



BLOB OPERA

Suitable K-12, Blob Opera transforms simple gestures into operatic masterpieces, inviting students to explore the fascinating interplay between Human Creativity & AI.

Year 4 Lesson Plan: Exploring Blob Opera

Objectives:

- Students will learn about vocal ranges (soprano, mezzo-soprano, tenor, bass) by interacting with the Blob Opera interface.
- Students will create simple musical compositions while exploring the role of AI in translating visual inputs into sound.
- Students will discuss how AI & human creativity work together, linking music, art & technology.

Lesson Outline:

Introduction (10 minutes):

- Introduce the concept of opera & vocal ranges.
- Demonstrate Blob Opera on a smartboard.
- Briefly discuss how AI is used to generate harmonious sounds from user inputs.

Hands-On Activity (20 minutes):

- In pairs, students experiment with Blob Opera.
- Encourage students to note how their actions influence the sound output.

Group Discussion (15 minutes):

- Facilitate a discussion on the collaboration between Human inputs & AI.
- Questions to prompt discussion: How does the AI interpret your actions? What role does your creativity play in shaping the output?

Reflection & Sharing (15 minutes):

- Students share their compositions with the class.
- They reflect on what they learned about music, art & technology.

Curriculum Outcomes (Year 4):

- Music: Supports outcomes such as MUS2.1, MUS2.2, & MUS2.4
- Creative Arts: Encourages creative enquiry through the integration of visual art & music.
- Geography GE2-1 & GE2-2

For high school students, Blob Opera serves as a springboard for deeper enquiry into AI-human collaboration. Older students can explore the underlying AI algorithms, such as generative neural networks & latent space interpolation, which enable the transformation of user inputs into operatic sounds. They can also engage in critical discussions on the ethics of AI in art & the impact of technology on creative expression.

Blob Opera is a valuable resource across the K-12 spectrum. For K-6, it offers an engaging, hands-on introduction to music, art & technology with clear curriculum outcomes, while for high school students it provides a platform for advanced enquiry into Human-AI collaboration and the future of creative technology.