

Unit 4 - Audio Engineering & Recording Production

Content Area: **Fine and Performing Arts**
Course(s): **Music Tech 2**
Time Period: **May**
Length: **20 Days**
Status: **Published**

Unit Overview

Recording music is more than just setting up a microphone and hitting the record button. Students will learn how different microphones as well as microphone placement can enhance or detract from a performance. Post-production is also an integral part of the process. Students will gain an understanding of how to edit, mix, and master a recording to make it available to the consumer.

Enduring Understandings

- Different microphones are used for different applications.
- Microphone placement is directly related to microphone selection.
- Post-production (editing and finalizing of an audio project) is necessary for a creating a marketable product.

Essential Questions

- How do technical aspects of music post-production impact the final product?
- How do technical musical choices made post-performance affect the quality of the final recorded product?
- How do venue and performing medium affect microphone selection?
- How does microphone selection affect microphone placement?
- What is the importance of post-production in a live performance?

Standards/Indicators/Student Learning Objectives (SLOs)

MU.9-12.1.3E.12adv.Cr2	Organizing and developing ideas.
MU.9-12.1.3E.12adv.Cr3	Refining and completing products.
MU.9-12.1.3E.12acc.Pr4	Selecting, analyzing and interpreting work.
MU.9-12.1.3E.12adv.Re7	Perceiving and analyzing products.
MU.9-12.1.3E.12adv.Re8	Interpreting intent and meaning.
MU.9-12.1.3E.12adv.Re9	Applying criteria to evaluate products.
MU.9-12.1.3B.12adv.Cn10	Synthesizing and relating knowledge and personal experiences to create products.
MU.9-12.1.3B.12adv.Cn11	Relating artistic ideas and works within societal, cultural and historical contexts to deepen understanding.

Performance Expectations

MU.9-12.1.3E.12adv.Cr2a	Select, develop and organize multiple melodic, rhythmic and harmonic ideas to develop into a larger work that exhibits unity, variety, complexity, and coherence using digital and/or analog tools and resources.
MU.9-12.1.3E.12adv.Cr3a	Develop and implement varied strategies and apply appropriate criteria to improve and refine the technical and expressive aspects of draft compositions and improvisations.
MU.9-12.1.3E.12acc.Pr4a	Develop and apply criteria to select sound resources to study and perform based on interest, an understanding of musical characteristics of the music, and the performer's musical skill using digital tools and resources.
MU.9-12.1.3E.12acc.Pr4b	Describe and provide examples of how context, musical aspects of the composition, and digital media/tools inform prepared and improvised performances.
MU.9-12.1.3E.12acc.Pr4c	Demonstrate how understanding the style, genre, context, and use of digital tools and resources in a varied repertoire of music influences prepared or improvised performances and performers' ability to connect with audiences.
MU.9-12.1.3E.12adv.Re7a	Select, describe and compare a variety of musical selections based on characteristics and knowledge of the music, understanding of digital and electronic aspects, and the purpose and context of the works.
MU.9-12.1.3E.12adv.Re7b	Justify (by using examples) how an analysis of the structural characteristics, context, and technological and creative decisions, informs interest in and response to the music.
MU.9-12.1.3E.12adv.Re8ea	Examine and cite research from multiple sources to connect the influence of the elements of music, digital and electronic features, context, purpose, and other art forms to the expressive intent of musical works.
MU.9-12.1.3E.12adv.Re9a	Develop and justify the evaluation of a variety of music based on established and personally developed criteria, digital, electronic and analog features, and understanding of purpose and context.
MU.9-12.1.3B.12adv.Cn10a	Demonstrate how interests, knowledge and skills related to personal choices and intent when creating, performing and responding to music.
MU.9-12.1.3B.12adv.Cn11a	Demonstrate understanding of relationships between music and the other arts, other disciplines, varied contexts, and daily life.

Lesson Titles

- Bootleg vs. Commercial - Students will learn how different microphones and microphone placements enhance or detract from recording a live performance.
- Critique - Students will learn how to give positive feedback to their peers as to project content, creativity, and overall performance.
- Microphones - Students will learn how to select a microphone for any type of performance application.
- Post-Production - Students will learn how to master a recorded live performance through editing and mixing.

Career Readiness, Life Literacies, & Key Skills

TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g.,
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	1.1.12prof.CR3a).
TECH.9.4.12.CI.2	Identify career pathways that highlight personal talents, skills, and abilities (e.g., 1.4.12prof.CR2b, 2.2.12.LF.8).
TECH.9.4.12.CI.3	Investigate new challenges and opportunities for personal growth, advancement, and transition (e.g., 2.1.12.PGD.1).

Inter-Disciplinary Connections

LA.9-12.3.3	All students will speak in clear, concise, organized language that varies in content and form for different audiences and purposes.
LA.9-12.3.5	All students will access, view, evaluate, and respond to print, nonprint, and electronic text and resources.
ITEC.9-12.	Technology is used to access, manage, integrate, and disseminate information.

Instructional Strategies, Learning Activities, and Levels of Blooms/DOK

- Classwork
- Critiquing
- Listening Journal
- Microphone Placement Demonstration
- Raw Track Mix/Master
- Tributes Assignment Using Prerecorded Music Choices

Modifications

- Determine where students' interests lie and capitalize on their inquisitiveness.
- Employ differentiated instruction to keep interest & success high.
- Encourage students to explore concepts in depth and encourage independent studies or investigations.
- Give direction orally.
- Invite students to explore different points of view on a topic of study and compare the two.

ELL Modifications

- Choice of test format (multiple-choice, essay, true-false)
- Continue practicing vocabulary
- Provide study guides prior to tests
- Read directions to the student
- Read test passages aloud (for comprehension assessment)
- Vary test formats

IEP & 504 Modifications

- Allow for redos/retakes
- Assign fewer problems at one time (e.g., assign only odds or evens)
- Differentiated center-based small group instruction
- Extra time on assessments
- Highlight key directions
- If a manipulative is used during instruction, allow its use on a test
- Opportunities for cooperative partner work
- Provide reteach pages if necessary
- Provide several ways to solve a problem if possible
- Provide visual aids and anchor charts
- Test in alternative site
- Tiered lessons and assignments
- Use of a graphic organizer
- Use of concrete materials and objects (manipulatives)
- Use of word processor

G & T Modifications

- Alternate assignments/enrichment assignments
- Enrichment projects
- Extension activities
- Higher-level cooperative learning activities
- Pairing direct instruction with coaching to promote self-directed learning
- Provide higher-order questioning and discussion opportunities
- Provide texts at a higher reading level
- Tiered assignments
- Tiered centers

At Risk Modifications

- Additional time for assignments
- Adjusted assignment timelines
- Agenda book and checklists
- Answers to be dictated
- Assistance in maintaining uncluttered space

- Books on tape
- Concrete examples
- Extra visual and verbal cues and prompts
- Follow a routine/schedule
- Graphic organizers
- Have students restate information
- No penalty for spelling errors or sloppy handwriting
- Peer or scribe note-taking
- Personalized examples
- Preferential seating
- Provision of notes or outlines
- Reduction of distractions
- Review of directions
- Review sessions
- Space for movement or breaks
- Support auditory presentations with visuals
- Teach time management skills
- Use of a study carrel
- Use of mnemonics
- Varied reinforcement procedures
- Work in progress check

Formative Assessment

- Anticipatory Set: Question of the Day
- Closure: 3-2-1, Exit Card, Sum It Up, Ticket Out The Door
- Critique
- Homework
- Individual Feedback
- Warm-Up: Listening Journal

Summative Assessment

- Class Collaborative Multi-Track Mixing & Mastering Project
- Marking Period Assessment
- Tributes Project

Alternative Assessments

Performance tasks

Project-based assignments

Problem-based assignments

Presentations

Reflective pieces

Concept maps

Case-based scenarios

Portfolios

Benchmark Assessments

Skills-based assessment

Reading response

Writing prompt

Lab practical

Resources & Materials

- Behringer C-1 Condenser Microphone
- M-Audio KeyRig 49
- M-Audio Mobile Pre

Technology

- GarageBand
- iMovie
- iPhoto
- iTunes

- SmartBoard

TECH.8.1.12

Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

TECH.8.1.12.B.CS2

Create original works as a means of personal or group expression.

TECH.8.1.12.C.CS1

Interact, collaborate, and publish with peers, experts, or others by employing a variety of digital environments and media.

TECH.8.1.12.C.CS2

Communicate information and ideas to multiple audiences using a variety of media and formats.