Sound Design, Unit 1: Music Technology

Content Area: **Music**
Course(s):
Time Period: **Marking Period 1**
Length: **Ongoing, throughout the school year 30/45 Day Cycle**
Status: **Published**

Brief Summary of Unit

In this unit, students will learn about the music equipment needed to compose and create audio productions. They will learn about GarageBand and other similar apps that will give them the basic understanding of working with any DAW (digital audio workstation). Students will learn to set their DAW up for recording. This will require students to maintain their equipment: charging their Ipad or computer, setting up microphones, using a computer dock, playing back through headphones/earbuds, becoming familiar with an audio interface and learning to edit, automate and mix their creations. Students will meet curriculum objectives by the end of eighth grade.

Essential Questions

- What equipment do I need for Digital Audio production?
- What are some DAW (Digital Audio Workstation) examples?
- How do I set up a microphone to use for recording?
- What is an audio interface?
- How can I use the equipment I have to make the best production?

Essential Understandings

- DAW, which stands for a digital audio workstation, is software that allows us to compose, record, and produce audio projects.
- Garage Band, Reaper, Cakewalk, and Band Lab are Digital Audio Workstations.
- If you need to record an audio source you will need a microphone, unless it is built into your Digital Audio Workstation.
- An audio interface will convert microphone and instrument signals into a format the computer software can recognize.
- Making a quality recording depends on various factors, which include: an appropriate recording space, equipment that is fully charged, clear microphone signals, volume settings. Additionally, prepared notes and clear vocal diction contribute to the success of a project.

Students Will Know

Students will know that a Digital Audio Workstation is required to create and edit audio productions such as recordings for a song, podcast, or audiobook.

Students will know that Garage Band is a Digital Audio Workstation.

Students will know that Garage Band and other DAW can be used to create, sample and record pre-set or original content

Students will know that microphone can be used to record a vocal or instrumental component for an audio project.

Students will know that an audio interface will facilitate a clear signal for recording, and that a faulty microphone setup will result in feedback or other signal distortion.

Students Will Be Skilled At

Students will be skilled at preparing their Digital Audio Workstation (DAW) by making sure all necessary materials and programs are in working order.

Students will be skilled at setting up and using microphones with a DAW.

Students will be skilled at recording editing and organizing multiple tracks.

Students will be skilled at automating volume and sound effects on instrumental and vocal tracks within a DAW.

Students will be skilled at setting up parameters on a track page, including but not limited to volume, meter, tempo, zoom, mute track, solo track, and metronome.

Students will be skilled at accessing and using software instruments, their variations, and sound effects.
Students will be skilled at accessing and using pre-set loops within an audio project.

Students will be skilled at using the software editing tools in a DAW for project completion.

Students will be skilled at using DAW as a tool for composition.

Learning Plan

Present and discuss the essential questions, making connections to these questions throughout the unit.

The teacher will develop strategies in daily learning plans to promote student independence and understanding in software/hardware setup and use, as well as navigating and using a DAW for composition and sound design

Explore software and how it interacts with hardware such as an Ipad, computer, microphone, audio interface.

Explore GarageBand or another DAW to set up projects with multiple tracks.

Experience adding and organizing tracks to facilitate editing during audio production.

Explore multiple digital instruments, their presets, and how to use them in creating their own melodies, harmonies, and rhythms.

Utilize microphones to create digital vocal or instrumental tracks.

Create projects that combine DAW presets, loops, personal and group vocals, and live and recorded instruments to produce an audio project such as a song, podcast, composition, audio book, documentary, or soundscape.

Plan a sound design using a DAW which is best suited for the project being prepared.

Review and edit in order to advance a production to the completed stage.

Evidence/Performance Tasks

Student response: ongoing discussion of essential questions and curriculum objectives.

Teacher observation of student performance pertaining to proper management of equipment: storing and charging ipads, microphones, docs, cables after every use.

Student demonstration of competent and appropriate use of all software and hardware when creating an audio production.

Teacher observation of student ability to troubleshoot issues between the DAW and microphones and or audio interface

Teacher observation of students' proficiency with editing tools.

Summative:

Completed Projects presented throughout the cycle or marking period based on rubric

Individual and group critique of production based on rubric

Benchmark

Project Drafts: Students will have multiple stages of progress for each production

Self and group critique of production based on rubric throughout the editing process

Assessment will have the following grade-level competency expectations:

6th Grade-with assistance

7th Grade- with limited assistance

Materials

The materials used in this course allow for integration of a variety of instructional, supplemental, and intervention materials that support student learners at all levels in the school and home environments. Associated web content and media sources are infused into the unit as applicable and available.

* To reach curriculum goals, students will use classroom instruments given their availability and at the discretion of the music teacher.

Standards

ELD standards:https://docs.google.com/document/d/1wdmsiGOdCHlrjU-WPvAtENnEgi0EStZXo0uiFYv1Nu4/edit

The identified standards reflect a developmental progression across grades/ levels and make interdisciplinary connections across content areas including social sciences, technology, career readiness, cultural awareness and global citizenship. The standards that follow are relevant to this course in addition to the associated content-based standards listed below.

P.7	Plan education and career paths aligned to personal goals.
P.8	Use technology to enhance productivity increase collaboration and communicate effectively.
1.3A.8.Cr2a	Select, organize and document personal musical ideas for arrangements, songs and compositions within expanded forms that demonstrate concepts such as tension and release, unity and variety, balance, and convey expressive intent.
1.3A.8.Cr2b	Use standard and/or iconic notation and/or recording technology to document personal rhythmic phrases, melodic phrases and harmonic sequences.
1.3A.8.Cr3a	Evaluate, refine and explain their own work by selecting and applying criteria including appropriate application of elements of music, compositional techniques, style and form, and use of sound sources.
1.3A.8.Pr5a	Identify and apply personally developed criteria (e.g., demonstrating correct interpretation of notation, technical skill of performer, originality, emotional impact, variety, interest) to rehearse, refine and determine when the music is ready to perform.
1.3A.8.Re7a	Select programs of music (e.g., a playlist, live performance) and demonstrate the connections to an interest or experience for a specific purpose.
1.3A.8.Cn10	Synthesizing and relating knowledge and personal experiences to create products.
1.3A.8.Cn10a	Demonstrate how interests, knowledge and skills related to personal choices and intent when creating, performing, and responding to music.
1.3A.8.Cn11	Relating artistic ideas and works within societal, cultural and historical contexts to deepen understanding.
1.3A.8.Cn11a	Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

Suggested Strategies for Modifications

This link includes content specific accommodations and modifications for all populations:

Performing Arts Accommodations & Modifications