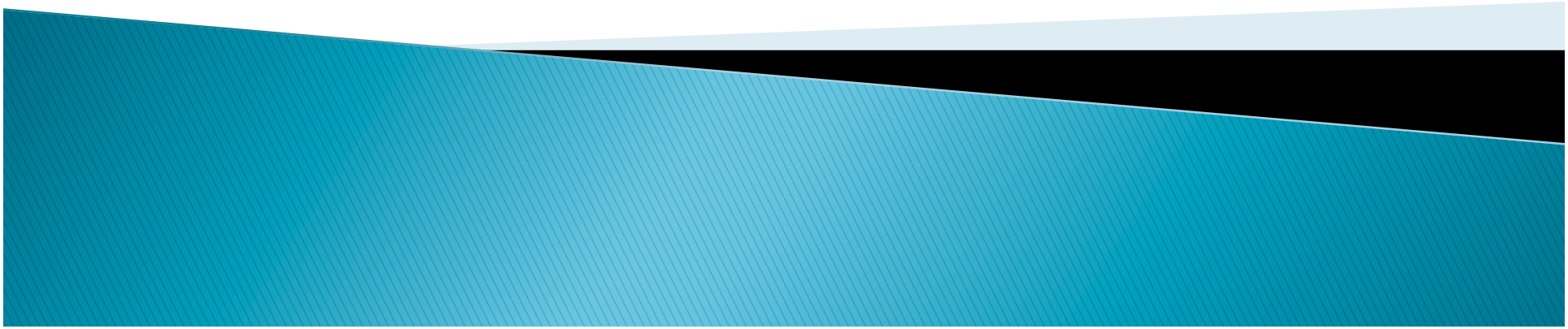
Tech Tools

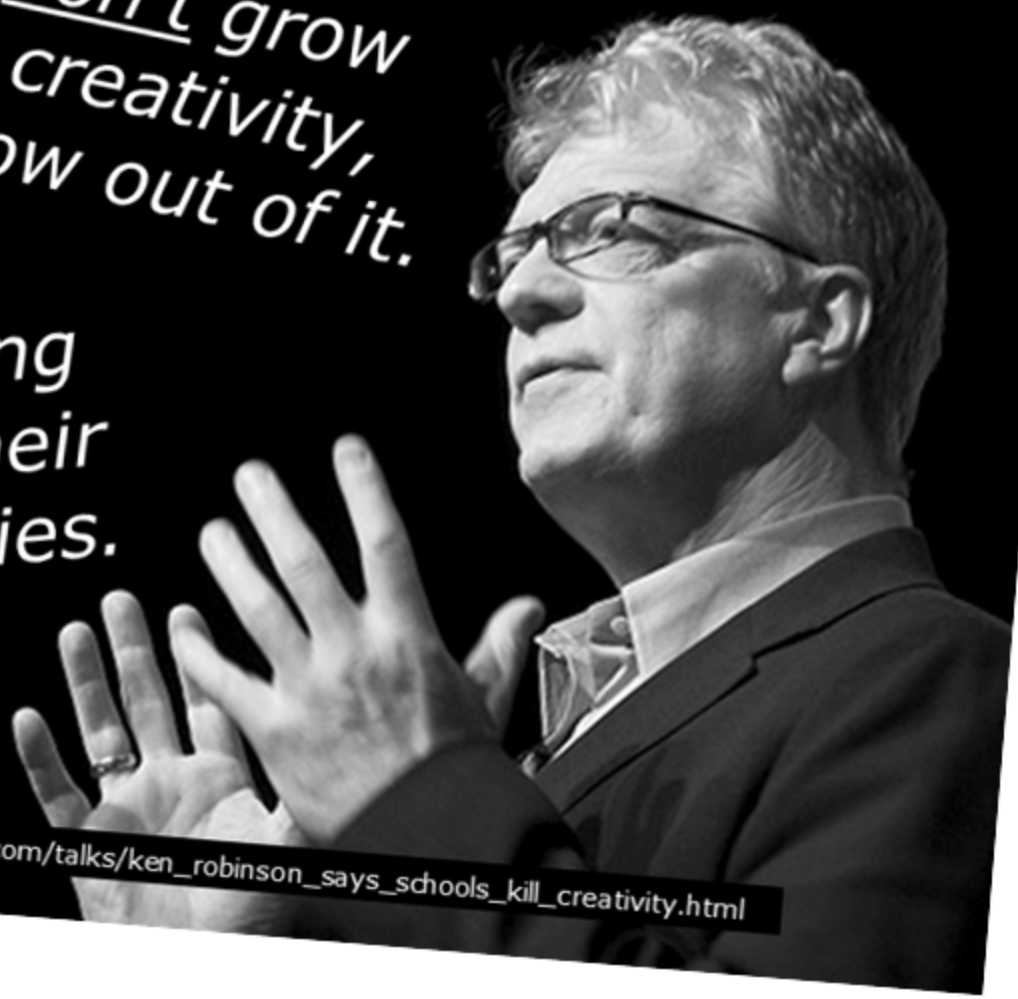
Creative Ways to Incorporate Technology in Your CMP Classroom



Schools *KILL* creativity!

We don't grow into creativity, we grow out of it.

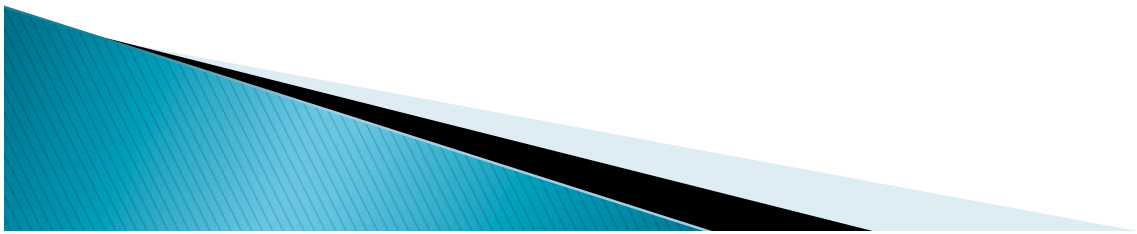
We are educating people out of their creative capacities.



TED Video (2006) - http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html

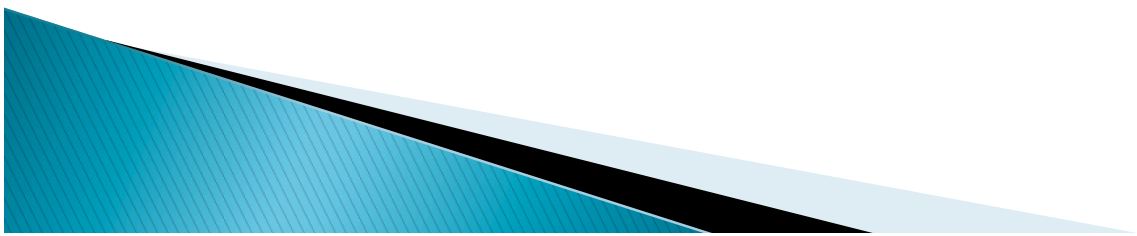
Disclaimer #1

- Some ideas are from Music Tech classes
- All Concepts can be used in BCO classes too!
- Technology is a tool – not just a toy



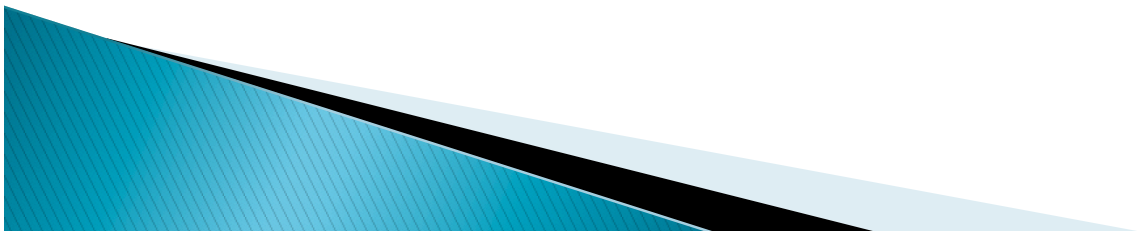
Disclaimer #2

- I HATED music history and theory in college
- Now I've grown to love it
- Because I've found direct application for it



Overarching Principles

- Differentiated Instruction
  - Musically Advanced Students
  - Students Who Need More Basic Instruction
- Deeper Understanding by Interaction
- Music must be meaningful



Music Tech @ Oak Prairie

- Semester – 7th and 8th Grade Elective
- 10% of Music Tech students are in Band or Choir

Bands @ Oak Prairie

- Three Concert Bands
- Two Jazz Bands
- 33% of School Enrolled in Band

Music Tech Classroom Software

Mac Schools

- NoteFlight Classroom ($195/year)
- GarageBand (free)
- iMovie (free)

PC/Chromebook Schools

- NoteFlight Classroom ($195/year)
- Soundation4Education ($6/student per year)
- Windows Movie Maker (free)

Additional Resources

MIDI Controllers
M-Audio Oxygen 8
Akai LPK25

musictheory.net

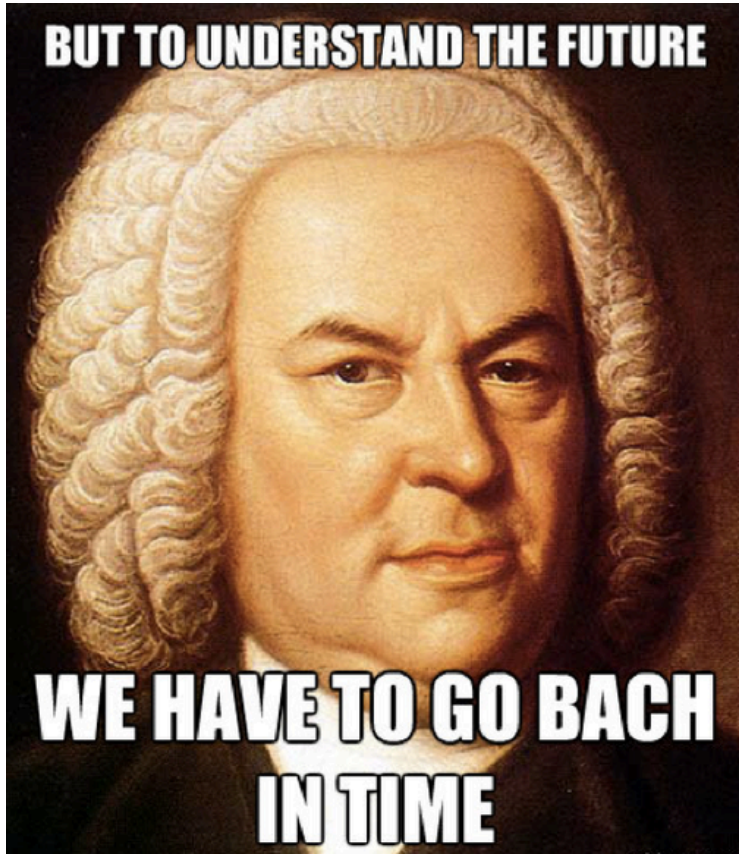
Mark Ammons: *Music AD450-1995*
(Mark Twain Publishers)

Notation Software

- Noteflight Classroom ($195/year, 250 users)
  - All Online
  - Works with Chromebooks, iPads, etc
  - Sharing within the classroom
- MuseScore
  - Free Downloadable Software
- Finale, Sibelius, etc ($$$)
  - Very powerful professional editors
  - Software to install and maintain

Literature Selection & Analysis

- Developments in Notation
  - Neumes
  - Polyphony (Organum)
  - Canon
  - Antiphonal Music
  - Use of Classical Form
  - Romanticism (Expressiveness)
  - Graphic Notation



Literature Selection & Analysis

- What composers/pieces best demonstrate these concepts?
  - Neumes – Gregorian Chant
  - Polyphony – Leonin and Perotin
  - Canon – Josquin des Prez
  - Fugue – Bach
  - Antiphonal Music – Gabrieli
  - Use of Classical Form – Haydn, Mozart
  - Expressiveness – Beethoven, Brahms, Liszt
  - Graphic Notation – Ligeti, Stockhausen

Organum Duplum

Now Let's Try...

OAK PRAIRIE BANDS

- Home
- Bands
- Music Technology
  - Project 1
  - Project 2
  - Project 3
  - Project 4
- Resources

CERT

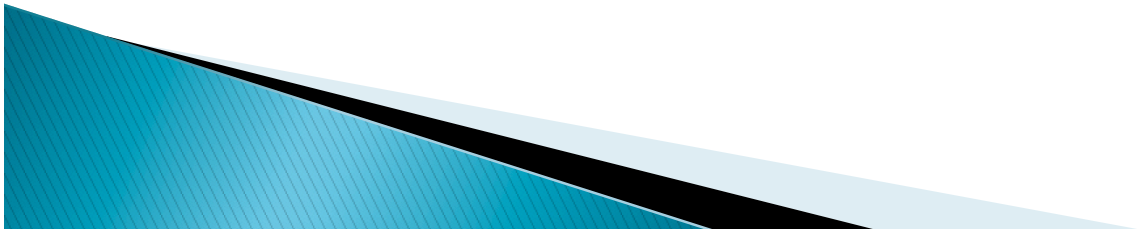
Project 4 – Canons & Fugues
Josquin des Prez – Missa Panga

Notation Concepts

- Copy & Paste
- Avoiding Clashes

Musical Concepts

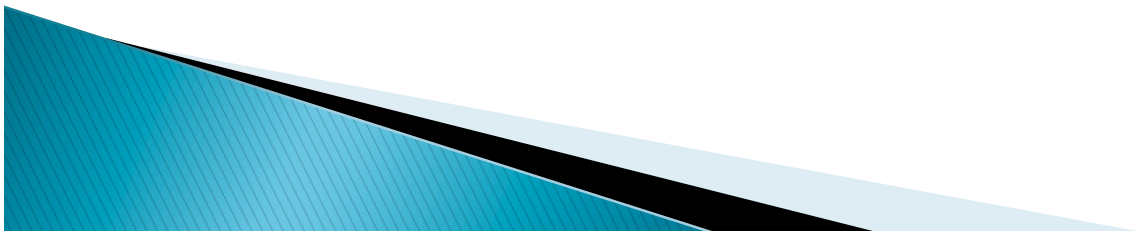
- Polyphony
- Echo Canon
- Melodic Form: Binary – ABAB (or ABAC)



Project 4 – Canons

Ideas for Composing in BCO

- Authentic Assessment!
- Compose Warm-Ups
- Teach Harmonization
- Practice Exercises



BCO Students In Music Tech

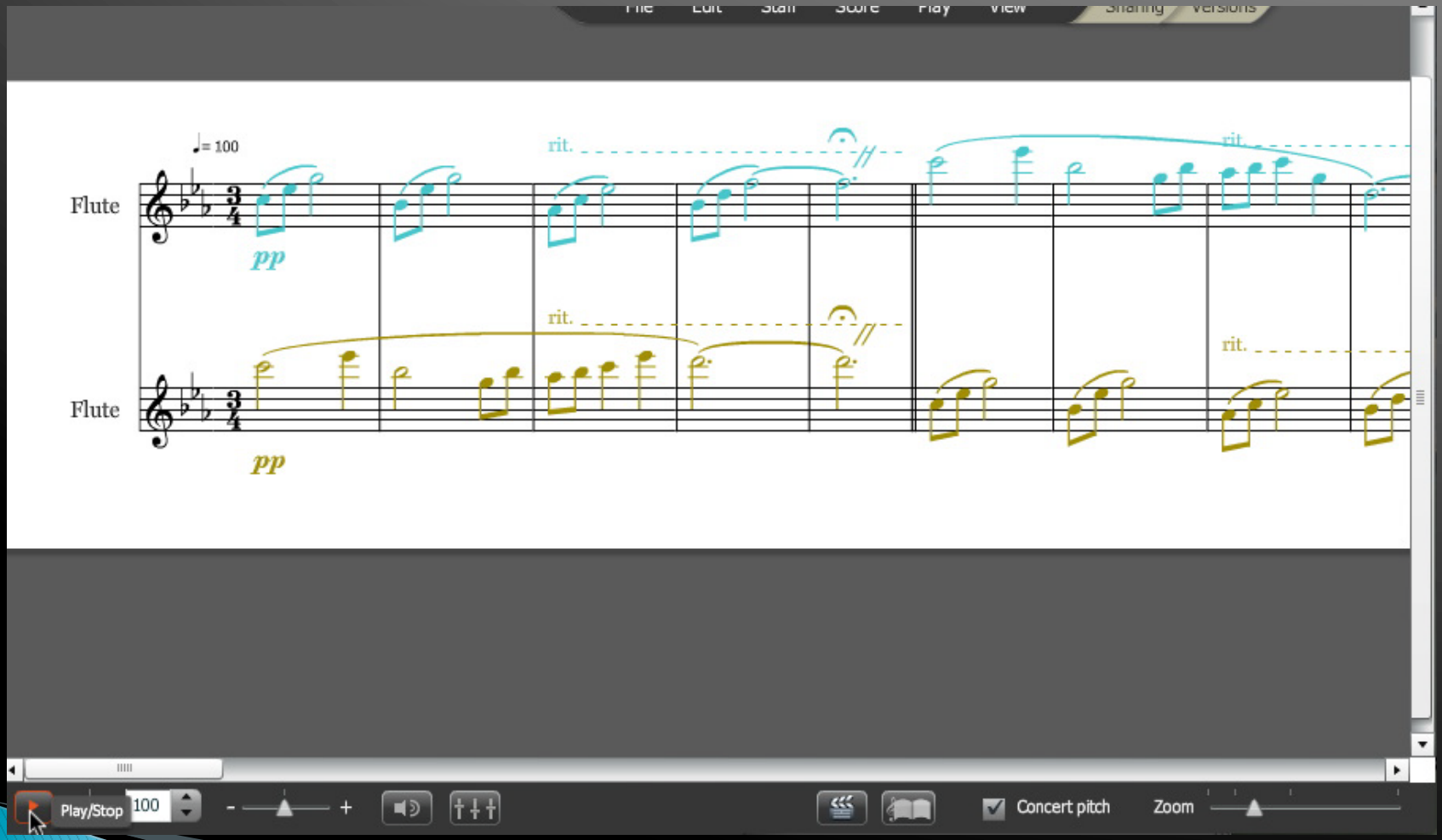
Independent Study

- ILMEA Composition Contest Requirement
- Focus on Form & Key Relationship
- Compose for Friends or Self
- Differentiated Instruction

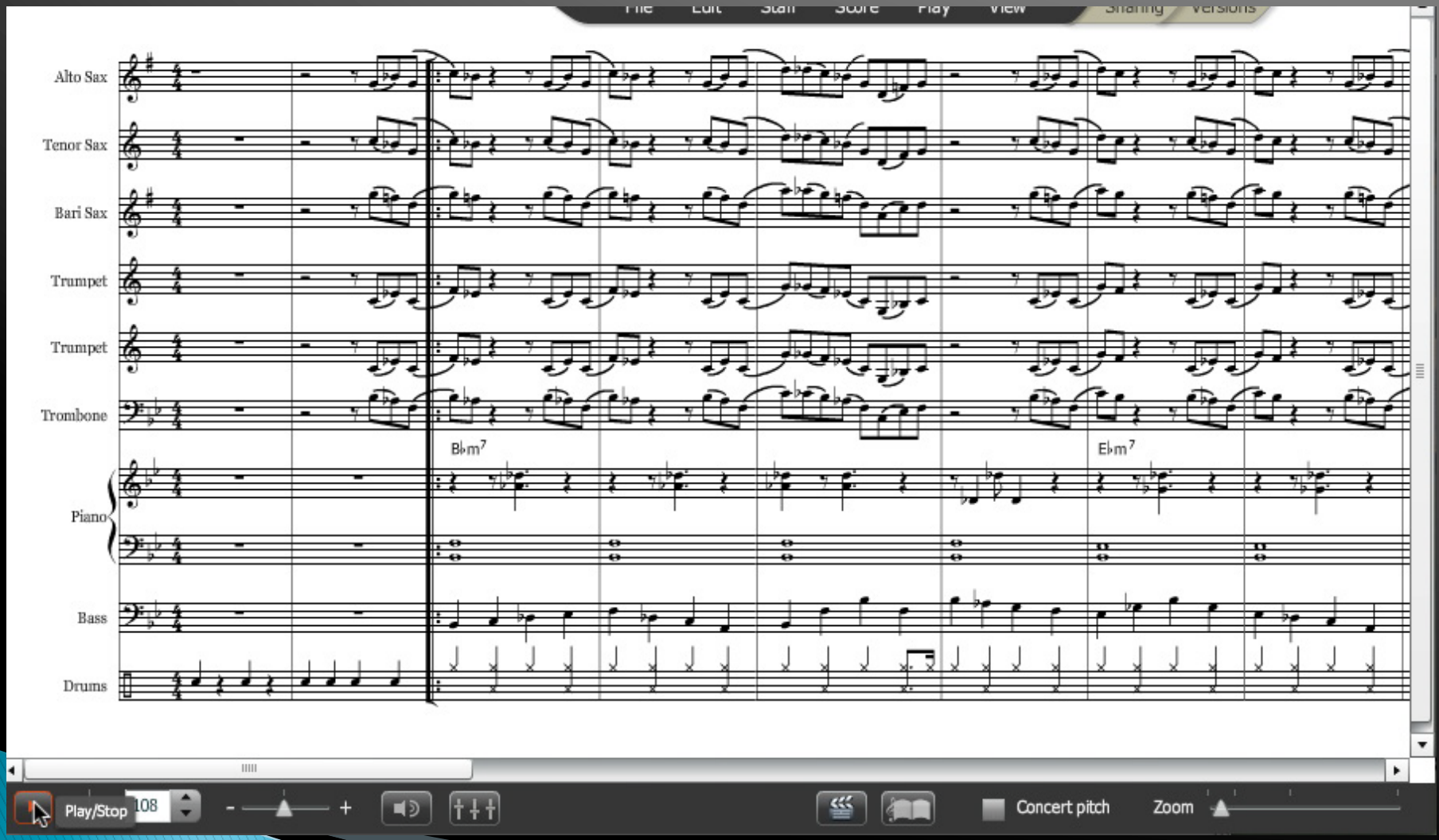
Piano – Rondo #1
Flute Duet – Wintertide's Phantasy
Jazz – Eddie's Blues

Kerry Kole – Rondo #1

Marilyn Alvarez & Sarah Rollins- Wintertide's Phantasy



Eddie Gillott – Eddie's Blues



GarageBand & Soundation

GarageBand Uses

Create Practice Tracks

- MIDI Data from iReal Pro

Record Ensembles

- Analyze Visual Audiogram
- Compare and Contrast Articulations
- Record Over Mp3s and Wave Files
  - Preparing for College Auditions
  - Analyzing Jazz Improvisations

GarageBand Basic

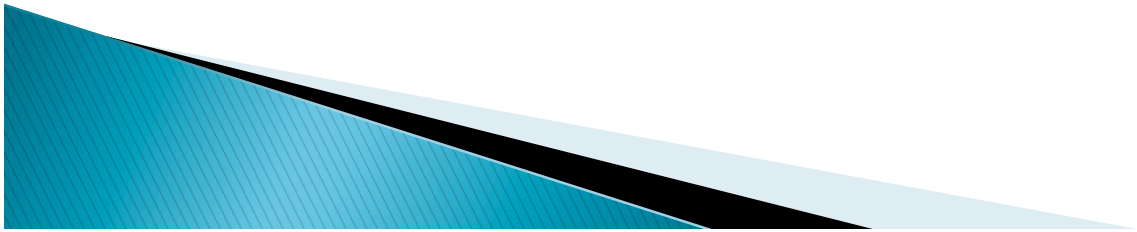
Start Simple – Loops/Form
Allow Students to Discover New Things
Use YouTube Tutorials
    Yaw Bass
    White Noise Sweep
    Pitch Bend

Project 6: Rondo Form

Compose a 40 Measure Piece in ABACA Form
Must have three elements:

- Treble Instrument
- Bass Instrument
- Rhythmic Instrument

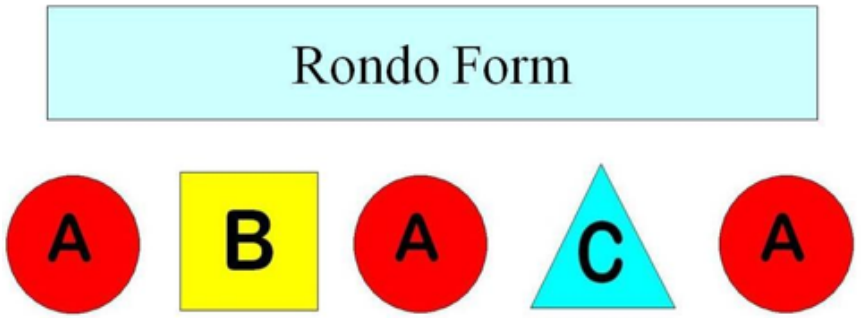
Loops must adhere to Form



Project 6: Rondo Form

Sequencing Techniques

- Using Loops
- Dynamics
- Automation Data



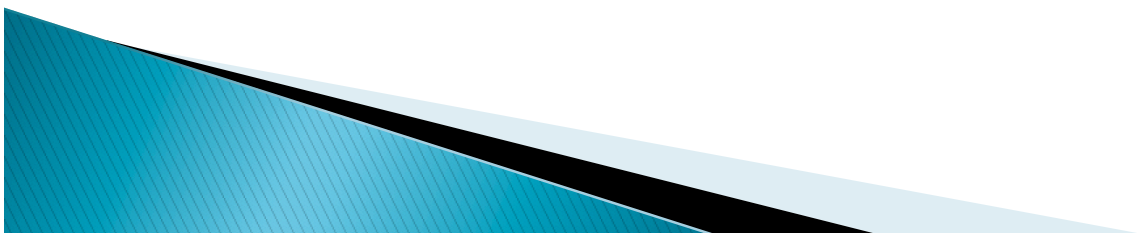
Musical Concepts

- Form
- Balance (Pan & Dynamic)
- Function (Rhythmic or Melodic)

Differentiated Instruction

More Advanced Music Students

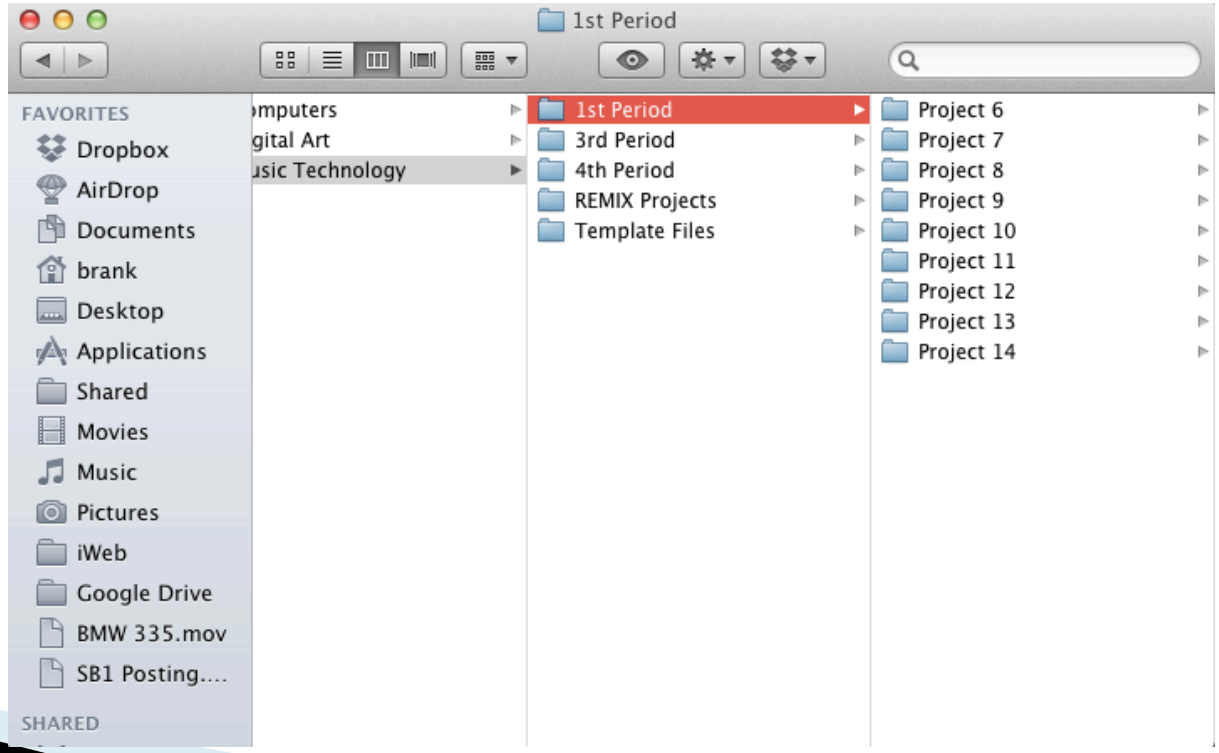
- ILMEA Remix Project
- ILMEA Electronic Composition Contest
- Using Their Instruments to Create Loops
  - "Trombone Shorty" tune
  - Like Christopher Bill's rendition of "Happy"



Hints for Organization

Hints for Organization

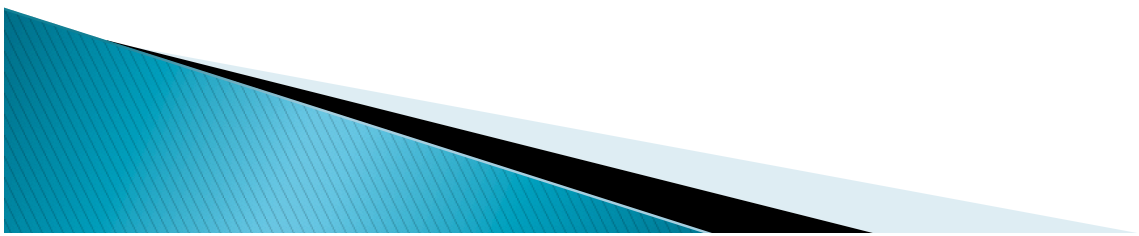
Talk to Tech Department – Dropbox Folders
Assignment Names – PLastname#
Use Image Capture and iTunes – Cover Art
Also consider using Google Classroom!



Google Classroom

Ideas for Google Classroom

- Journaling Assignments
  - You see what they submit, it's all done online
  - You can make comments
- Surveys & Quizes
- Playing Assessments
  - Video Recordings
  - Rubric for Self-Reflections
  - Saves Time in Class



Google Classroom Assessments

- Computer
  - Web Browser
  - Speakers/Microphone
  - Metronomeonline.com
  - Photobooth (or video recorder)
- Mobile Device
  - Google Classroom App
  - Google Docs App
  - Google Sheets App
  - Tempo Lite Metronome

Better for Practice Rooms

Kids love their devices

iPad Apps

- Tonal Energy Tuner
  - Metronome/Tuner
  - Transpositions
  - Tone Generator
  - Oscilloscope
  - Recorder upload straight to gClass
  - Slow Down Mp3's

iPad Apps

- iReal Pro
  - Jazz Playalongs/Exercises
  - 1300 Jazz Tunes (Forums)
  - Transpose/Speed-Up Exercises
  - Change Styles

- Jam Player
  - Slow Down/Speed Up Recordings
  - Change Keys
  - Loop Sections of Mp3's

iPad Apps

- SoundCloud
  - Store & Share Recordings

- ForScore
  - Sheet Music on the iPad
  - Done this with scores, but is time consuming and better for regular sheet music

- Spotify
  - BCO Playlists (BDG Twice-Played List)
  - Performance Models

iPad Quiz Apps

iPad Quiz Apps

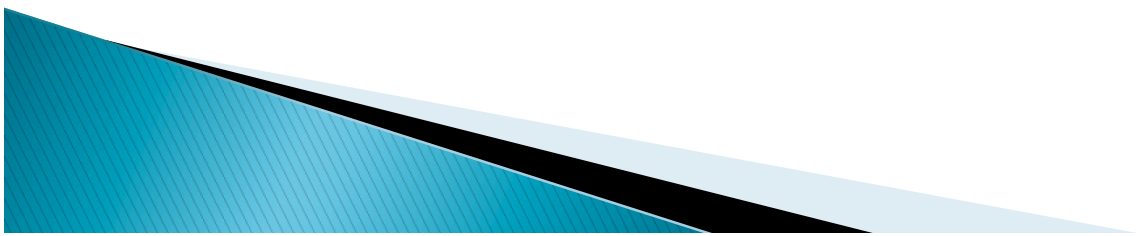
- Socrative Teacher/Student
  - Online Real-Time Assessment
  - Web-based or iPad
  - Student-Paced Assessment or Teacher-Paced
  - Exports to Excel Spreadsheet (with Grades)
  - You can add images on the Website

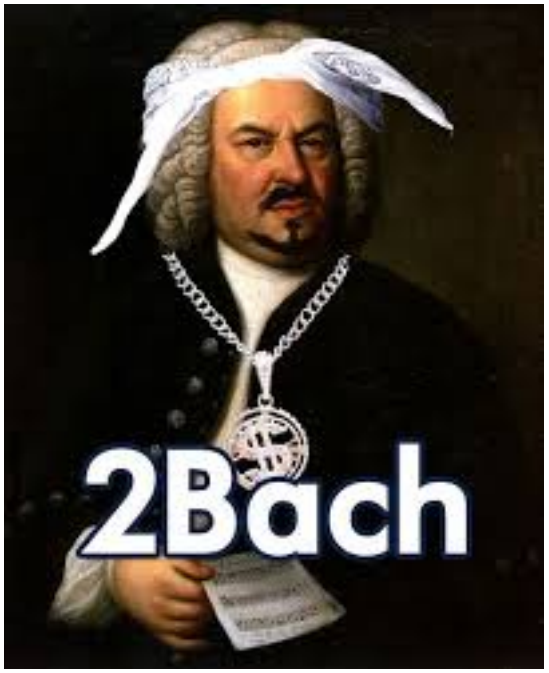
- Kahoot!
  - Online Real-Time Contest
  - Web-based or iPad
  - Review Game

iPad Apps

- Google Earth
  - 3-D Buildings
  - 360 views
  - Walking Tour without leaving School

Your Turn….



What's next???

- More interactive and live electronic music
  - Ableton Live
  - MIDI Drum Pads, Guitars & Wind Instruments
- More powerful sequencers at lower cost
- More interaction between composers & artists
- Student Producers of music, not just consumers