

**A Pedagogical Approach to Technology Integration  
Using Pop Music as a Framework  
Dr. Scott Shinbara**

**Origins**

Crosstalk Percussion Ensemble at the University of Arizona – Director Norman Weinberg.  
All Electronic Percussion Ensemble Member 2005-2008

I wanted to take the concept and instruments of Crosstalk and turn it into an ensemble that used pop music as its medium to energize students, challenge them in a musical way they weren't in other ensembles, and create a "show" that audiences would respond well to. My goal as a teacher is to shape students to be great musicians and teachers, help them to grow entrepreneurially, and for them to empathize with the whole curation process of music-making.

**Objective**

By participating in this ensemble, students will...

- Improve transcription and arrangement skills.
- Have coaching opportunities (students help run their tunes).
- Develop an ear for all music. Reconstructing pop songs reinforces the artistic aesthetics of timbre in popular music that is especially lacking in acoustic transcriptions of percussion music (ex: pop songs arranged for marimba band).
- Play drum set (and be coached) in a collegiate setting that isn't jazz band or pep band.
- Have a pop ensemble option for ed majors in their K-12 curriculum, especially in schools that don't have the funding or numbers for large marching bands.
- Experience playing and rehearsing with singers.
- Experience other "instrument" roles (bass, keys, guitar) outside of being the drummer.
- Receive training on instruments they may be required to use in gigs, especially in pit orchestras or other large-scale events.
- Get to work with electronics for their own development of music and/or to help get gigs in audio reinforcement/recording.
- Get a chance to promote the concert. This concert has the potential to be very popular and make real money.

## Methodology

1. Students do transcriptions of assigned song. They transcribe it as closely as possible to the original instruments. We don't generally transcribe drum set or voice parts (unless needed).
2. Whole group goes through each transcription with a recording to look for errors in the score or make suggestions on how to make it easier to play.
3. Director (often with input from transcribing student) assigns parts to the instrument set-ups that we have. It is not uncommon for parts to be modified so that a student can play more than one part at time.
4. Students look for sounds and do sound design. This usually involves building sounds up like the actual instrument.
  - For Example: Electric Guitar- start with a Fender Strat sample sound, add amps, then effects like flanger, distortion, wah-wah, etc.
5. Rehearse. Early rehearsals are often filled with note-taking for changes and modifications for sounds. Singers are brought in after a few instrument-only rehearsals take place.

“Playing and performing the part” is usually the easy part. The preparation of steps 1-4 is a better arbiter of success.

## **Current gear for 2019 concert:**

### Controllers:

- 1 Malletkat 3 octave
- 1 Malletkat 4 octave
- 1 Pearl Malletsation
- 1 Trapkat

### Samplers:

- 1 Roland SPDSX
- 1 Nord Keyboard (also used as midi when needed)

### Acoustic:

- 1 Mapex Armory 6 piece
- 1 Tama Starclassic Snare

### Interface Audio/Midi:

- 1 Tascam Celesonic USB 20x20
- 1 Motu Microlite midi interface
- 1 Macbook Pro
- 1 USB 3 hub (powered)
- 1 Furman Power Conditioner

### Mixers/Monitors:

- 1 Behringer X-32 Compact
- 1 Behringer 16 input stage box
- 1 Behringer 8 input stage box
- 2 Sennheiser in-ear units (2 separate bands)
- 7 total (5 and 2 receiver packs)

### Mics:

- 3 Shure sm58 (vocals)
- Various drumkit mics (various choices)

### Software:

- Reason 10 (run in rewire)
- Ableton Live Suite 10

## **Changes Over Time**

Our first concert, we didn't integrate the mixer until the week of the concert. This meant we had to do a lot of adjusting (individual scenes) in very long "tech week" rehearsals that could be 6 hours long.

Currently, we run everything through in-ears from the mixer the whole time. This meant we only needed one rehearsal with the singers and one dress rehearsal that met outside of normal percussion ensemble time.

Our first concert was about 45 minutes of music. Over the years, we ballooned up to 3 sets (of 45 minutes each with a break between each). Normally, bars have 3 acts in a night. That was too long for our audience. We went down to 2 sets (45 minutes with break in between) and found some people left in between. We now do 1 set of about 80 minutes of music that lasts about 90 minutes total.

## **Starting Gear**

3 Malletkat 3 octave

1 Trapkat

1 Drumkat

1 Macbook Pro

1 IMac

2 M audio 2x2 audio interface

2 Midiman midi interface

2 4 channel headphone amps

Reason 7

## **Strategies for Success:**

1. Start early!
2. Before we started doing full concerts, we did 1-2 songs along with traditional percussion ensemble rep.
3. If possible, team up with a tech professor. They may even have a few students who might be interested in coming to your rehearsals to assist with sound design and mixing.
4. If possible, use in-ears or headphones and run everything through a mixer from the beginning. This will make the transition to the performance space so much easier.
5. It's good to program music you believe in, but always let your students be part of at least some of the selection.
6. Most students love the concert, but it is difficult to keep 18 to 21-year-old students focused on each step. Those that don't like the concert tend to really hate it. It is vital to remind them of all of the benefits of working with technology.

**Lab Setting for today:**

Mallekat (bass) and Malletstation (guitar/synth) are set up so that you can play along with the provided music track. This gives some idea of what our scores look like, what playing the controllers is like, and how the hardware and software are set up.

Please forgive the quality of the recording; it came from a rehearsal. Rehearsals are multi-track recorded and the bass and synth/guitar part are removed for play-along purposes.