The Curriculum: Goals

In constructing a curriculum specifically for brain development, and mitigating the harmful effects of homelessness, this text focuses on a few main principles important to our goals. This is a one-day curriculum focusing on a variety of workshops that together are able to attract a broad demographic of people with various interests and skill levels.

Principle 1:Potential/Mastery

Working with the outreach coordinators at NW Noggin, one of the things that they found that helped children transition from interested to inspired was making sure there was some form of empowering accomplishment. In order to provide such accomplishment, several of the workshops in this text provide opportunities for the participants to create or accomplish something, and feel a level of empowerment or mastery over a specific musical principle or technique. Because long term musical training is necessary to fully compensate for the compromised cognitive development of homeless youth, giving students a sense of mastery and musical potential will be important toward the goal of inspiring students to continue to seek out opportunity to learn and make music.

Principle 2: Performance/Collaboration

More harmful byproducts of growing up homeless are dehumanization and invisibility. In order to mitigate the harmful effects of being chronically dehumanized and ignored, the workshops in this curriculum include elements of collaboration and performance. Through performance, the participants will be seen and heard, looked at in the face and eyes, be complemented, and have their name learned by others, which are all humanizing experiences that many homeless have fewer opportunities for. By collaborating with others, the participants will be a part of a soundscape that would be different without them, and will have to engage in complex forms of communication, improvisation, and call and response techniques that we expect will give participants a sense of community, belonging, importance, and flow.

Principle 3: Future Orientation

The last thing we chose to build the curriculum around is future orientation. Homeless youth have higher rates of depressive symptoms than non homeless youth. In order to help participants feel a sense of ambition, curiosity, and motivation to continue learning and mastering different musical techniques some of the workshops were developed to give a glimpse into the potential for continuing to learn and practice theory and technique that will not be mastered within one day. The hope is to help participants set musical goals, as regular musical practice and stimulation will be required to significantly improve brain development and realize the long-term effects of music on the brain.

Workshops

The workshops in this curriculum are designed to be customized. The point of this curriculum is not to tell instructors how to teach, for that would surely only result in the instructors teaching less effectively and confidently. The focus of the curriculum is to shape the way music instructors approach teaching towards a specific outcome; in this case, brain development and mental health. Whereas, historically, music instruction has focused on mastery of theory, composition, or instrumental proficiency, this curriculum is focused on brain health and mental health outcomes. This is not to say that mastery and proficiency need to be disregarded, but rather to say that the actual practicing and learning is more important for the purposes of this curriculum than any sort of musical achievement. This curriculum is primarily made for volunteer music instructors, community music programs, and nonprofits to use, and each instructor and volunteer will bring their own experience and expertise. The workshops provided in this curriculum are primarily exemplary in nature, but the curriculum itself is built to leave room for instructors to shape their expertise into customized workshops that focus on brain development and mental health for homeless youth. In short, there is no wrong way to inspire kids to love making music.

Workshop 1: Build a Drum

The purpose of this part of the workshop is to build a sense of mastery and potential in students early on in the program. There are many ways to build a drum, but in this method students take something round and hollow and stretch a balloon over the top, or cover it in tape to craft a drum. Students should be encouraged to build their drum creatively and be able to decorate it and customize it to their liking. This is an opportunity for students to express a part of their personality, learn about each other, and combat dehumanization and invisibility.

Objective: Students will build a drum out of simple parts that they will be able to use in the other workshops.

Materials: Coffee/Paint Can, Scissors, Balloons, Rubber bands, Arts/Crafts supplies for decoration.

Estimated Time: 30 min

Instructor: Volunteer (no experience necessary)

Instructions:

- 1. Each student selects a can and a balloon
- Each student cuts the bottom of the balloon off and stretches the balloon over the top of the can
- 3. Each student stretches a rubber band over the balloon to hold the can in place
- Each student will then be able to freely decorate their new drum using paints, stickers, yarn, pipecleaners, etc.

Workshop 2: Ethnic Drumming

The goal of this workshop is to help students develop a sense of mastery over drumming as well as potentially a source of pride in their identity/heritage as many drum techniques from various cultures are taught in a culturally literate way. This example uses a latin "Cumbia" rhythm, but any type of drumming from any other culture can be used effectively based on the instructor's experience.

Cumbia is a folkloric rhythm accompanied by its own style of dance from Colombia in South America. It has roots in the indigenous culture of the Caribbean coast of Colombia, as well as Africa and Spain. It was typically the music of the poorer "working class," but eventually was adopted and popularized across classes and all over Central and South America.

Objective: Students will follow instructor to learn about the basics of rhythm and meter, as well as techniques specific to culturally significant ethnic drum rhythms.

Materials: Balloon Drum

Estimated Time: 25 min

Instructor: Drum Instructor with experience in ethnic drumming

Instructions:

- Instructor will teach model an introductory Cumbia beat. Instructor will have first student(s) play a basic 1 - & a 2 - & a Cumbia rhythm.
- Once students are able to keep rhythm with beat 1, Instructor will have 2nd student(s) add quarter notes as the bass.
- 3. Once both groups are playing rhythmically, the instructor will add the 3rd beat and have 3rd group of students play on the and of each beat, explaining that this extra rhythm is known as the tumbao.
- Finally, Instructor will have the 4th student(s) add in conga part which consists of a 1 & 2 & 3 & a (4)e& 1.
- 5. As students master the rhythm collaboratively instructor can play a basic 2 chord pattern on the guitar or another instrument (optional), expressing that the students are officially "jamming."

Workshop 3: Intervals

All music is made of notes. The distance between these notes relatively is called an "interval." Every melody we've ever heard is made up of a series of intervals. This workshop is designed to help students understand pitch, melody, ear training, and composition. Most students will already have heard many popular musical works, and this workshop will tap into their existing knowledge to teach them something new. This is a helpful technique because it gives the student an initial sense of mastery and belonging before beginning teaching one of the more difficult principles to master. The mastery of ear training and intervals is important for musical training, especially in student who will have less access to professional instruction. Since all songs are made of intervals, every song can be deconstructed and reverse engineered based on the intervals used. This is helpful for harmonic analysis, as well as songwriting. It becomes easier to write music, when one can understand what musical techniques many of their favorite composers are using to make the music that they enjoy. This mastery of pitch "by ear" can help students stay motivated towards practicing, composing, and pursuing musical goals because they will be better able to learn songs they love and craft their own songs based on their influences.

Objective: Student to gain basic understanding of pitch and intervals by giving reference to songs that they know.

Materials: Piano (optional)

Estimated Time: 40 min

Instructor: Vocal Coach with working knowledge of Music Theory Specifics:

 For examples of each interval have the students sing along or play along to the following songs.

Interval	Ascending
Minor 2nd	Jaws (Theme)
Major 2nd	Happy Birthday to You
Minor 3rd	Seven Nation Army (The White Stripes)
Major 3rd	Oh, when the Saints
Perfect 4th	Amazing Grace
Tritone	Simpsons
Perfect 5th	Star Wars
Minor 6th	The Entertainer (Scott Joplin)
Major 6th	Dashing Through the Snow (Jingle Bells)
Minor 7th	Somewhere (West side story)

Octave Somewhere over the Rainbow (Wizard of Oz)

2. 2. Once the students have learned the intervals have them play intervals to each other, and guess which one was played. Instructor can then teach that these intervals are the foundation of all western music, and once learned, one can deconstruct and reverse engineer any song they know, and improve their songwriting.

Workshop 4: Signal Chain Processing

All of western music is basically crafted from the same set of 12 notes. One of the main properties of music that keeps songs feeling "fresh" and "new" is timbre. Timbre is basically what the music/instrument/song/ "sounds" like. One of the more interesting and fun ways to learn about timbre, as well as recording, production, synthesis, and creativity in general is through signal chain processing. Signal chain processing is using effects units (such as guitar effects pedals) to disrupt, change, distort, modulate, or repeat an electrical audio signal.

The goal of this workshop is to let students creatively create a sound that could symbolically represent their personality. One way to think about our brains and minds is that we are essentially a "dry signal" as interpereted by our genes which can be represented by our instrument and amplifier. As we accrue experiences (effects units) they shape our signal in interesting ways so that none of us end up with the same signal path but that we are all unique and interesting and musical.

Objective: Student to gain basic working knowledge of how signal chains/synthesis works and also how cognitive development works by getting hands on experience with a signal chain.

Materials: Electric Guitar or Synthesizer, effects units, amplifiers, cables

Estimated Time: 30 minutes

Instructor: Volunteer with synthesis experience and working knowledge of basic cognitive development.

Specifics:

- 1. Instructor to set up an effects chain including a distortion, fuzz, reverb, delay, and modulation pedal.
- Instructor explains how these effects work on the dry signal by showing the student the sound of a clean dry signal and looping it.
- 3. Instructor explains how each of the effects works, (i.e. what they do to the dry signal.) A distortion pedal takes the clean sound wave and makes it spiky. A fuzz pedal does a similar thing, but with bigger wave forms. A modulation pedal takes the image of the wave and cycles the two sides of it against each other. A reverb signal makes the wave loop back on itself to imitate the sound of a room or space. A delay pedal takes the signal and replays it just after it already played, creating an echo effect.

 Whilst explaining the various effects in the signal chain the student is encouraged to shape the wave by way of the knobs on the pedals.

Workshop 5: Live Concert

A very common story amongst musicians is the story of the first live concert that inspired them to become a musician. The houseless and under 21 demographic that this curriculum is designed for, unfortunately, has far fewer opportunities for live music and, in turn, fewer opportunities for the robust type of future orientation and inspiration that those experiences can provide. Hosting a live concert is one of the more labor-intensive workshop examples given in this text, but can be very effective in encouraging students towards long-term practice and mastery of musical instruments. For accomplishing such a feat, the authors recommend working with other non-profit organization in your area that can facilitate such an event. A basic layout for how to set up a live concert is provided.

Objective: Give students an opportunity to see professional music in a live setting.

Estimated Time: 2 hrs

Instructor: Collaborative effort

Instructions:

 Find a venue. It is important for the purposes of this curriculum that the venue is friendly to students of all ages and backgrounds. Collaboration with other nonprofits that can facilitate this is recommended, or finding a space that will donate the rental to the cause as a sponsor is another good solution. Fundraising for the space rental is another option.

- 2. Sound System, Lights, etc. Many venues will already have these things. If the venue you have does not, try to find a sponsor who will give free/discounted rental rates for nonprofit work. The minimum of gear should include a mixer, 2 PA speakers, 2 monitor speakers, 3-4 dynamic microphones, and 2 Direct Input boxes. As well, a volunteer with experience running the sound for the event is recommended. Lights are optional, but in order to provide a professional concert environment and give students the best opportunity to be inspired, a quality event should be prioritized.
- 3. Musicians. Finding musicians is a process that should start at least 1 month before the event, preferably before. It is important when finding musicians to have a date/venue in mind. Musicians can be recruited through a variety of ways. Start by asking people you know and building a network of contacts. Look for the booking contacts of the musicians you are interested in having play and reach out with an email.
- 4. Promotion. Depending on the venue, musicians, and the details of the students you are working with, promotion may or may not be an important part of this workshop. Typically promotion consists of a press release (contacting local media publications about the event), social media advertising, and guerilla marketing (such as hanging flyers, and word of mouth). The guerilla marketing and social media advertising is a great opportunity for involvement by the

students themselves. It helps them to feel useful, and gives them a vested interest in the event. Promotion can also help draw a larger crowd, making the event seem like a "real" concert, rather than a charity workshop for houseless youth.

Conclusion

As previously stated, this curriculum is not designed to reinvent the wheel, but rather to rethink its purpose. Based on the research done in various fields we can see that musical training effects more than musical ability. In order to get the most robust effects from music training, it is important to begin teaching towards these new goals. For many "at-risk" populations, there are undeserved psychological, physiological, and cognitive consequences that create an unnecessary gap in privilege and achievement. Music has been found to be one way to help close this gap, and repurposing musical training to this cause will hopefully give more people a chance to have more opportunity than their circumstances might typically offer.