

Co-Creating with Computers Lesson Plan

Audience: Jazz ensemble

Overview: Students will use an artificial intelligence music generator (AIVA) to create a chord progression. Then students will improvise and record their own melody on top to create their own piece.

Objectives:

- Improvise a melody
- Create and record a new musical work
- (Optional) Use a digital audio workstation to edit music

National Standards Addressed:

MU:Cr1.1.E.IIIa: Compose and improvise musical ideas for a variety of purposes and contexts.

MU:Cr2.1.E.IIIb: Preserve draft musical works through standard notation, audio, or video recording.

MU:Cr3.2.E.IIIa: Share varied, personally-developed musical works - individually or as an ensemble - that address identified purposes and contexts.

MU:Cr1.1.T.IIIa: Generate melodic, rhythmic, and harmonic ideas for compositions and improvisations that incorporate digital tools, resources, and systems.

Duration: 2 class periods

Materials:

- Device with internet access and headphones for each student
- Student instruments
- Technology with audio recording capabilities
- (Optional) Digital audio workstation for students to use

Prior Knowledge and Skills:

- Improvise over a chord progression
- Use audio recording technology

Preparation:

- Have students create accounts on AIVA (creators.aiva.ai)

Procedure:

1. Students will go to AIVA (creators.aiva.ai) and create a 'Generation Profile' to use for generating their chord progression. Suggested settings:
 - a. Development: Song I or Jazz
 - b. Harmonic dataset: Simple Chords I, Simple Chords II, Simple Chords III, Seventh Chords I, Intermediate Mixed Chords I, Advanced Mixed Chords I, or Advanced Jazz Chords
 - c. Harmonic Pacing set towards slow
2. Students will generate at least one piece from their Generation Profile. (If students would like to make changes, they can open the piece in Editor.)
3. Students will practice playing along with their generated piece. (If needed, students can open it in the Editor and click on 'Chords' to see the chords being used.)
4. When they are ready, students will record a solo over top of the piece. Students can download the generated music and listen to it with headphones while recording their solo into a digital audio workstation, where they can then edit their final recording. Alternatively, students can simply play the recording with the chord progression out loud and improvise over top of it, recording the entire thing.

Differentiation:

- Rather than recording works, students could generate their chord progression and practice playing along with it, then play a prepared or improvised solo in front of the class
- Students could work in pairs to generate the chord progression and then take turns soloing for their recording
- The complexity of chords in the generated music, as well as the key signature, can be controlled in the generation profile. You could also choose to edit some chords after it is generated if needed.

Feedback, Evaluation, and Assessment:

- Evaluate students' final recordings

Extension/Follow-up:

- Students could trade chord progressions and try improvising over each others'
- The generated chord progressions could be used to practice ear training

Tips:

- If students are having a hard time generating a chord progression they like, they may want to adjust the settings in their generation profile