### **AI Terminology**

#### A.I. (Artificial Intelligence)

Computer systems designed to perform tasks that typically require human intelligence, such as learning, reasoning, problem-solving, and perception.

#### GenAl (Generative Al)

A type of artificial intelligence focused on creating new content, such as text, images, or music, often through learning patterns from existing data.

#### LLM (Large Language Model)

A type of AI model, like GPT-3, designed to understand and generate human-like language patterns on a large scale.

#### GPT (Generative Pre-trained Transformer)

A type of large language model in artificial intelligence, developed by OpenAI, capable of understanding and generating human-like language patterns based on pre-training with vast amounts of diverse data.

#### Tokens

Tokens are how AI Tools will often measure their usage and charge for premium services. For example, a Language Based AI tool may track each word as a token, and will charge for each token generated, alternatively it could be an image generated or a length of a piece being mastered.



# **AI Shortcomings**

Things to be aware of when dealing with Artificial Intelligence

Hallucinations are when a Generative AI presents fictional information as if it were factual or accurate. This fabrication extends to various aspects, including citations, publications, biographical details, and other elements commonly found in research and academic papers.

Generative AI models should **not be viewed as knowledge databases**; rather, they represent an effort to synthesise and replicate the data on which they were trained. This poses significant challenges in terms of validating and appropriately attributing the sources of their content.

Numerous generative AI models, including ChatGPT, undergo training with data that has specific **cutoff dates**. Consequently, these models may provide outdated information or struggle to offer insights into current events. Unfortunately, the cutoff date for the training data is not always explicitly communicated to users.

To address the issue of undisclosed and inappropriate uses of generative AI content, organisations are actively developing and promoting **generative AI detectors**. These tools leverage AI to identify content created by generative AI. Despite their well-intentioned purpose, these detectors can be unreliable, occasionally leading to false positives. It is not advisable to rely solely on these tools to determine whether an assignment or other work was created using generative AI, and it is important to have effective authenticity strategies in place.



### **Suggestions for AI in the Classroom**

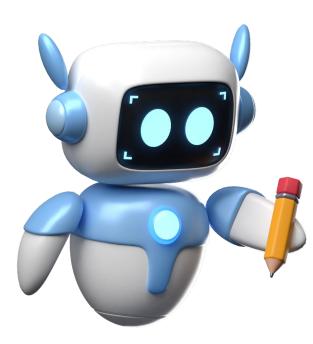
Here are some suggestions for using text based GenAI (such as ChatGPT) for generating content and ideas for the Music Classroom.

#### Teachers

• Finding music examples eg. Find me film music that prominently features an ostinato, or uses the shepard tone.

• Activities to teach specific content eg. What is an activity to teach students the concept of syncopation?

• Write (or rewrite) content at a specific target audience eg. Rewrite this paragraph for a 13 year old or give me the definition of sonata form for a 15 year old.



### Students

- Inspiration for songwriting (lyrics, topics, ideas)
- Lyric generation
- Suggestions ie. chord progressions,

#### instrumentation

- Music Theory Explanations:
- Genre Characteristics / Explanation
- Generate copy to promote on social media



### **A.I Tools for the Classroom**

Find below a list of current AI tools that could be utilised in the classroom! Due to the nature of AI, many of these tools do require a subscription.

Pricing for AI will often be a **subscription** or be **tokens/credits** (see above for an explanation).

Songwriting & Idea Generation

<u>WaveAI's Alysia</u>: Alysia is an AI tool designed for songwriting. It analyses lyrics and generates melodies to match the emotional tone of the text. Platform: iOS Cost: Free with in app purchases

Lyric Studio: Lyric Studio is an AI-powered app that assists with lyric writing. It suggests rhymes, themes, and ideas based on user input, helping songwriters overcome creative blocks.

Platform: Web based Cost: <u>Subscription</u>

Voice Changing Apps



Both of these apps allow you to record your voice, and make it sound like another person. A great way to encourage students who are self conscious about singing to record themselves and add vocals to their compositions!

<u>Voice-Swap Al</u> Platform: Web based Cost: <u>Subscription</u>

#### **Singify**

Platform: Web based Cost: Free sign up (1000 tokens free) with credit/token based pricing



### Instrument Changing Apps

<u>Tone Transfer</u>: This app allows you to record an instrument or sound, such as singing, cello, or even bird chirping, and change it to another instrument, currently offering Flute, Saxophone, Trumpet and Violin. Platform: Web based Cost: Free

#### **Drum Machines**

Leverage the power of AI to create unique and interesting drum grooves with these apps! Drum Loop AI Platform: Web based Cost: Free trial, then token/credit based pricing The Infinite Drum Machine Platform: Web based Cost: Free DrumNet Platform: Web based Cost: 14 day free trial with subscription and purchase options

### Collaboration

<u>Endlesss</u>: Endlesss is a collaborative music platform that combines human creativity with AI. It allows users to jam, remix, and create music together using AI-generated sounds.

Platform: Web based Cost: Free with premium option



**Mixing and Mastering** 

<u>MasteringBOX</u>: MasteringBOX is an online AI mastering platform that provides an automated mastering process. It analyses the audio and applies processing to achieve a balanced and professional sound.

Platform: Web based

Cost: Free (1 master per day) with subscription options

LANDR: LANDR is known for its AI-based mastering service, but it also offers AI tools for music creation. Users can generate ideas, find inspiration, and collaborate with AI assistance.

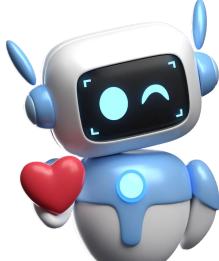
Platform: Web based

Cost: Free sign up, then subscription

<u>CloudBounce</u>: CloudBounce offers an AI-powered mastering service that automatically applies processing to enhance the overall sound quality of a track. The per track pricing is perfect to get you started, with unlimited monthly or annual subscriptions for more frequent use. Platform: Web based Cost: Per track or subscription options

<u>eMastered</u>: Another online AI-powered mastering service! This one was made by Grammy-winning audio engineers. The benefit of this service is you can trial the software for free, preview your mastered tracks, and only pay if you're happy with them.

Platform: Web based Cost: Free preview, subscription





### Music Creation / GenAl

These apps generate entire pieces of music based on given prompts. These could be useful for inspiration but could also be a potential risk for composition tasks. There are many other similar applications available.

<u>AIVA</u>: AIVA (Artificial Intelligence Virtual Artist) is an AI music composition software that can generate musical pieces in various styles. It's designed to assist composers in their creative process. Platform: Application for Windows, MacOS and Andoird Cost: Free with subscription options

Magenta Studio: Magenta Studio is an open-source research project exploring how to make music and art using machine learning. Platform: <u>Web based</u> and <u>Ableton Live Plugin</u> Cost: Free

Humtap: An AI-powered music creation app that turns hummed melodies into fully produced songs. It helps students create music even if they don't play traditional instruments. Platform: Apple Application Cost: Free

<u>Sony's Flow Machines</u>: Flow Machines is a project by Sony that uses AI to analyze a vast amount of musical data and generate music in various styles. It gained attention for creating <u>"Daddy's Car.</u>" a song in the style of The Beatles.

Platform: Apple Application Cost: Free

<u>Soundraw.io</u>: Soundraw, an AI-powered music generator, allows you to craft unique and royalty-free musical compositions, designed to enhance content or projects. Tailor the length, tempo, composition, instruments, and genre of your custom tunes and music using Soundraw. Platform: Web based Cost: Free preview with subscription plan

Free preview with subscription plan

