

# **Automatic Accompaniment Generator Applications: Teaching with Band-In-A-Box**



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# Leading Automatic Accompaniment Generating Software Products

- Band-In-A-Box by PG Music at:  
<http://www.pgmusic.com>
- SmartMusic by Makemusic at:  
[http://www.makemusic.com/practice\\_tools.asp](http://www.makemusic.com/practice_tools.asp)
- **MiBAC Jazz: by MiBAC Music at:**  
<http://www.mibac.com>
- Jammer by Soundtrek at:  
<http://www.soundtrek.com>

# Band-In-A-Box: The Perfect Music/Jazz Education Software Next to Artificial Intelligence!

- Find out why Automatic Accompaniment Generating software applications are “King” among music technology software applications for classroom music teachers.
- Band-In-A-Box is primo among this software applications.
- Enhanced creative practice is possible for both reading jazz charts and improvisation for creative instruction.

# Workshop Introduction Challenges:

## Page 1

- No question about computer applications accelerating and electrify creativity levels in your music classes.
- Automatic accompaniment generating software applications are perhaps the most congenial software applications for music and jazz educators regardless of ones "computer chops."
- Find out how easy it is to create practice exercises for ensemble and improvisation practice by just identifying the chord progression.



# Workshop Introduction Challenges:

## Page 2

- Learn the market of leading automatic accompaniment generating software and then learn why Band-In-A-Box was designed for the classroom music teacher.
- In BBB, there are thousands of musical styles available with just a click of the mouse in jazz, Latin, blues, classical, country/folk, waltz, pop/rock, ethnic, alternative and many others.
- Its ability to view and print out all rhythm section parts along with melody, strings and guitar is important pedagogically for students to both analyze comping techniques and able to practice “live” with the accompaniments.

# Workshop Introduction Challenges:

## Page 3

- The ability to change playback speed and modulate is essential in enhancing traditional play-along accompaniments.
- Its single most instructional feature that can't be duplicated by any other software product is the ability to generate improvised solos in over 250 different styles of landmark jazz artists: Charlie Parker, Miles Davis, Herbie Hancock, etc. and without any copyright restrictions for duplication to audio tapes and CD's for students to actually listen to, analyze and play-along at home.

# Workshop Introduction Challenges:

## Page 4

- BBB also has good sequencing capabilities for creating full compositions plus the ability to creatively analyze the melody in nearly 50 styles of famous ensembles such as Nashville, Paul Shaffer, Supersax, George Shearing, Glen Miller, Big-Band brass, Count Basie, Tom Scott and others.
- You can record students “live” with acoustic and /or MIDI instruments which makes for powerful compositions and improvisation practice because the entire composition can be burned to a CD for distribution via .WAV files and then even converted to MP3 and posted to the Internet in just minutes.
- All accompaniments can be freely duplicated for distribution to student use at home which makes this product very desirable for jazz education purposes as well as being so user-friendly to use.

# Entry-Level Workshop Goals (time permitting):

## Page 1

- Better understand the market of automatic accompaniment generating software applications and in particular, what their individual strengths are.
- Learn how to open files, playback, create accompaniments in a myriad of music styles and at tempos and keys of your choice.
- Learn how to View Notation of all parts created.
- Learn how to create improvised solos.

# Entry-Level Workshop Goals (time permitting):

## Page 2

- Learn how to print lead sheets.
- Learn to enter chords.
- Learn advanced chord functions.
- Learn how to choose the style/soloist/harmonies
- Learn how to add a melody.
- Learn how to add lyrics.
- Learn how to save BB files as MIDI files and how to import MIDI files as well.

# Entry-Level Workshop Goals (time permitting):

## Page 3

- Learn how to burn a practice CD.
- Learn how to use Band-in-A-Box in a Power Application mode for creating larger composition.
- Step-by-step guidelines on how to convert .WAV/CDA audio files to MP3 file format.
- Step-by-step guidelines of how to audio stream audio files on the Internet.
- Step-by-step guidelines of how to post audio files to ones web site with cost-effective solutions.

# Entry-Level Workshop Goals (time permitting):

## Page 4

- How to Take a BBB file with or without a “live” recording from Band-In-A-Box and post it to the Internet with audio streaming, go to:
  - [http://www.kuzmich.com/handouts/digital\\_magic.html](http://www.kuzmich.com/handouts/digital_magic.html).
  - [http://www.superscopetechnologies.com/press/IAJE\\_column.htm](http://www.superscopetechnologies.com/press/IAJE_column.htm)



# Music Education Applications:

## Page 1

- Middle/High School Jazz band program:
  - Develop soloists
    - Practice accompaniments for jazz band charts
    - Listen to and analyze soloists created by BBB.
    - Transpose play-along accompaniment to any key, any tempo
    - Create loops to practice certain chord progressions.
  - Develop Jazz Band
    - Practice and test entire jazz band charts
  - Compositions
    - Create rhythm section parts
    - Add melody via MIDI or Record input
    - Harmonize melody parts
    - Add solo section
    - Harmonize melody with MIDI or recording input.
    - Export to notation application
    - Import notation file and add rhythm section parts



# Music Education Applications:

## Page 2

- Sight-Reading
- General Music applications
  - Get students to play melody of a given piece.
  - Teach students different musical styles from rock to Latin to Blues to Jazz and beyond.
  - Sample project:
    - 1 computer with piano
    - Programmed chords for about 15 songs
    - Students had to play the melody to fit the beat established by BBB
    - Experimented by playing their melody in a number of music styles.
    - Band & Orchestra students would bring their music in and ask to input the chords so they could play along with BBB.

# Music Education Applications:

## Page 3

- Ear Training
  - Chords
  - Intervals
  - Guess a New Root
  - Replay Root
  - Guess a New Chord
  - Guess Chord and Root
  - Replay Chord
- Arranging - Practicing
- Piano Chord Solos - Practicing
- Guitar Chord Solos - Practicing

# Band-In-A-Box Tutorials

## Page 1

- Twelve BBB Tutorials in their Help Pull-Down Menu
  - Setting Up MIDI/Sound Card
  - Loading and Playing Songs
  - Inputting New Songs
  - Custom Patch/Drum .DK File
  - StyleMaker – Editing styles
  - StyleMaker – Making new styles
  - Notation, Printing
  - Using the Soloist Feature
  - Using the Melodist Feature
  - Using Audio and Guitar Features
  - Using the Guitar Styles
  - Using the Chord Wizard and Embellisher
  - Using the Style Sheet and Leadsheet Harmony
  - Using the New Features of Version 2004

# Band-In-A-Box Tutorials

## Page 2

- Two CD-ROM Video Set: Band-In-A-Box Video Tutorial Pak (comes free with version 2004)
  - Incredible product overview and QuickStart practicing music with BBB.
- **Article: BeBop Bass Solo with Band-in-a-Box by Tobin Frank** [http://www.band-in-a-box.com/article\\_june21.htm](http://www.band-in-a-box.com/article_june21.htm)
- Band-In-A-Box Group at: <http://www.biabgroup.com/> that focuses on:
  - Exchange and Share BIAB files
  - Get to know other BIAB members
  - Exchange hints and tips
  - Build and Maintain a File Repository of BIAB Files
- Band-In-A-Box Related Web Sites at: <http://www.nortonmusic.com/links.html#box>

# Articles On-Line

- Band-In-A-Box Introduction:  
<http://www.kuzmich.com/band-in-a-box.html>
- Band-In-A-Box Basics:  
<http://www.kuzmich.com/band-in-a-box2.html>
- Band-A-Box Tutorial: <http://www.kuzmich.com/band-in-a-box3.html>
- Feature article: September, 2004 issue of School Band & Orchestra magazine at:  
<http://www.sbomagazine.com/technology.html>
- Technology: Music Software Music Lessons Through the Computer by John Kuzmich, Jr. at:  
<http://www.pgmusic.com/review38.htm>

# Basic BBB Concepts To Be Taught!

## Page 1

### ■ Working with Song Files

#### – Opening files

- Select File | Open to open songs by file name.
- Click on the Song button to open the Song Titles box – this allows you to open songs by title instead of file name.
  - Note that you can also search by title in the Song Titles box
  - If you want to see the song titles for a different directory:
    - You must first close the Song Titles box
    - Use File | Open and open any song in the directory you want to use.
    - Go back to the Song Titles box by clicking on the Song button

# Working with Song Files: Starting/Stopping Page 2

- Click on Play to start the song.
- Use the FROM button to start in a particular bar number.
- Instead of pressing stop, you may press the HOLD button to pause the song.

# Basic BBB Concepts To Be Taught!

## Page 3

### ■ Playing along

- You may play-along on the MIDI keyboard at any time.
- You may also use the computer keyboard:
  - Turn the “Wizard” on by selecting it from the Play menu.
  - Use the two rows of keys starting with “A” and “Z”
  - You can also use the “Smart Notes” feature found in the Play menu. This will cause the bottom row of keys to play only “right” notes and the next row to play “wrong” notes. (Try it!)



# Basic BBB Concepts To Be Taught!

## Page 4

- Changing song settings
  - Changing the instrumentation
    - Note that any part can play any instrument. The Piano part, for example, can be performed by a banjo, etc. Click on the part you want to change and then select the instrument from the instrument box.
  - Muting instruments
    - You can mute any number of the parts by clicking your right mouse button over the part name. The name of the part will turn red when it is muted. Click your right mouse button over it again to turn it back on.

# Basic BBB Concepts To Be Taught!

## Page 5

- Changing the tempo
  - Using numerical values
    - You can type a new value in the Tempo box
  - Tapping on the mouse or keyboard
    - You can tap on the = key to have BIAB start automatically – tap for four beats and it will come in at the tempo you tapped. This will also allow you to change the tempo during a song. If you want to tap the tempo without the song starting automatically, use the – key. This can be useful for testing your ability to tap certain tempos. The tempo will be indicated in the tempo box after four taps.

# Basic BBB Concepts To Be Taught!

## Page 6

### ■ Transposing

- You can transpose the entire worksheet by selecting a new key from the key box, right beside the tempo box.
- You can transpose part of the your song by selecting the bars you want to affect first.

### ■ Changing styles.

- Click on the STY button to see a list of the styles available.

# Basic BBB Concepts To Be Taught!

## Page 7

- Changing melody harmonies
  - Choose Melody Harmony from the harmony menu to select a new harmony.
  - Note that the Allow Melody Harmonies must be on in the Harmony Menu. (If you don't want harmony, this is where you can turn it off).
  - If your music sounds strange – try changing or turning off the harmony –this is often the cause of strange sounds.
  - Changing thru harmonies
    - The thru harmony harmonizes what you play on the MIDI keyboard. (The thru instrument determines the instrument played on the MIDI keyboard).
    - The thru harmony works in the same manner as the melody harmonies.

# Basic BBB Concepts To Be Taught!

## Page 8

### ■ Viewing the Notation

- Turning on the notation window.
  - You can switch to the notation window by pressing Ctrl-W or by clicking on the first item in the Notation menu.
- Selecting the part
  - BIAB doesn't allow you to view more than one part at a time, although you export the score to a notation program such as Finale 2004. To select the part to view, use the B D P G S M S buttons above the notation. B is bass, D is drums, etc.
- Selecting the Chord view
  - Clicking on the IIL button will cycle you through the various chord nomenclatures available.
- Looping the screen
  - Click on the LoopScn button to have BIAB loop the bars on the screen (you will have to click on PLAY before it will start looping.)

# Basic BBB Concepts To Be Taught!

## Page 9

### ■ Using the Soloist

#### – Selecting a soloist

- Click on the SOLO button to try out some of the soloists. BIAB looks at the chord structure for the whole song before building the solo, so it may take a few minutes to build the solo. You can view the solo by clicking on the S button farthest to the right in the notation window.

#### – Printing the Song

- View the notation window and switch to the part you want to print
- Choose File | Print Song
  - You may change any of the settings before printing
  - You can print a fake book of everything that is on your computer. I wouldn't recommend it, however, since you will get about 1800 songs!

# Basic BBB Concepts To Be Taught!

## Page 10

### ■ Creating Your Own Song

#### – Choosing the Key/Time Signature

##### ■ Setting the song information

- Use Edit | Song Settings to set your song first.
- Use the number of bars settings in order to control how your song is repeated, etc.

#### – Entering Chords

##### ■ Using chord names

- You may type in the chords desired onto the chord worksheet. See the on-line help for a complete list of chords.

##### ■ Using the chord reader

- You can play a chord on the MIDI keyboard and press ctrl-enter to enter it onto the worksheet.
- Clicking on Options | MIDI Chord Detection gives you more control over how the chords up play get entered.

##### ■ Copy/Paste

- You can mark bars and use the cut/copy/paste features to save time.



# Basic BBB Concepts To Be Taught!

## Page 11

### ■ Advanced Chord Functions

#### – Entering rests/shots/holds

- Click on the C7 button to control rests, shots or holds within the current bar.
- You may also use the following to control rests, shots or holds:
  - C. indicates a C chord that is a rest
  - C.. Indicates a C chord that is a hold
  - C... indicates a CD chord that is a held chord
- You may exempt instruments by typing the letter of the instrument after the dots:
  - For example, C.bd forces all instruments except the bass and drums to rest.



# Basic BBB Concepts To Be Taught!

## Page 12

- Choosing the style/soloist/harmonies
  - Experiment – use the STY, the SOLO button and the Harmonies menu
- Adding a melody
  - Recording
    - You can record to either the melody or the soloist track. Use the Melody menu or the Soloist menu to find Record.
    - Note that after you have finished recording you have the choice of “taking” the recording.
  - Step entering
    - Please see the manual for more details
  - Importing from a MIDI file
    - You can import melodies from a MIDI file by choosing Melody | Import from MIDI file.

# Basic BBB Concepts To Be Taught!

## Page 13

- Note: In many case is it more efficient to first record a melody using a sequencing or notation program such as Finale, Sibelius or Home Studio. Save the melody as a MIDI file and then import it to BIAB.
- Adding Lyrics
  - Open the Notation windows (Ctrl-W)
  - Type the lyrics above the music in the beige box between the notation and ;the toolbar.
  - The lyrics can be printed above or below, depending on the options you choose when printing.
- Saving as a MIDI file
  - Choose File | Make a Standard MIDI file
  - Choose Save to File and give it a file name.
  - You can now open the file in any notation program for further editing.

# Basic BBB Concepts To Be Taught!

## Page 14

### ■ Burning to a CD

- You can easily create a save file of your Band-In-A-Box song to burn to a CD.
  - First, confirm that Windows is set up to record from the SD-90.
    - Go to Start – Control Panel – “Sounds, Speech, and Audio Devices”, and then click on “Sounds and Audio Devices.” Go the “Audio” tab and choose “Edirol SD-90 IN” in the Sound Recording section, then hit OK and close the control panel.
  - Then, in Band-In-A-Box, click the “.wav” button, or choose “Record MIDI to Stereo .wav file etc...” From the “Audio” menu.

# Basic BBB Concepts To Be Taught!

## Page 15

- Click the “(Rec)-Render to WAV file...” button and ;it will play through your entire song, while recording a wave file. When it is done, you can click the “Test wAV” to make sure that your recording worked.
  - You may want to clear the “Include 2 bar lead-in” and “Include Drum Count-In Sound” If you are creating play along CD’s, otherwise, these are useful give them tempo.
- You can also use this window to burn a CD or convert to WMA for posting on the Internet. Please consult the on-line help or printed documentation for further information.

# Closing Comments

- It can be done easily.
- It can be done on a minimum budget.
- Multiple teaching applications:
  - Improvisation
  - Composition
  - General Music
  - Ear Training
  - Sight-Reading
  - Arranging – Practice
  - Piano Chord Solos - Practice
  - Guitar Chord Solos - Practice
- It can change your relationship with your students, parents, administration and community especially posted on a school web site.
- It offers great practice opportunities at home.
- Music must be included on your website.
- E-mail at: [jkuzmich@jeffco.k12.co.us](mailto:jkuzmich@jeffco.k12.co.us) and good luck!!