Instructional Lesson Plan	
Content Area(s)/Course/Grade: High School General Music	Unit: Music Production and Technology
Date: 11/5/2024	Lesson: Exploring Articulation through ADSR Envelopes
Teacher: Kevin Catalon	Duration: 50-minute Class

Lesson Description (synopsis):
Students will explore articulation in music through ADSR envelopes (Attack, Decay, Sustain, Release). They start by matching sound envelopes to instruments, then experiment with an online synthesizer to create unique sound profiles by adjusting ADSR settings. The lesson concludes with students recording and reflecting on their sound creations. Teaching demo will encompass all portions included in this slideshow.

Student Objectives (SWBAT):

- SWBAT identify and describe the four components of an ADSR envelope (Attack, Decay, Sustain, Release) and how they relate to articulation in music.
- SWBAT create and manipulate three different ADSR envelopes using an online synthesizer tool.
- SWBAT justify their creative process and describe their own ADSR envelopes using appropriate musical terminology.

Instructional Delivery/Sequence

- Hook: Play three short sound clips from different instruments (violin, drums, and organ). Ask students to discuss what they hear and how the sounds differ. Prompt them to think about what makes each sound unique in articulation.
    - Explain that today, they will learn about how we can shape how sound is articulated through ADSR.
- Define Attack, Decay, Sustain, and Release. Explain how each affects sound production and articulation, as well as connecting it back to physical instruments they are familiar with.
- Activity: Envelope matching
    - Display pictures of different amplitude envelopes on the board
    - Display pictures of the corresponding instruments (e.g., violin, drums, organ) and ask for student volunteers to match the envelopes to the correct instrument.
    - Facilitate a class discussion about the reasoning behind their matches. Ask guiding questions like, "Why do you think the piano has a sharper attack than the violin?" “What if the violin was pizz. rather than arco?”
- Demonstration/Exploration
    - Introduce students to the online tool from Ableton – Learning Synths.
        - Teacher will demonstrate how changing each of the phases affects the sound of the

synth.
    - Following teacher demonstration, instruct students to experiment with creating three different ADSR envelopes, focusing on how their adjustments affect the sound's articulation.
        - Students will be prompted some guiding questions to get them started if they need inspiration: “Can you create a sound with a slow attack that fades quickly?”
        - “Can you adjust the ADSR to mimic a plucked vs. bowed sound?”
- Introduce the assessment task, telling students that they will submit a screen recording of their created envelopes along with a written explanation.

Assessment/Evaluation

Formative:
Observe students during the matching activity and hands-on exploration for engagement and understanding. Students should demonstrate a growing understanding of the objectives during the discussion, matching activity, and exploration time with the online Ableton tool.

Summative:
Students will upload screen recordings of their two (or three for extra credit) envelopes along with a written explanation that includes:

- Their goals for each envelope.
- Descriptive words for the sounds they created (e.g., smooth, legato, short, plucky, staccato, ambient, crisp, sharp, punchy, percussive, rounded, sustained, dull, sudden).
- Comparisons to existing instruments if applicable ("This envelope sounds like a smooth violin").

Methods of Differentiation

- Challenge more advanced students to create envelopes that mimic more complex instruments or to explore additional parameters beyond ADSR (how it applies to pitch, or an introduction to LFOs; the next module in Ableton’s Learning Synths webpage). They can also create a third envelope for extra credit.
- Offer students who need support guided practice. Teacher could offer step-by-step instructions to create an ADSR envelope (for example a pluck sound), and could offer other examples before they experiment on their own, and provide a more streamlined template for their written reflections. The student could also just be required to create one envelope.