relationship with a cheerleading coach or guard instructor, ask them to perform part of one of their existing routines to a click track or metronome set at a particular tempo. Video tape the performance and import that into the DAW just as you had done with the films. Controlling the tempo of their dance or routine is important to ensure any beats they write or quantization of MIDI data they use has an accurate tempo on which to lock. I actually use this project to create competitions for my students: if the cheerleading coach or guard instructor decides to use a student composition in a show or a game, they win [insert prize here].

the discovery project

Focal Concepts
aural skills and musical aesthetic

Prerequisites
none

Software Needed
notational program

Prep Time
in the car, on the way to work, between coffee shop and the gas station

This project actually developed after a discussion with my supervisor when she came to my first “concert”. We had an arts expo event at my school that showcased a wide variety of student artwork: drawings, paintings, dance, spoken word poetry, and music from my new digital music program. I invited her to the event, and after she had listened, we discussed everything from the practical (you need more what?!) to the philosophical (how do people learn to experience music? To compose it?).

She worried that a curriculum too heavy in formal theory would predispose students to composing a “certain way”, or more generally, stifle their creativity by creating a set of accepted rules and procedures (consider what the Florida Writes/FCAT 5-Paragraph Methodology has done to students’ writing abilities over the last decade).

The Discovery Project is going to sound really open ended, and maybe even a little like an instructional cop-out. It’s based on the philosophy that children experience music aurally first, then systematically second (“rote before note”). It’s purpose is to completely remove all risk of stifling student creativity with a rubric that implies “do this to earn an A”.

You’re going to hand them the keys to the car, give them no instruction, and then strap yourself in.

All you need is a notation program and this is one I can actually provide some steps for:

Step 1

Students will open a music notation editor (Sibelius, Finale, or Noteflight)

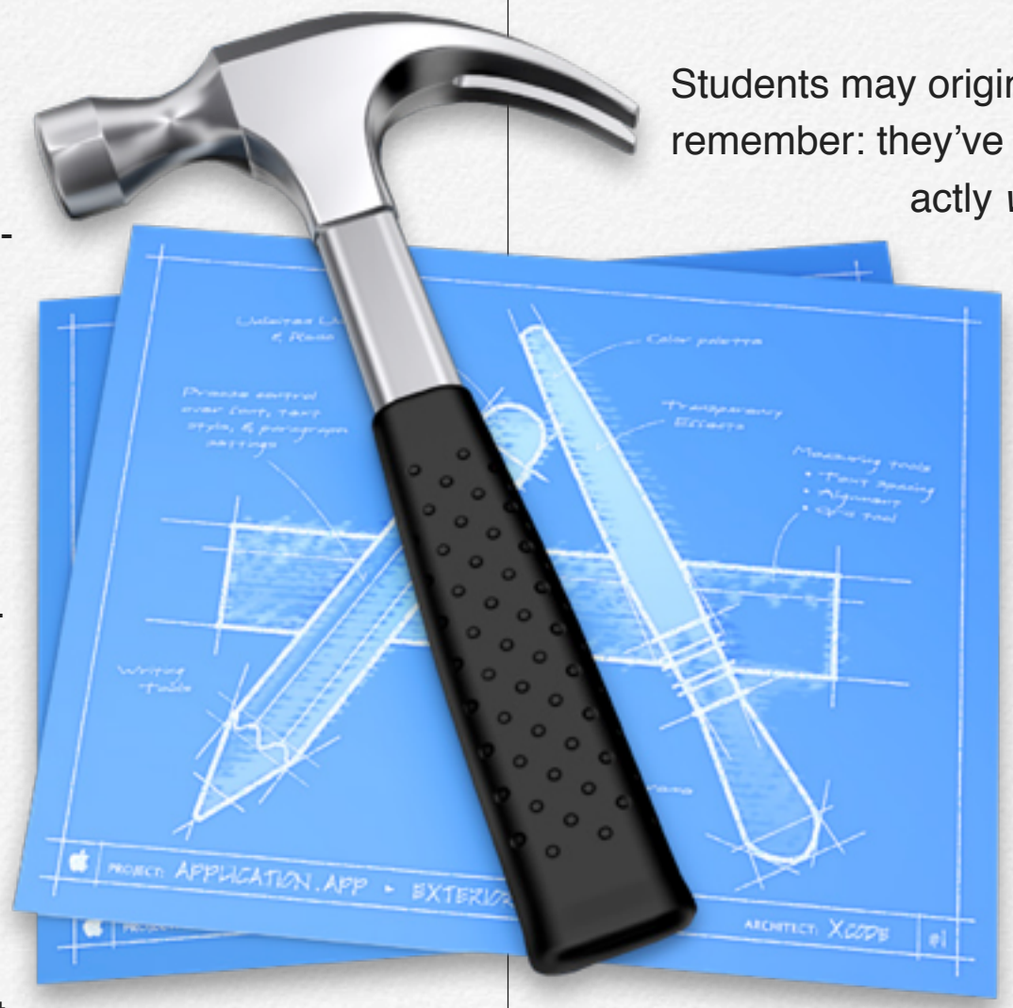
Step 2

Students will enter notes in whatever combinations they desire, creating a musical composition completely by ear.

Step 3

Students will listen to each others' compositions. You will lead them in a discussion about which pieces they liked (and why!), what they liked in their own pieces (and why!), and what they did not like in their own pieces (and why!).

Your discussion should include the musical "why's", which you will most likely have to provide at first. For example, Susie may say, "I don't like my melody because I think it's too boring", and you could at that point address melodic contour variation using Susie as an example for the class. Timmy might say, "why does this section of my music sound wrong", and you could discuss consonant and dissonant harmonies.



Step 4

Rinse and repeat.

Students may originally be very frustrated with this--remember: they've been taught to expect to be told exactly *what* to do, and how to "get an A". I think the magic in this project is all about how you approach it. Don't start by saying, "Open up Sibelius and write whatever you want - there are no rules. You have three weeks." You need to strike a balance between making them understand that there is no specific project length or number of instruments. Emphasize that they need to listen and adjust notes by ear. If you have the luxury of MIDI controllers have them play around a little first (even if they don't have any keyboarding experience).

The point of this project is for them to be able to freely create--something we've pretty much killed in our children. I think this is by far the most difficult project for teachers (and maybe even students), but can be the most powerful. I don't think you

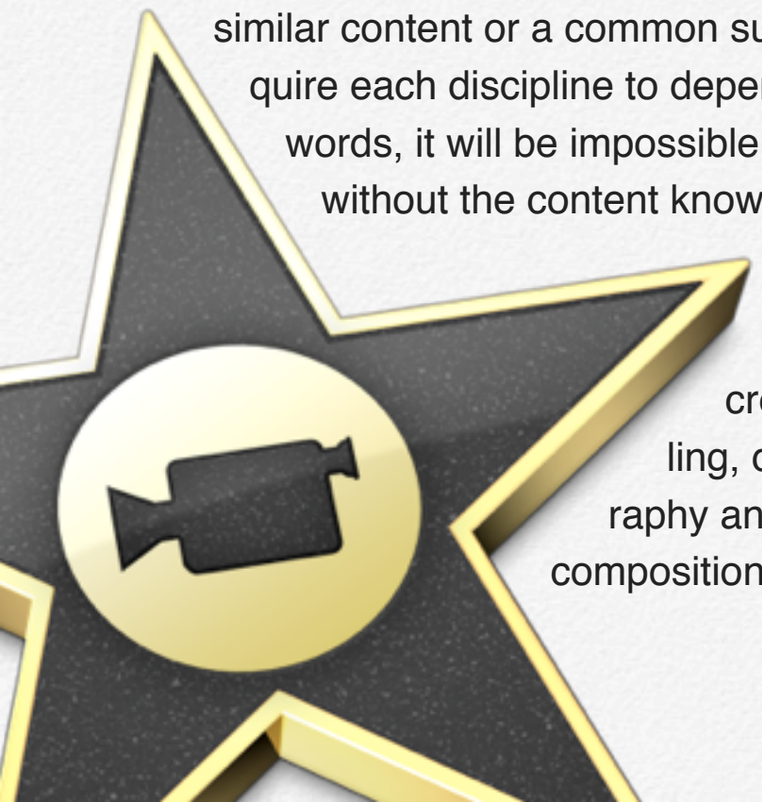
should make this your entire year, but I think it's a great way to introduce the technology to them (and maybe for some of them, if you're lucky, music itself). I like to use the analogy of handing them a ball of clay and saying, "create for me a reflection of yourself". I warn them that if they were to take it literally, they would complain that they didn't have the artistic skills to create a model of their own physical likeness.

"So don't," I reply.

multidisciplinary art: the movie project

Multiple Talents. Multiple Media.

Interdisciplinary lesson plans rarely work. On the odd occasion a few teachers do get together, they often have to develop artificial connections between the disciplines, or the content is so separated, it's really just two lessons that happen to cover similar content or a common subject. This project will require each discipline to depend on the other. In other words, it will be impossible to complete the project without the content knowledge and product of each part.



Focal Concepts
creative writing and storytelling, drawing/2D art, cinematography and video editing, music composition and film scoring

Prerequisites
none

Materials Needed
iLife Suite (iPhoto, iMovie, GarageBand), scanner, video camera, USB microphone, index cards (for storyboarding), art supplies (for creating props, costumes, and sets)

Prep Time
about the time it will take to have lunch with an art teacher, English teacher, drama teacher, and a TV production teacher or media specialist

This project will take students through a very basic outline of the process of filmmaking.

Screenwriting. Students will develop an original script for a short film that demonstrates a good concept of plot structure, conflict, and character development with the assistance of an English and drama teacher.

Storyboarding. Students will then translate their stories from script to screen by essentially drawing the entire film on index cards under the direction of an art teacher. Students should take care to make sure their storyboards act as a true "frame" for what the camera "sees"--we should be able to look at the fin-

ished movie and hold the cards up side by side and see the same thing. Far too often students simply illustrate what is going on in their story, but don't draw exactly what we will see on screen.

Storyboards should then be scanned into a Mac and imported into iPhoto. Students should create a rough movie in iMovie using the storyboard cards, adding commentary and/or dialogue throughout where appropriate. This planning video will assist them in composing the film score and choosing sound effects as well.

Cinematography. Students will now capture the required video for their project. They can choose to do stop animation using paper or clay (the program Frame by Frame is a free application that will help with this) or live action video capture. Art teachers and drama teachers will be needed here to coach camera angle, lighting, and acting.

Film Scoring. Finally, students will create a musical score to accompany their film, as well as add in any voiceover dialogue and sound effects. A music teacher can assist with the music composition, and a drama teacher can assist with any voice acting needed for dialogue.

Premiere. These videos should be premiered at an evening screening and/or hosted on a video site (per your district's guidelines) such as YouTube or Vimeo.

COURSE TITLE: **MUSIC COMPOSITION & TECHNOLOGY 1: FUNDAMENTALS OF MUSIC**
SUBJECT AREA: Music
DOE CODE: 1300###
CREDIT: (1.0) ONE ELECTIVE CREDIT; SATISFIES FINE ARTS REQUIREMENT
PREREQUISITES: None

COURSE OVERVIEW

Students will learn basic fundamentals of music notation, scales & intervals, triad and seventh chord structures, and basic principals of part writing. Melodic structure and construction will also be studied, with careful attention paid to melodic form, contour, and harmonic implication. Students will learn to use music notation software, and explore composing music by ear using a variety of music software.

COURSE OBJECTIVES

1. Students will develop written compositional and analytical skills in standard western musical notation of pitch and rhythm.
2. Students will develop written compositional and analytical skills scale structure and key recognition of all western modes, interval recognition, and triad and seventh chord structures
3. Students will begin their studies of melody and will write and analyze melodies based on their contour, their form, their tendency tones, and their aesthetic.
4. Students will develop proficiency in [AVID's Sibelius] music notation software.
5. Students will develop proficiency in [Apple's GarageBand] digital audio workstation.

COURSE PLANNER

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
1	Fundamentals of Pitch: notation, clefs, extended musical vocabulary, naming notes on the treble & bass clefs		Orientation to the Mac: the Finder, Spotlight, printing and emailing PDFs; Basic note entry in Sibelius 7
2			
3	Fundamentals of Rhythm: durational symbols, beat and meter, simple time signatures	Rhythmic Dictation: simple time signatures	FaceTime, QuickTime X; Exploring the Ribbon in Sibelius 7
4	Major Scales and Scale Degrees		
5	Key Signatures and Identification	Dictation: dotted rhythms	
6	Finding the relative minor key, writing	Melodic Dictation: stepwise, major, simple	

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
	natural minor scales	time signatures	
7	Writing harmonic and melodic minor scales		Exploring the GarageBand Window, Working with Apple Loops, Browsing and Adding Loops to the Project, Arranging Loops and Tracks in the Timeline
8			
9			
10	Other modes	Dictation: compound time signatures	Duplicating Tracks, Panning Tracks, Transposing a Region in the Editor, Finishing and Sharing Projects
11			
12	Melodic Design: Contour, Form, and Tendency Tones	Dictation: minor melodies	Exporting MIDI Data in Sibelius, Importing MIDI Data in GarageBand
13			
14	Writing Simple Melodies		Sibelius Melodic Study
15			
16			
17			
18			
19	Intervals: Generic	Interval recognition: 4ths, 5ths, and 8ves	Identifying Regions and Tracks, Recording a New Software Instrument Part
20	Intervals: Specific		Trimming and Looping a Region, Naming Regions and Changing Track Icons
21			
22	Triad Structure	Dictation: melodic skips along the tonic and dominant triads	Fixing, Arranging, and Mixing Music in GarageBand, Recognizing Timing Issues
23			
24		Intervals: 3rds and 6ths	Quantizing a Software Instrument Region, Working with Groove Matching, Exploring Flex Time in the Editor
25	Triads in Context and Harmonic Function		
26			Working with Musical Notation, Adjusting Project Tempo, Showing the Project Notepad
27	Seventh Chord Structure	Intervals: 2nds and 7ths	Adding Effects to a Track, Adding Effects to the Overall Song
28			
29			Working with Volume Curves, Showing Volume Curves, Adding and Adjusting
30	Seventh Chords in Context and Harmonic		

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
	Function		Control Points
31	Harmonizing a Simple Melody	Identifying Chord Qualities: Triads and Seventh Chords	GarageBand Project
32			
33			
34			
35			
36			

SUGGESTED COURSE TEXTS

Clendinning, Jane Piper and Elizabeth West Marvin. The Musicians Guide to Aural Skills. 1st ed. W.W. Norton, 2004.

Kostka, Stefan and Dorothy Payne. Tonal Harmony: With an Introduction to Twentieth Century Music. 6th ed. McGraw-Hill College, 2008.

Ottman, Robert and Nancy Rogers. Music for Sight Singing. 7th ed. Prentice Hall, 2006.

Scoppettuolo, Dion and Mary Plummer. Apple Training Series: iLife '11. 1st ed. Peachpit Press, 2010.

Spencer, Peter. The Practice of Harmony. 5th ed. Pearson/Prentice Hall, 2004.

COURSE TITLE: **MUSIC COMPOSITION & TECHNOLOGY 2: FUNCTIONAL HARMONY: DIATONIC & SECONDARY FUNCTIONS**
SUBJECT AREA: Music
DOE CODE: 1300###
CREDIT: (1.0) ONE ELECTIVE CREDIT; SATISFIES FINE ARTS REQUIREMENT
PREREQUISITES: B or better in Music Composition & Technology 1

COURSE OVERVIEW

Students will learn the structure of functional harmony through sixteenth century part writing exercises. They will compose and analyze diatonic harmonic progressions and begin an exploration of secondary dominants and leading tone chords. Students will begin a study of an advanced digital audio workstation, learning its basic functions.

COURSE OBJECTIVES

1. Students will master principals of voice leading in the sixteenth century as a foundation for western tonal harmony.
2. Students will study functional, logical harmonic progression as a foundation for western tonal harmony.
3. Students will study simple musical form.
4. Students will identify, analyze, and compose music containing simple and complex nonchord tones.
5. Students will learn to prepare dominant harmonies with simple secondary functions.
6. Students will learn basic functions of [Apple's Logic Pro] digital audio workstation.
7. Students will take and pass the AP Music Theory Examination.

COURSE PLANNER

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
1	Review of triad and seventh chord structure, review of functional harmony (Roman numeral analysis)	Review: Rhythmic Dictation in simple and compound time signatures	
2	Chordal Inversion	Review: Melodic Dictation of stepwise melodies in major and minor, in simple and compound time signatures	Orientation to Logic, Exploring the Interface, Starting a Project with Apple Loops, Navigating the Project
3	Recognizing and realizing figured bass,	Melodic Dictation & Sight Singing:	
4	principals of voice leading, different types	melodies with skips that outline the tonic	Building an Arrangement, Mixing the

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
	of motion	and dominant triads	Song, Exporting the Mix
5	Root Position Part Writing with Roots a 4th (5th) Apart	Melodic Dictation & Sight Singing: melodies with leaps of a 4th, 5th, or 8ve	
6	Root Position Part Writing with Roots a 3rd (6th) Apart		Setting Up Digital Audio Recording, Recording a Single Track, Recording Additional Takes
7	Root Position Part Writing with Roots a 2nd (7th) Apart	Melodic Dictation & Sight Singing: melodies with leaps of a 3rd or 6th	
8	Triads in First Inversion		Recording Multiple Tracks, Punching In and Out, Changing Recording and Metronome Settings
9		Melodic Dictation & Sight Singing: melodies with leaps of a 2nd or 7th	
10	Triads in Second Inversion		Comping Takes, Assigning Mouse Tools, Editing Audio Regions in the Arrange Area
11		Harmonic Dictation: diatonic harmonic progressions in major keys with emphasis on the tonic and dominant harmonies	Deleting Unused Audio Files, Quantizing an Audio Drum Recording
12	Harmonic Progression and the Circle of Fifths		Manipulating the Waveform with the Flex Tool
13	Differences in the Minor Mode		
14	Cadences and Basic Musical Forms	Harmonic Dictation: inversions	Editing Audio Destructively in the Sample Editor
15	Part Writing Diatonic Seventh Chords		
16		Harmonic Dictation: diatonic harmonic progressions in major and minor keys with emphasis on cadential patterns and preparation of the dominant	
17			
18			
19	Nonchord Tones 1		Recording MIDI, Quantizing MIDI Recordings
20	Nonchord Tones 2		Merging Recordings into a MIDI Region, Recording MIDI Takes
21			Using Punch Recording, Using Step Input Recording, Filtering Incoming MIDI Events
22	Secondary Dominants	Harmonic Dictation: secondary functions	Programming in the Piano Roll Editor, Editing a MIDI Recording

<table>
<tr><th>WK</th><th>WRITTEN THEORY</th><th>AURAL THEORY</th><th>TECHNOLOGY</th></tr>
<tr><td>23</td><td rowspan="3"></td><td rowspan="5"></td><td>Using the Score Editor, Editing Notes with a MIDI Keyboard</td></tr>
<tr><td>24</td><td>Editing Note Velocity Using Hyper Draw</td></tr>
<tr><td>25</td><td rowspan="3">Secondary Leading Tone Chords</td><td>Editing MIDI Continuous Controller Events, Editing in the Event List</td></tr>
<tr><td>26</td><td rowspan="2">Programming a Drum Pattern in Ultrabeat</td></tr>
<tr><td>27</td></tr>
<tr><td>28</td><td rowspan="2">Begin Practice AP Exams</td><td rowspan="2">Melodic Dictation & Sight Singing: melodies using a raised 4th scale degree and flatted 7th scale degree</td><td>Changing the Groove in the MIDI Editors, Creating a Snare Roll Using the Hyper Editor</td></tr>
<tr><td>29</td><td rowspan="8">Converting a MIDI Sequence into an Audio Region, Converting an Audio Region into a Sampler Instrument Track</td></tr>
<tr><td>30</td><td colspan="2" rowspan="8">Preparation for the AP Music Theory Exam</td></tr>
<tr><td>31</td></tr>
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<tr><td>34</td></tr>
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<tr><td>36</td></tr>
</table>

SUGGESTED COURSE TEXTS

Burkhart, Charles. Anthology for Musical Analysis. 6th ed. Thompson/Schirmer, 2004.

Clendinning, Jane Piper and Elizabeth West Marvin. The Musicians Guide to Aural Skills. 1st ed. W.W. Norton, 2004.

Kostka, Stefan and Dorothy Payne. Tonal Harmony: With an Introduction to Twentieth Century Music. 6th ed. McGraw-Hill College, 2008.

Nahmani, David. Apple Pro Training Series: Logic Pro 9 and Logic Express 9. 1st ed. Peachpit Press, 2009.

Ottman, Robert and Nancy Rogers. Music for Sight Singing. 7th ed. Prentice Hall, 2006.

Riemenschneider, Albert. 371 Harmonized Chorales and 69 Chorale Melodies with figured bass by Johann Sebastian Bach. G. Schirmer, 1941.

Spencer, Peter. The Practice of Harmony. 5th ed. Pearson/Prentice Hall, 2004.

COURSE TITLE: **MUSIC COMPOSITION & TECHNOLOGY 3: ADVANCED CHROMATICISM & INSTRUMENTATION**
SUBJECT AREA: Music
DOE CODE: 1300###
CREDIT: (1.0) ONE ELECTIVE CREDIT; SATISFIES FINE ARTS REQUIREMENT
PREREQUISITES: B or better in Music Composition & Technology 2

COURSE OVERVIEW

Students will learn expand their harmonic vocabulary to include simple modulatory techniques, the Neapolitan chord, augmented sixth chords, and other modern preparations of the dominant. They will begin their study of orchestration with an in-depth look at single-family instrumentation for bowed and plucked strings, woodwinds, brass, percussion instruments (both definite and indefinite pitch), and keyboards. Students will demonstrate content knowledge through progressive compositional exercises. At the end of this course, students may choose to take the Apple Certification Exam in Logic Pro.

COURSE OBJECTIVES

1. Students will write and analyze secondary functions, the Neapolitan chord, and common forms of augmented sixth chords.
2. Students will demonstrate mastery in mode mixture and use of borrowed chords.
3. Students will compose harmonically unique predominant progressions.
4. Students will learn instrumentation techniques for individual orchestral families.
5. Students will arrange condensed scores for small ensembles or orchestra families.
6. Students will master advanced techniques in [Apple's Logic Pro] digital audio workstation.
7. Students will take and pass the Logic Pro Level 1 User Examination.

COURSE PLANNER

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
1	Review of Secondary Dominants and Leading Tone Chords		
2	Introduction to Modulation: Modulations Using Diatonic Common Chords		Matching the Project Tempo to an Audio Region's Tempo
3	Some Other Modulatory Techniques		
4	Mode Mixture & Borrowed Chords		Working With Apple Loops, Creating

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
5			Apple Loops
6	The Neapolitan Chord		Change the Playback Pitch and Speed with Varispeed
7			
8	Augmented Sixth Chords 1		Time Stretching and Tempo Matching with Flex Time Editing, Creating a Turntable or Tape Slowdown Effect
9			
10	Augmented Sixth Chords 2		
11			
12			
13	Instrumentation: Bowed & Plucked String Instruments		Previewing the Song, Using Existing Material to Fill in Parts
14			Adding and Deleting Sections, Muting Elements, Cleaning Up Noisy Recordings
15	Orchestration: Scoring For Strings		Previewing the Final Mix, Using the Amp Designer, Using the Pedalboard
16			Adjusting Levels, Choosing Pan Positions
17			Choosing EQ Settings
18			
19	Instrumentation: The Woodwind Choir		Using Delay and Reverberation
20			Using Dynamic Processing Plug-ins
21	Orchestration: Scoring for Woodwinds		Creating and Editing Offline Automation
22			Recording Live Automation, Using Control Surfaces, Exporting the Mix
23	Instrumentation: Brass		
24			
25	Orchestration: Brass		**Logic Pro Examination Prep**
26			
27	Percussion Instrumentation: Instruments of Definite Pitch (Idiophones-Mallet, Idiophones-Shaken or Stroked, Membranophones, Chordophones, and Aerophones)		
28			
29			
30	Percussion Instrumentation: Instruments of Indefinite Pitch (Idiophones-Metal,		
31			

WK	WRITTEN THEORY	AURAL THEORY	TECHNOLOGY
32	Idiophones-Wooden, Membranophones, Aerophones)		
33	Instrumentation: Keyboard Instruments (Piano, Celeste, Harpsichord, Organ, Harmonium)		
34			
35			
36			

SUGGESTED COURSE TEXTS

Adler, Samuel. The Study of Orchestration. 3rd ed. W. W. Norton & Company, 2002.

Burkhart, Charles. Anthology for Musical Analysis. 6th ed. Thompson/Schirmer, 2004.

Clendinning, Jane Piper and Elizabeth West Marvin. The Musicians Guide to Aural Skills. 1st ed. W.W. Norton, 2004.

Kostka, Stefan and Dorothy Payne. Tonal Harmony: With an Introduction to Twentieth Century Music. 6th ed. McGraw-Hill College, 2008.

Nahmani, David. Apple Pro Training Series: Logic Pro 9 and Logic Express 9. 1st ed. Peachpit Press, 2009.

Ottman, Robert and Nancy Rogers. Music for Sight Singing. 7th ed. Prentice Hall, 2006.

Spencer, Peter. The Practice of Harmony. 5th ed. Pearson/Prentice Hall, 2004.

COURSE TITLE: **MUSIC COMPOSITION & TECHNOLOGY 4: ORCHESTRATION**
SUBJECT AREA: Music
DOE CODE: 1300###
CREDIT: (1.0) ONE ELECTIVE CREDIT; SATISFIES FINE ARTS REQUIREMENT
PREREQUISITES: B or better in Music Composition & Technology 3

COURSE OVERVIEW

Students will study and analyze full orchestration techniques, large-scale forms, and film scores. They will compose and arrange for various sized ensembles from smaller ensembles to modern day full orchestras. Students will also continue their study into advanced techniques in industry standard digital audio workstations.

COURSE OBJECTIVES

1. Students will demonstrate all harmonic knowledge through compositional and analytical exercises.
2. Students will study scoring for large orchestras and other large form ensembles.

COURSE PLANNER (still under review)

Unit 1 – Orchestration: Scoring for Orchestra
Unit 2 – Orchestration: The Orchestra as Accompanist
Unit 3 – Orchestration: Transcribing for Orchestra
Unit 4 – Preparation of the Score and Parts

SUGGESTED COURSE TEXTS

Adler, Samuel. The Study of Orchestration. 3rd ed. W. W. Norton & Company, 2002.

Burkhart, Charles. Anthology for Musical Analysis. 6th ed. Thompson/Schirmer, 2004.

Clendinning, Jane Piper and Elizabeth West Marvin. The Musicians Guide to Aural Skills. 1st ed. W.W. Norton, 2004.

Dvorin, David. Apple Pro Training Series: Logic Pro 9 Advanced Music Production. 1st ed. Peachpit Press, 2010.

Ottman, Robert and Nancy Rogers. Music for Sight Singing. 7th ed. Prentice Hall, 2006.

Spencer, Peter. The Practice of Harmony. 5th ed. Pearson/Prentice Hall, 2004.

making lemonade from real lemons

Sections

1. **Beg, Borrow, and Asset Transfer**
2. **Freedom Isn't Free (But Freeware Is)**
3. **We Need More Lemon Pledge (What To Do When Your Administration Says, "No, No.")**

For the 99%

Not everyone has a multi-million dollar budget to build an Apple Store right on their campus. But you might be surprised how much technology is around you that you never noticed before (because you weren't looking for it). This chapter will cover strategies that I have used or known friends to use in their schools to work with what we have. Everything presented in the following pages is either free or nearly free. I also give some ideas for working with your administration to help them gain confidence in you and your program. Remember--this is so new (even to us) that they may have little to no faith in a program in "music technology"...

...but you will not be brought down by uncooperative citrus.

beg, borrow, and asset transfer

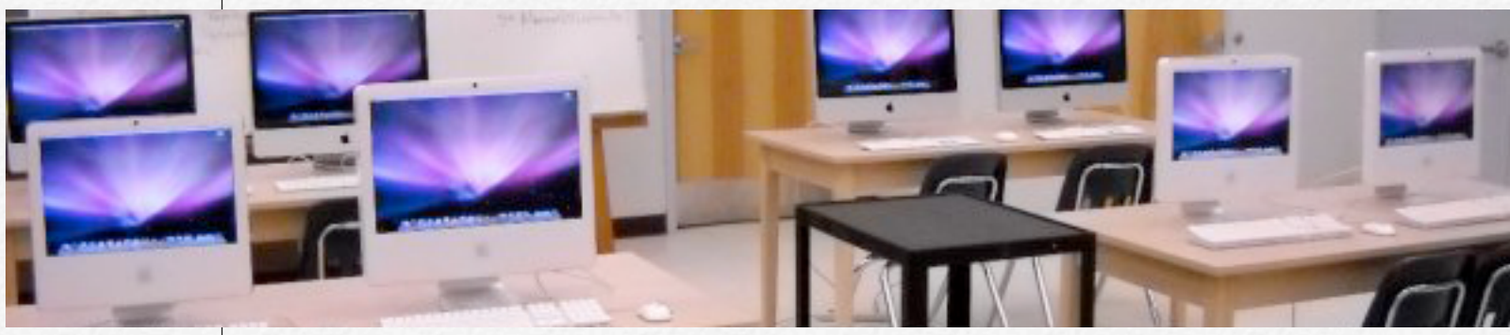
Most people assume that only schools with big budgets can accommodate a technology program of any kind. The first music technology "class" I ever taught was after school in the TV Production lab in the media center when no one was using it. Now that the program has grown, my superiors have decided to budget money to support it--but I had to grow it first. Here I offer some possible solutions that most any school with little or no budget can afford.

Solution #1: Media Center and/or TV Production Lab

Most schools have some sort of media center or TV Production computer lab that is checked out by teachers on an as-needed basis, or (in the case of TV Production) only used one or two periods a day. See if you can work with your media specialist or TV Production teacher to use the lab when it isn't in use, or even during lunch or after school if necessary.

Solution #2: Art Labs

Some schools are fortunate to have art labs for the visual arts teachers. The benefit of these is that they are typically Macs, meaning you won't have to buy additional software (see my discussion of the pros and cons of the Mac and Windows platforms later). If your art teacher uses his or her lab every day, every period, see if they'd be willing to let you teach your class in their lab during his or her planning period. Coordinate with your administration to get your new class on the schedule during the planning period. They may be more willing to help you knowing you've gone the extra step to save them some money.



Solution #3: Mobile Learning Labs

A few schools have begun investing in mobile learning labs. These are typically large carts that have slots for laptop computers (Mac or PC) and, in a few instances, a WiFi router. My

school uses the labs for our math and reading classes, but they are not always in use, and (as in the case of the art labs), all teachers have a planning period. The advantage here is that if this lab can be checked out to you for one period every day, you can have the students use the same computer each day.

Solution #4: Teacher-Issued Computers

I have yet to hear of a school district that does not issue teachers computers to use email and enter attendance and grades. If you have a computer and can borrow or check out a projector from the media center, you can do demonstrations on the board using web based freeware (discussed in the next section) and have students work at home or in the media center after school. This is of course the most desperate option, and I would only recommend this in an after school setting, not as a regular class.

~~An older PC laptop~~ A lemon, similar to the one most teachers are issued for email and attendance.

freedom isn't free...

...but Freeware is.

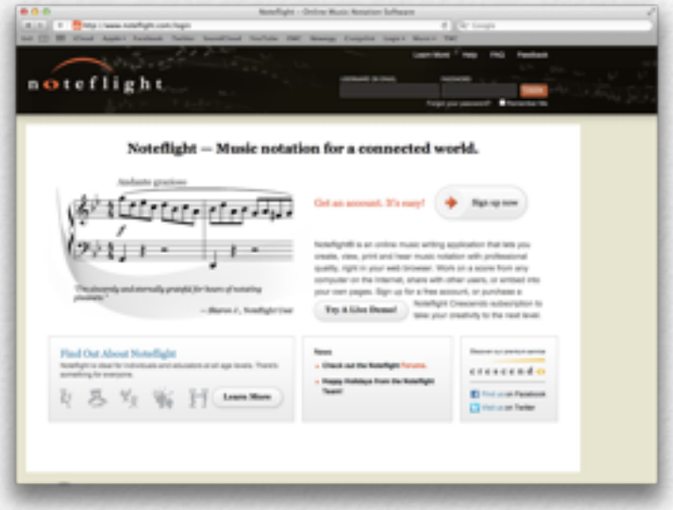
Now that you've got your hardware squared away, you're probably saying, "Great! Now I can teach the kids how to use Microsoft Word!" Never fear - if the hardware was cheap, the software is only that much ~~cheaper~~ free-er.

Solution #1: GarageBand (Mac only)

If you have access to Macs, you can use the program GarageBand, which is a simple digital audio workstation (DAW) to teach quite a bit. This program is included free in all Macs (iMacs, MacBooks, MacBook Pros, etc.), but if your computer has been re-imaged or erased and you no longer have the OEM installation discs, it is available from the Mac App Store for $15.

Solution #2: Noteflight (Mac or PC, requires Internet)

www.noteflight.com



Noteflight.com, a free web-based music notation program.

Noteflight is quite possibly the best thing since sliced bread. It's a free, online music notation program that allows you to notate, print, and even export your composition as MIDI. You can save scores you have created, and browse a library of scores other musicians have created and posted online. Their are paid versions of the program, but the free version only requires that you have an email address (such as a free Gmail address).

Solution #3: Audacity (Mac or PC, requires microphone, Internet for original download)

http://audacity.sourceforge.net

Audacity is a free digital audio workstation (DAW) that allows you to record audio and export in a variety of audio formats.

This of course requires you to have either a built in computer microphone or an external microphone. It requires an Internet connection to download, but once you have the installer, you don't need the Internet to actually run the software.

Solution #4: Presonus' Studio One 2 Free (Mac or PC, requires Internet for original download)

http://studioone.presonus.com/free/

PreSonus has developed an entry level version of their new digital audio workstation Studio One 2. The program comes with limited instruments, loops, and effect plugins, but it's completely free and can run on a Mac or PC. You can also hook up MIDI controllers (which most classroom keyboards can function as with the proper interfaces) or external microphones and record directly into the program. Like Audacity, once you have it downloaded (including the free instrument package you must download after installation) it doesn't require the Internet to run.

Solution #5: Finale Notepad 2012 (Mac or PC, requires Internet for original download)

http://www.finalemusic.com/notepad/

Well folks, it's free again! Musicians rejoice, Finale Notepad 2012 no longer costs. After you download the software from the website link above, it doesn't require the Internet. It's a pretty fleshed-out notation editor (for freeware that is) that will allow your students to compose, print, and export MIDI data for use in other programs.

we need more Lemon Pledge

Here are some Q&A style scenarios intended to assist you in troubleshooting really tricky situations in which you are simply told, “no, no”.

Q: My administration says they aren’t willing to add a new course during the school day.

A: If you have a reluctant administration, try starting an after school or lunch time club and meeting in either the media center (or other solutions mentioned earlier) once or twice a week. As the program grows in popularity, begin showing off some of your students’ projects to parents and the administration. Have students or parents contact your administration with a show of support for the addition of a regular class during the school day.

Q: My administration is willing to add the course to my teaching schedule, but they want to know what I am willing to let go?

A: This is a tough one. Never give up a *class* of music, but be flexible with the sections. Can you combine some courses (two small keyboarding classes into one, etc.)? Is there another music teacher at your school who can share the load (split a section of guitar and give half to the band director and half to the chorus teacher)? Do you have the option of extended learning classes (“school after school”)? Could you team teach the course with a colleague and only do it for a semester?

If your administration is willing to add the course, then they may be more forward thinking than you realize. Perhaps this is the time to really sell the fact that your program is growing and that you are making extra efforts to grow it by adding this new class. Maybe this is the year to propose adding another music teacher to your staff. Never assume this is completely out of the picture until you ask. My supervisor once said that in her perfect world, every school would have a music *staff*, not a music teacher.

Another option you might consider in larger programs or magnets, if you are an assistant director and are not responsible for the brunt of program planning (getting buses for competitions, scheduling concerts, etc.), see if your district pays teachers willing to teach without a planning period. Some teachers in our district make extra money by teaching 7 out of 7 periods. Again, this is completely at your discretion and the financial status of your district.

Q: I think this "music tech stuff" is cool, but I'm swamped and I just can't add another prep.

A: To be totally honest, you really have to want to do this to do it. But if you're on the fence and just not sure of yourself, you can try integrating the technology gradually, a little bit at a time.

If you're interested in using more technology in your traditional ensembles, read Chapter Two: BCO 2.0. There are lots of ideas for integrating technology that will enhance student performance without sacrificing major planning time or rehearsal time.

If you'd rather do something separate, Chapter Three: A La Carte, has several ideas for standalone lessons that you can use in a keyboarding, guitar, music appreciation class, or any other non-ensemble or non-performance class. I think you could very easily integrate a small unit on composition or other technology-based lesson to "get your feet wet" and see how the students manage. These lessons may also help if you can only check out the mobile lab or visit the media center for a few weeks at a time.

Q: There is a reading teacher at our school who uses a Mobile Learning Lab, but doesn't want it to leave her room.

A: People can be funny about their "stuff". If you (or really, your assistant principal in charge of curriculum or scheduling) have the flexibility, see if you can schedule your course during her planning period. Offer your office to her so she can work in peace if needed. Ask if it would be available after school or during lunch if you can't get the schedule to work properly.

links & books

Further Reading

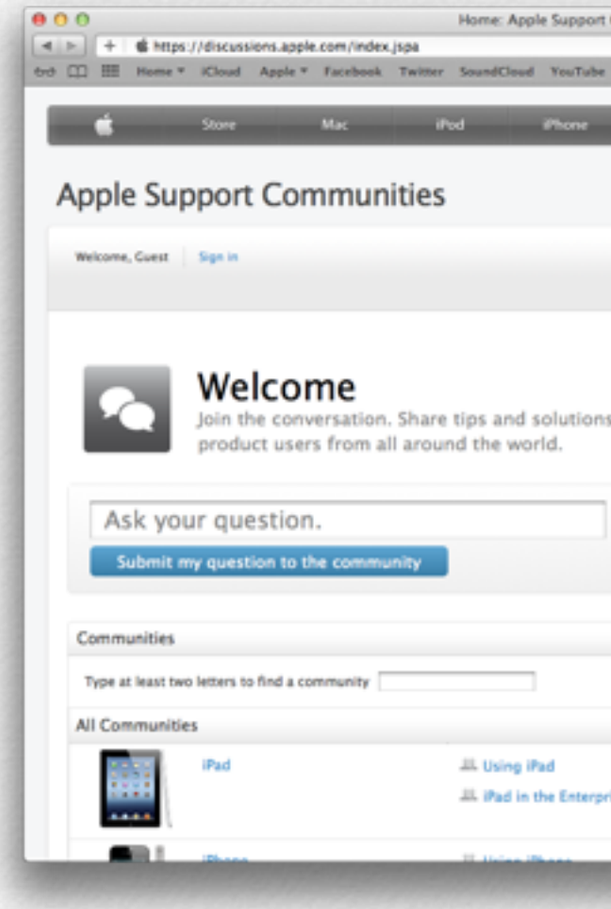
Here are a few resources that I use that you may find useful as well. My only disclaimers here are that: 1) you have to be careful with the integrity of information found on websites. Most of the information you will find will be very useful and simply explained, however, as anyone is allowed to post to these sites, misinformation is very possible. 2) Textbooks are unfortunately typically outdated within months of their publishing, if not beforehand. You will have to purchase textbooks every year, which is why I do not recommend purchasing a class set of any print material. Order a copy for yourself, highlight, annotate, and make handouts or PDFs to give to your students if you want to give them a printout (or better yet, distribute your materials electronically and save a few trees).

Websites

http://logicprohelp.com

This website is an online forum of Logic Pro users where you can search topics or even post your own when troubleshooting in Logic Pro.

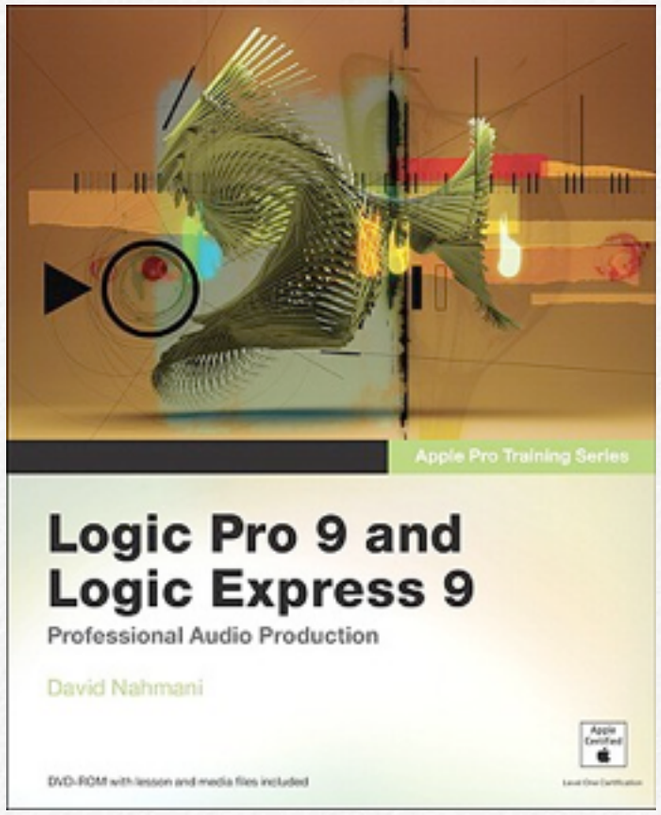
http://discussions.apple.com



These are Apple's official user forums. This is not tech support in the sense that none of the users (at least, officially) are Apple employees - it's just a place to discuss or search for solutions to problems related to the Mac and all its software (including GarageBand).

http://imslp.org/wiki

This is the Petrucci Music Library at the International Music Score Library Project. It contains a large database of public domain scores for your students to study.



Texts

Apple Pro Training Series: Logic Pro 9 and Logic Express 9 by David Nahmani (Peachpit, 2010)

This is the official training text for Apple's Logic Pro software. It covers all the information required for the Level One certification exam. It includes a disc with practice lessons.

Apple Training Series: iLife '11 by Dion Scoppettuolo and Mary Plummer (Peachpit, 2010)

This is the official training text for Apple's iLife '11 suite. GarageBand '11 is no longer available separately, but Mary Plummer's updated text is included in this edition. It includes a disc with practice lessons.

Making Music with GarageBand and Mixcraft by Robin Hodson, James Frankel, Richard McCready, and Michael Fein (Course Technology PTR, 2010)

This text contains lessons, tutorials, and projects for Acoustica's Mixcraft and parallel lessons and assignments for Apple's GarageBand. This text is great for either Mac or PC users, but is directed at the two programs Mixcraft and GarageBand.