

Making a Music Video with Motion Capture

Teacher Resources

Years 3-6



Welcome

Sydney Opera House is one of the indisputable masterpieces of human relativity and has long been a place for learning and sharing knowledge.

The land on which Sydney Opera House stands was known to its traditional custodians, the Gadigal people of the Eora Nation, as Tubowgule, meaning “where the knowledge waters meet.”

A stream carried fresh water down from what is now Pitt Street to the cove near Tubowgule, a rock promontory that at high tide became an island. The mixing of fresh and salt waters formed a perfect fishing ground. Middens of shells were a testament to Tubowgule’s long history as a place where the Gadigal gathered, feasted, sung, danced and told stories.

In this Resource

2. The Creative Learning Journey: these Resources
4. Sydney Opera House
Creativity Framework
5. About The Event
6. Pre-Event Activities
8. Post-Event Activities
11. Curriculum Links

Did You Know...?

Sydney Opera House is home to eight flagship Australian performing arts companies which bring art to life every day beneath the famous shells. We are proud to partner with the Australian Chamber Orchestra, Bangarra Dance Theatre, Bell Shakespeare, Opera Australia, Sydney Theatre Company, The Australian Ballet, the Sydney Symphony Orchestra and the Sydney Philharmonia Choirs.

130,000 people attend performances at the Sydney Opera House, for young audiences annually. Since 2014, one furry guest has caught the attention of locals and international visitors alike. The northern VIP steps of the Opera House, otherwise unoccupied for the majority of the year, is the favourite sunbathing spot of a wild long-nosed fur seal, affectionately called 'Benny' (named after Bennelong Point).

You can now experience the Opera House, as never before, on Google's digital museum platform with 1270 digital artefacts and 50 interactive online exhibits; the Sydney Opera House's presence on the Google Cultural Institute allows people everywhere to experience the symbol of modern Australia.

The Creative Learning Journey

Before the Event

Begin your Creative Learning Journey

Have your students think about the themes of the talk with information and activities in these Creative Learning Teachers Resources. Check out the video and links page to initiative topics of discussion and dive into the recommended reading list written by experts in these areas.

During the Event

Engage with the Event (live & interactive)

This event is 45 minutes in duration and designed to inspire your classroom activities.

During the event you will listen and interact with the workshop facilitators who will explain the concepts and demonstrate the activities.

You will need room to move around in this workshop.

[You will need a camera and microphone to partake in this activity.](#)

After the Event

Continue the Creative Exploration

Follow up the event with the Post event activities and continue the conversation and learning with your students. What did they think were the biggest learnings from the session? Can you develop any projects out of the learnings?

Sign up for another Free Event

We offer an annual program of performances, workshops and talks to further extend the learning journey of your students. Free for all Australian Schools and offered throughout the year.

Listen and Watch

Explore the other resources and activities on our website that could support your classroom learning program. See here:

www.sydneyoperahouse.com/learn/schools/resources.html

About the Resources

These Creative Learning Resources have been prepared to help you get the most out of the Making a Music Video with Motion Capture Live Workshop. These resources have been collated to help prepare your students to unpack the content, think deeply about it and apply it to their continued learning.

You should use and adapt these Resources to suit the student age and stage of your class and the curriculum foci and outcomes used in your school. These resources are written as a creative document for you to bring to life. If you have questions about exercises or provocations please feel free to make contact to talk it through. We are always open to feedback, comments and working with you to assist and learn from you. Contact details are on the back page.

Some websites are suggested throughout this resource. It is recommended that you first review the sites and assess the suitability of the content for your particular school environment before setting the activities based on these.

Sydney Opera House has a bank of Creative Learning Resources for you to access and use. Please have a look around our website for other resources and activities that could support your classroom learning program.

Acknowledgements

Grateful thanks are extended to all the artists and educators who have generously allowed their resources to be included in this document.

Sydney Opera House Creativity Framework

These Creative Learning Resources have been written using the Sydney Opera House Creativity Framework as the pedagogy. The Framework aims to define the creative process in a way that educators can use to teach and be inspired by.

At a glance this Creativity Framework is:

Prepare

Tools and Pathways

Preparing mind, body, space, materials and time

Buy in

Presence and Enthusiasm

Convincing students that they want to be there

Imagine

The Fertile Unknown

Exploring a subject through arts practice. Using form to uncover content. Allowing uncensored expression to reveal new ways of seeing a subject

Question

Analysis, investigation and revelation

Creating new understanding by analysing what just happened when honing the imagination

Make

Forging form from content

Putting shape to content and moving towards a project; scripts, composition, choreography, project design

Show

Commit, frame, judgement

Performing and presenting the work

Reflect

Remembering, Processing, Exiting

Creating understanding and healthy memories from the creative process and product.

Whilst written as a sequence, the Sydney Opera House Creativity Framework is not a method or system but a way of articulating the creative process. As the Framework is applied it becomes apparent the sequence dissolves and many of the specific sections live in one exercise. These resources have been written with this in mind.

This Framework underpins the Sydney Opera House Creative Leadership in Learning program that sees schools partner with the House for three years of teacher professional learning, student projects and performances. For more information please see the Sydney Opera House website.

Making a Music Video with Motion Capture

Create a live animated music video using motion capture technology

The team are all here at the Sydney Opera House to create a new music video, but there's one key role missing....the choreograph director! Luckily our students have shown up online to take on this important role.

With the help of the motion capture performers, students are guided through making the artistic decisions to create a music video. They will engage in movement activities to uncover the story they want to tell and decide how they can capture that story through visual storytelling.

Students will be introduced to all the key people in their team. They will experience how to create a dance piece, both from the production and creative perspectives.

At the end, we'll capture their best moves, fusing technology with creative play. But will their music video sink or soar? The creative team will decide!

Before the Event

Here are some suggested activities that will help you and your students prepare for the workshop.

Class Discussion – How, when, where, what and why is dance used?

As a class, come up with as many examples of how and when dance is used in society, and what it is used for.

Some examples might be:

- In celebrations such as parties and social gatherings
- As a form of exercise
- As a way to express cultural heritage
- As a means of self-expression
- As a way to promote social interaction

Class Discussion – Identify different forms of Dance and their individual characteristics.

As a class, come up with as many examples of dance together with their characteristics.

Some examples might be:

- Ballet
- Contemporary
- Jazz
- Tap
- Hip-Hop
- Ballroom
- Disco
- Belly
- Latin
- Bollywood
- Folk Dance
- Country and Western
- Flamenco

Watch examples of different genres of dance, and comment on the characteristics of the dance moves together with the characteristics of the accompanying music.

Student Activity – Dance warm-up

Ensure that the students are in a clear space, and that they are sufficiently spread out to avoid collision/ injury. Ensure the students are in suitable non-slip foot-wear. If the students are on carpet, removing shoes and moving in socks may be an option. Perform some simple effective warm-ups to get the children's heart rate up and stretch and warm up muscles.

Some could include:

- Jumping Jacks
- Leg Swings
- Lunges
- Heel raises
- Hip swings
- Neck turns
- Shoulder rolls

Student Activity – Exploring the Elements of Dance

Dance has to start somewhere. When choreographing a Dance, considerations are made relating to the Elements of Dance. These include:

- Space – shape (curved /straight)
- Level – (high/medium/low)
- Direction – (forward/backward/sideways/diagonal)
- Pathway – (zigzag/circular/straight)
- Time – tempo (fast/slow), accent/emphasis, stillness
- Dynamics – flowing/sharp/swinging/suspended/collapse

Experiment with the elements of Dance to make some interesting shapes.

For instance, make a curved shape on a high level that collapses to a medium and then low level. Use this shape to travel in a zigzag pathway at a slow tempo.

Improvise movement using the elements of dance to create a movement sequence of 8 beats, to a piece of music chosen by the class. Decide on a general theme (for example: Under the Sea, On Mars) Have individual children perform their creations.

Choose one particularly interesting sequence. Analyse the student's composition in terms of the Elements of Dance and its connection to the music. What makes it so effective? Have class perform this Dance sequence as a whole.

After the Event

In the following post-event activities students will unpack the workshop and dive deeper into the topics explored

[Your music video will be uploaded here following the workshop:](#)

<https://youtube.com/playlist?list=PL3sLdtwwg0qIRcvXSGU7oCwq9jHCwUZn5>

Student Activity – As a follow-on activity, re-watch the music video with your class.

- Following on from the piece created during the workshop, work in pairs or groups to develop the next part of the story. Start by writing it out and then develop a 2 minute long movement piece telling the story to perform to the class. Would the scene in the music video be the beginning, middle or end of the story?

Extension: Write the lyrics to go with your story.

- Repeat the Choreography Process to make a Dance Sequence - Now that you have undertaken the creative process with Robot and Blobby, improvise movement using the elements of dance to create a three movement sequence of 4 beats, to a piece of music chosen by the class. Decide on a general theme (for example: Under the Sea, On Mars) Have individual children perform their creations. Choose one particularly interesting sequence. Analyse the student's composition in terms of the Elements of Dance and its connection to the music. What makes it so effective? Have class perform this Dance sequence as a whole

Extension: Create an entire story with a beginning, middle and end using only movement. Try to express the feelings and mood of the story and not just the storyline.

Class Discussion – Talking about dance

Select 3 contrasting Dances from different genres. These could include:

- Dance of the Sugar Plum Fairies - Tchaikovsky,(Ballet)
- Singin in the Rain (Gene Kelly- Tap)
- Gangnam Style (K-Pop)
- Any contemporary Lyrical Jazz

Watch these examples of different genres of dance, and comment on the characteristics of the dance moves together with the characteristics of the accompanying music. Identify the Elements of Dance used by the choreographers of these dances.

Class Discussion – Reviewing the use of digital technology in the production of a Music Video

There are many forms of technology used to create a Music Video. Can you describe the function of these forms of technology?

- Green Screen
- Motion Capture
- Unreal Engine
- Stop Motion
- Calibration

Make a list of all of the different ways in which motion capture technology can be used. Think much more broadly than the purpose it was used for in the workshop consider fields like:

- Medical
- Environmental
- Gaming

Extension: Choose one of the areas from the list developed in task one and design a poster detailing how motion capture technology could this technology be used as a solution to a problem

Student Activity – Re-tell an existing story through other mediums

Choose a short piece of text from a story that you know, for example a fairytale. Turn the story into a movement sequence. Start by using your body to express the different moods of the story, then create a sequence by putting them all together.

Create an animation or drawing of the same story. What is the difference between the two forms of the same story? Write a reflection on this thinking about the benefits and drawbacks of different storytelling methods

Student Activity – Reflect on your dance-making process

Write down your thoughts. You may like to include:

- What was the most challenging part?
- How did you feel creating movement inspired by music?
- Describe the movement that you created. What levels did you use? What shapes did you use? Was the movement fast or slow? What emotions were you trying to communicate to the audience?
- What would you do differently next time?

Class Discussion – Exploring the Roles of the Music Video team

Producing a Dance Music video requires a team of people. Can you recall the different roles and their jobs? These include the:

- Stage Manager
- Audio Visual Technician
- Director
- Choreographer

Which role appeals to you and why? Explore the full list of roles & skills involved in making a music video below.

Role	Skills
Actor/Storyteller The performer who led the workshop and demonstrated the final movement piece.	Movement, dance, performance skills including acting and voice, language, empathy, imagination, collaboration
Writer The person who developed the concept and script	High level English and language, story telling, imagination
Producer The person responsible for managing the overall project, including managing budgets and timelines	Finance, collaboration, presentation, team building, organisation, computer and admin
Stage Manager The person responsible running the action in the room, facilitating communication across all teams and overseeing sets, props, lights, sound and technical cues	Organisation, collaboration/communication, computer skills, English and language
Sound designer The person responsible for finding or developing the right sounds (including music and sound effects) for the project	Imagination, musical instruments, musical composition, sound composition, English, a variety of computer programs, knowledge of technical equipment including speakers, microphones, acoustics and sound technology
Animator/Designer The person who designed / built the avatar	Creativity, imagination, drawing, high level computer skills, design
Developer/Designer The person who set up the “Rigging” of the avatar so that the technology could translate human movement onto it	Creativity, imagination and storytelling/ narrative, high level computer skill
Audio Visual Technician The person who manages the equipment to ensure that audiences can see and hear the avatar & performers when live.	High level computer skill, organisation, collaboration/communication, knowledge of technical equipment
Choreographer The person who creates the dance movements. They work with the writer to map the story using their bodies.	Movement, dance, performance skills including imagination, collaboration, leadership

Curriculum Links

KLA	Stage 1	Stage 2
ENGLISH	communicates effectively by using interpersonal conventions and language to extend and elaborate ideas for social and learning interactions	communicates with familiar audiences for social and learning purposes, by interacting, understanding and presenting
DANCE	composes and performs dance by combining movements, and identifies how dancers express ideas	makes and performs drama by engaging in dramatic play, and identifies how performers enact ideas
DRAMA	makes and performs drama by engaging in dramatic play, and identifies how performers enact ideas	makes and performs drama by engaging in dramatic play, and identifies how performers enact ideas
MEDIA ARTS	Create and present media artworks that communicate ideas and stories to an audience	Plan, create and present media artworks for specific purposes with awareness of responsible media practice

