

# Using Smart Board in the Band and Orchestra Classroom

Presented by Jeff Nelson  
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Chrisman Junior and Senior High School  
2013 Midwest Band and Orchestra Clinic  
Thursday Dec. 19<sup>th</sup> 9:30 – 10:30AM Meeting Room W181

## 1. Lesson and Activities

- a. Power Point Agenda
  - i. A great means of keeping things organized and keeping your rehearsal or class running smoothly
  
- b. “Sponge” activities... Quick learning, Quick success!
  - i. 5 or 10 minutes at the most at beginning of class, but can be used at any point that works best for your schedule.
  - ii. Smallest units of learning possible to ensure success. Repetition and success are the key!
  - iii. Customize to fit your long term or literature based theory curriculum.
  
- c. Notebook Lessons
  - i. Customize your own lessons
    - I. From templates which are provided with Notebook software
    - II. From Scratch. It takes some trial and error, but you can make some cool lessons!
  - ii. Downloadable lessons  
*<http://exchange.smarttech.com/search.html?sbj=mu>*  
Tons of downloadable lessons with a helpful search capability
  
- d. Short Compositions using Finale
  - i. Touch, See, and Hear Note Entry.
    - I. SMARTBoard enables students to enter notes by touch to see and hear compositions!
  
- e. Music Web Sites... lessons and games!
  - i. *[www.musictechteacher.com](http://www.musictechteacher.com)*
    - I. Basketball, to teach steps, skips and repeats as well as intervals
    - II. Soccer, to teach rhythms, and math!
    - III. Space Invaders, to teach
    - IV. Fling the Teacher, to teach rhythms and math

- ii. [www.musictheory.net](http://www.musictheory.net)
  - I. The Note Identification Game, helps students memorize the line and space names of ALL clefs, customizable
  - II. The Key Identification Game, for all keys! Again customizable.
  - III. Ear Training, intervals and chords!
- iii. [www.teoria.com](http://www.teoria.com)
  - I. Rhythmic Dictation, very valuable rhythmic teaching tool!
  - II. Ear Training with staff, relates intervals and chords with what they look like on the staff.
- iv. [www.therhythmtrainer.com/](http://www.therhythmtrainer.com/)
  - I. A MODE - Listen and Dictate
  - II. B MODE – Read, Listen, and Match
    - 1. Both modes offer customizable rhythmic games
- v. [www.philtulga.com/counter.html](http://www.philtulga.com/counter.html)
  - I. Counting Music Machine
  - II. Multiple Counting options
    - 1. Numeric
    - 2. Kodaly
    - 3. Gordon
    - 4. French
- vi. [www.emusictheory.com/freeResources.html](http://www.emusictheory.com/freeResources.html)
  - I. Fingerboard practice and games for entire strings family.
- vii. Other great sites to explore!
  - I. [www.mibac.com/Pages/Theory/Main\\_Theory.htm](http://www.mibac.com/Pages/Theory/Main_Theory.htm)
  - II. [www.philharmonia.co.uk](http://www.philharmonia.co.uk)
  - III. <http://fiddlerman.com/>
  - IV. [www.metronomeonline.com/](http://www.metronomeonline.com/)
  - V. [www.music.vt.edu/musicdictionary/](http://www.music.vt.edu/musicdictionary/)
  - VI. [www.blanksheetmusic.net/](http://www.blanksheetmusic.net/)
  - VII. <http://people.virginia.edu/~pdr4h/musicpaper/>

**f. Video... The Ultimate Classroom Movie Theatre**

- i. Video from both computer and DVD / VHS
  - I. On-line video content
    - 1. Performances
      - a. <http://www.banddirector.com/productguide/>
      - b. Lessons
        - i. <http://www.vicfirth.com/podcasts/>
      - c. YouTube

2. DVD / VHS video
  - a. Easy to hook up and use in conjunction with projector and sound system.
3. Audacity

## 2. Integration of SMARTBoard into Rehearsal Process

- a. Play Along
  - ii. Watch, Listen and Play Along with SmartMusic
  - iii. VicFirth rudiments for percussionists
    - I. 40 Essential Rudiments link provides both notation and sticking along with progressive play along examples
    - II. <http://www.vicfirth.com/education/rudiments.php>
- b. Tuning
  - iv. SmartMusic's "Practice Tools" Tuner
    - I. Makes tuning a visual experience
    - II. Can be used to demonstrate pitch tendencies to entire sections and entire ensemble.
- c. Recording
  - v. SmartMusic's "Practice Tools" Recording option
  - vi. Audacity... free and easy to use and has a cool sound wave display.
    - I. <http://audacity.sourceforge.net/download/>
- d. Assessment with SMARTBoard
  - i. SmartMusic Assessment program
  - ii. Can be used as a game..."guess the score" which can also aid in peer assessments.

## 3. Acquiring Your SMARTBoard

- b. Equipment options
  - i. Ideal Set-Up
    - I. SMARTBoard, Ceiling Mounted Projector, Sound System...SmartAudio or Custom, Capable Computer... either laptop or desktop with the
    - II.
  - ii. Super Basic Set Up
    - I. Bed Sheet, Projector, Computer... loss of most interactivity and sound capabilities, but it is a start and will easily accept add-ons as \$ becomes available
- c. School Funds

- i. 2% – 5% of Ed Fund is spent on Technology
  - ii. Our small district running an approximate \$3 million budget, spends around \$90,000, or approx. 3%
  - iii. By comparison an average of 2% of Ed fund is spent on athletics
  - iv. In our seven county regional area has seen a dramatic rise in classrooms with SMARTBoards
  - v. The users seem to be believers as none have indicated that they could go back to teaching without one.
- d. You Own Booster Organization
  - i. Specified dedicated fundraising for a SMARTBoard
- e. Other Booster Organizations
  - i. Academic Boosters
  - ii. Athletic Boosters
  - iii. Community Organizations
  - iv. Chamber of Commerce
  - v. Auxiliary Clubs
  - vi. American Legion
- f. Grants
  - i. Local Grants, check with Chamber of Commerce and Local Banks
  - ii. ROE  
<http://www.roe11.k12.il.us/Links/Grants%20&%20Resources%20Info.htm>
  - iii. Federal  
<http://www2.ed.gov/programs/edtech/index.html>
- Information about equipment from SMART
  - <http://smarttech.com/us/Solutions/Education+Solutions/Products+for+education>
- New Stuff!!! There is an app for that! Notebook App for iPad!
  - <https://itunes.apple.com/us/app/smart-notebook-app-for-ipad/id554245373>

Thank you so much for attending. If I can be of any assistance in the future please feel free to contact me at **nelsonjd@chrisman.k12.il.us** or at **217-269-3980**. I would be glad to share lessons and ideas and to learn of your successes with SMARTBoard!

### **Example of Grant Format:**

To All Those Whom It May Concern;

The following is a grant written for the SMART Board while at my former district. I have altered it to reflect the specifics of my classes here at Chrisman. I was proud that our grant was accepted and approved, however due to unforeseen technology expense cutbacks, our grant acceptance was taken back and we were not able to receive the SMART Board. Needless to say, everything was in place to begin use in our curriculum but my staff and I never received the chance, thus the knowhow and training are there but the SMART Board equipment was all that is missing. The grant was written in a form which answers the following questions:

1. Which SMART Board set up are you applying for and how often would it be used?
2. How will students benefit from the use of the SMART Board in your class?
3. List the ways the SMART Board will be used in your instruction.
4. How will your use of the SMART Board go beyond what is possible with an LCD projector?
5. What software programs would you use in conjunction with the SMART Board?

## **Example of Submitted Grant:**

### **CHS SMART Board Building Application For the Instrumental Music Department. Submitted 11- 12 - 08**

1. The SMART Board set up, consisting of the SMART Board, LCD Projector, Laptop Computer or Class Room Computer, and ceiling mount kit, would be used every day during 1<sup>st</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> 7<sup>th</sup> and 8<sup>th</sup> hour classes. Its use would last the entire class period for sponge activities, warm-up exercises, and selection specific practice material and visual/musical examples for students to both see and hear and assessment activities from the method book using Smart Music. Given that I give before and after school lessons the SMART Board would also find use before and after school to pre-test and test students and to play and show accompaniments for practice and lessons.
2. Students will use the SMART Board for hands on learning activities in that they will be able to manipulate notes on the it that apply exactly to what they play. A student having difficulty playing a specific passage of music can both through the stock music software or through SmartMusic software, enter those very notes into the computer and both see and hear how the part goes and to make things even better it can be turned into a playing exercise for the entire class to perform. Something previously impossible without hundreds of wasteful copies. They can also use it's tuner to see in real time if they are in tune. Previously, we would have to tell them individually, without visual aid as it was impossible. SMART Board allows them to see and adjust from wherever they are in the room. Students can also use the metronome, and instead of it only being seen and heard by one student it can be seen and heard by all, which again has thus far been impossible. In Jazz band, students can use the writing tool to create improvised passages of music, see and hear how it sounds, and share their composition with the entire class. They can even save, print, and take it home without the hassles of handwriting and photocopies.
3. The SMART Board will be used for instruction in 9 ways. 1 - Daily announcements both school and band specific, 2 - Daily itinerary, 3 - Daily sponge activities to begin each class, 4 - Warm-up exercises,

5 - Tuning and intonation work, 7 - Dynamic control, 8 - Method and Selected counting practices, and  
9 - Assessments of scales and selected sections of band pieces, all of which will be seen, heard and performed by every student in the room with instant feedback. In the past, each of these activities and exercises either required books, copies or electronic devices which constantly need updating and replacing due to wear. SMART Board would eliminate a great deal of expense and paper copies used by our program.

As a sample I will describe SMART Boards use during the first 30 + minutes of class time. We begin with a "Sponge" activity. Each day of the week has its own category of sponge activity, for example I will use "Theory Tuesdays". Right as student enter the room they know to begin, they will follow the direction and begin working on identifying signs and symbols used in written music, which is created by the teacher before class begins. Students who finish first will then go up to the board and fill in the answers and we will check them as a class. Next, we bring up the daily warm-up. Scales and patterns in concert C major. SMART Board and Smart Music can be used together to show this scale and its patterns in every band transposition! Every student seeing these, performs them as a class. We can even listen for our mistakes as Smart Music on the computer can record us and playback for instant feedback. We can then use the visual real time assessment tool and see exactly which notes were missed or hit with correct notes showing green and incorrect showing red... no guess work. Next we tune the band both as individuals and as a group. The tuner is turned on and the students see the tuner needle and tune themselves by watching the needle move to the "0", again no margin of error. Next we do a dynamic control exercise. There is a multi color bar showing the band or individual's level of dynamic. We simply see green and yellow for quiet and orange and red for loud and everything in between. Students can see and hear dynamics. Next, we will practice counting in an exercise programmed by one of the directors which was taken from the very piece we are working on for contest! The SMART Board allows students to walk right up and write in the counting, for all to see. The playback option, on Smart Music, can allow us to hear and see how it goes. Finally, as we rehearse our band pieces we can program in any part that is needed and have the SMARTBoard display the passage, show how it goes and then

through SmartMusic actually assess the passage as it is played note for note in real time by the student! Even the greatest band director in history would miss something in assessments by ear... Smart Music misses nothing and it can be seen the moment you are finished testing, which provides students with the type of instant feedback they are used to in today's technology driven society.

**4.** In the previous paragraph I outlined one class of concert band's daily exercises. Using an LCD projector would only do what the paper does that we hand out currently. While it does display these exercises for all to see, it doesn't allow teacher and student to manipulate the exercise. For instance, if a passage is difficult to count SMARTBoard allows the student to walk right up and write in the counting for all to see and learn from. That student can also just by touching the note on the screen move the notes to alter the rhythm for better understanding. The LCD can't do that. Furthermore the LCD has no ability to mix the usefulness of Smart Music with SMART Boards tactile functions. With SMART Board and Smart Music teachers and students can manipulate every aspect of the music or exercise without going back and forth from computer to music stand to instrument to board; it is all there on the board, saving time. The exercises listed above would be possible in part, but not interactive and not alterable.

**5. Smart Music.** This music program has been revolutionizing music education all across the country. Every seminar we attend as music educators offers courses in this program. It is in our educational journals. We even receive materials in the mail about what it can do to make our teaching more efficient and accelerate student learning. It not only tunes, shows dynamics, and has a metronome, it has thousands of built in exercises in easy to read notation. It even plays accompaniment parts for solos, both classical and Jazz styles. You can transcribe in any music using Finale, the music writing software, and have it ready instantly for display, playback and most importantly assessment. Smart Music has the ability to record a student and instantly show exactly what the student played correctly and incorrectly. You know exactly what to fix. This assessment program almost becomes a game, which students love, and students test over and over and over again each time shooting for a better score. Then, when they are done the score is printable and able to be sent as an



email to the teacher. Through Smart Music's individual subscription accounts our students can even have their own version of Smart Music for use on their home computers for between \$20 and \$30 a year. Students can test at home, over and over again, each time working on a higher score, all the while spending time practicing and simply email me their test results. I would then know how much they have been practicing and the assessments are error free. SMART Board would enable us to make Smart Music interactive and available to the entire class. We can also use SMART Board in conjunction with **Finale** and other advanced music composition software for everything from exercises to entire band arrangements. There are also several online software programs such as **musictheory.net**, **emusictheory.com**, and **teoria.com** which will allow students to play and practice music theory, rhythmic dictation and ear training interactively as a class! Lastly the **SMART Board Notebook** program itself contains music staves, notation, musical signs and symbols which can be used in endless varieties.

Should the state ever make fine art assessment part of their testing requirements this tool would have us well on our way to not only covering state mandated material, but going much further through our own curriculum. Students learn more and faster. Teachers work smarter, not harder, truly a great opportunity for all.

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**NOTE:**

Please see the attached daily "Sponge Ideas" lesson plan guide which is currently in use. Note that the ideas which are circled, can and will be administered using the SMART Board. Also more lesson plans outlining the SMART Boards use in the rest of each day's lessons can be available upon request.

Thank you for your consideration.

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