



Dance and Architecture

Creative Learning
Teacher Resource



Dance and Architecture

Notes for Teachers

Being inspired by nature, and connecting to the human experience, Jorn Utzon watched the wings of a seagull as it took flight as possible windows; how snow and ice, clouds and sand could inspire the colours and textures of a building; and how the actions of builders and engineers who constructed the Opera House could move to and 'perform' the rhythms of the building.

Dance and Architecture is part of a series of workshops that use the site and building of the Sydney Opera House as a catalyst for learning about science, technology, engineering, arts, architecture and maths - transforming the way we understand STEM subjects and ideas through the creative and performing arts.

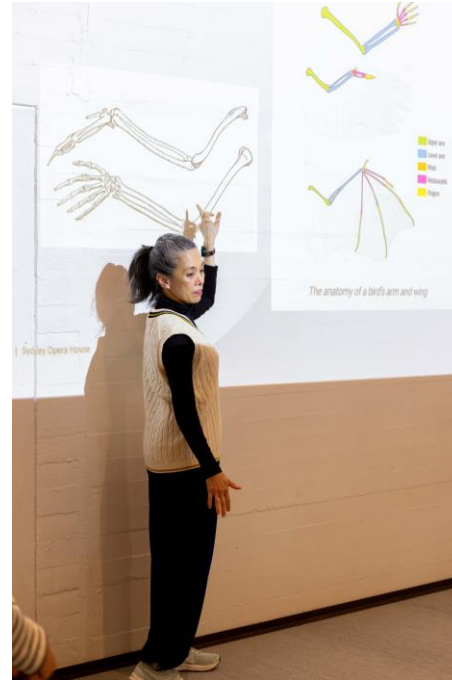
- **Subject areas:** Dance, Creative Arts, Music, PDHPE, Mathematics, Engineering
- **Cross curriculum priorities:** Aboriginal and Torres Strait Islander Histories and Cultures
- **General capabilities:** Critical and Creative Thinking, Personal and Social Capabilities, Intercultural Understanding

Dance and Architecture

Workshop overview

This workshop enables students to interpret the 'human' elements of the Sydney Opera House and compare them with the geometry, engineering and material components of the building. The students then create a series of movements, dance works and choreography with their bodies to reflect this biomimicry. Students will also consider how architects create buildings for people to inhabit, work, move and explore in urban spaces.

[Watch this video](#) to learn more about how the architecture of the Sydney Opera House influences the way people use, work in and enjoy buildings.



Dance and Architecture

In this workshop, students will:

- Use their bodies to create movement and dance sequences, drawing from specific architectural spaces in the Opera House as repositories of physical ‘memories’
- Build skills and express themselves through physical movement to interpret ideas and communicate through dance
- Explore their own anatomy through movement and create short choreography on their own and with classmates from their discoveries
- Learn about biomimicry, and how biomechanics from nature can inspire design and architecture
- Acquire a deeper appreciation for the design and beauty of the Opera House and feel a physical and personal connection to the site and heritage of the building



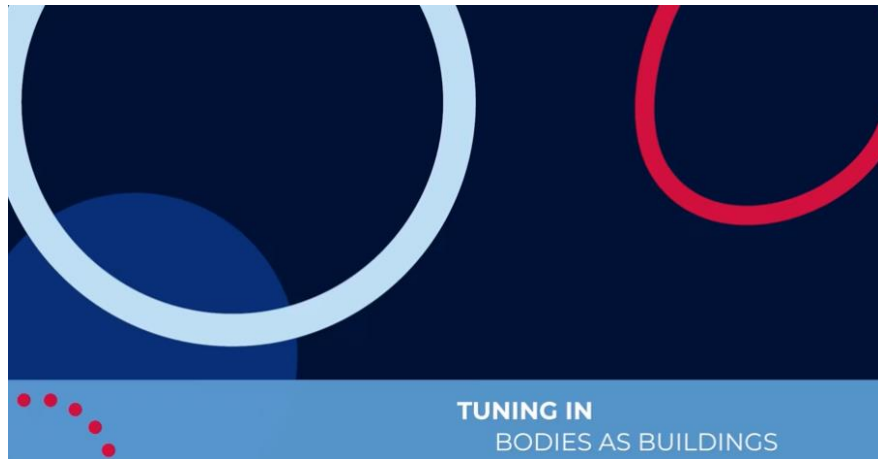
**In the
classroom**

Tuning In: Wellbeing in the Arts

Developed by the Sydney Opera House and Department of Education

Use the following video, developed by the Sydney Opera House and Department of Education to guide your classroom learning for the following activities.

The associated podcast, *Chatting Creative Arts* with Charemaine Seet and Julia Brennan to learn more about the inspiration for this workshop.



Warming up to dance

Activities in the classroom

Warming up our bodies is an essential component of safe dance practice and must be a part of all dance lessons. [In the video](#), Charmaine demonstrates some simple warmups to follow. Alternatively, a warmup should include:

- Engaging in some continuous movement that increases in difficulty, involving large muscle groups. These large muscle groups include quadriceps, hamstrings, calves, muscles of the lower back, shoulders and so on.
- A focus on the specific angles, joints and muscles intending to be used and the speed you plan to move.
- Include simple and engaging physical activities such as jogging on the spot (non-locomotor) with knees gradually getting higher, star jumps and roll downs to warm up the spine.



Establishing relationships and connections

Activities in the classroom

Dancers and choreographers find inspiration for movement and making dance by looking around the spaces they are in, such as their homes, a shop or café, by the ocean or in a park, even from a building as remarkable as the Sydney Opera House.

Dancers look for interesting shapes, materials, textures or windows that give them clues, ideas or instructions that help to make their bodies move in a particular way. They draw connection and establish relationships with the space to inform the way they create or perform their dances.



Establishing relationships and connections

(continued from previous slide)

- Consider the spaces and places around your classroom, school or local community.
- Examine maps, including [Google Earth](#) or do a [gallery walk](#) of the classroom, noting any features of the architecture that perhaps had gone unnoticed before.
- Create a list of key points of interest.
- Consider asking [local Aboriginal Elders](#) for advice and connecting with other learning such as in HSIE for a broader experience as well.

Take time to look at the space you are in. Consider some of these key points:

- Are you inside or outside?
- Is it warm, or cold, or just right?
- Is there furniture or objects in the way, or is it wide and open?
- If inside, is the room big or small? Are the ceilings low or high? Are the walls or carpet brightly coloured?
- Can you see a lot of windows?
- Do you notice cracks, or maybe small hidden power points or elaborate lights or fans?

Establishing relationships and connections (continued from previous slide)

- Select one of these elements to focus on. Carefully examine the way they look, their structure, lines, shapes, and connections, and how they move. Using bodies or through discussion focus on the following processes:
- Trace that shape in the air with eyes, then with fingers, then with arms only, then legs only, then the entire body.
- Reflect on what those movements looked and felt like.
- Imagine and perform these movements as tiny, small gestures, then as big, grand motions.
- Find some space around to practice these shapes with any or all of these parts of the body.





Composing a dance

Composing a dance

Activities in the classroom

Composing or choreographing in dance is a way of using creative ideas and adapting them to create a piece or work.

Composing or choreographing is a way of connecting individual or smaller dance movements in a row or sequence that makes a connection or flow. Little movements can be connected together, repeated several times, or combined with music to create a performance piece, a work, a series of movements, or a routine or a sequence.

When we join our movements with others, we can work together or collaborate to make a new dance.



Composing a dance

(continued from the previous slide)

From the previous activity, share the objects of inspiration and the accompanying movement, with a partner, another group or the whole class. Consider the similarities or differences in the objects and the movement styles. Reflect on this process.

Consider the ways some of these movements might be connected. Join in with others, and gradually add more movements.

For example, start by making two movements each and sharing them, then working together to make a complete movement sequence.

This can start by an individual teaching another, then pairs teaching another pair, building up to small groups and so on. It may then culminate in a whole of class composition. Classes can teach other classes as well to create a whole of school composition

Manipulating the movements

Activities in the classroom

Consider ways of changing the movements to help them connect and create interesting sequences. There are multiple ways that movements can be manipulated to extend the composition, create interest or connect pieces together. Dance composition should be a collaborative process requiring a team approach.

Once the students have created and then determined their key locomotor or non-locomotor movements, they can be manipulated to create new movement phrases or sequences. The overall outcome is to promote enjoyment and skill building by creating interesting and original movements as a team.



Manipulating the movements

(continued from previous slide)

Explore some of these strategies to create new movements from the original developed ideas and then to connect the pieces together into a full composition:

- repetition – repeat it exactly the same way
- retrograde – perform it backwards
- inversion – perform it upside down
- size – expand or condense it
- tempo – make it faster or slower
- rhythm – change the pattern of ‘sounds’ or the number of movements
- quality – change how the movement is performed such as lightly or heavily (the dynamics or weight)
- body parts – perform it with a different body part
- change levels – try it up high, down low or in the middle
- reduction – use only a part of the motif
- combination – connect any of these techniques
- music – try with or without music or with a different piece and compare the effects this has on the choreography.



Cooling down

Activities in the classroom

Dancing is a fantastic way to not only exercise, but to have fun and feel connected to our bodies and those around us. Consider ways to embed a short dance-related warm up or cool down at the beginning or end of a lesson or the school day. Repeating this practice over time, enables students to become more focussed and connect with others.

It is important to slowly cool down our bodies in just the same way as a warmup. Cool downs facilitate calmer breathing, restore normal blood flow to our limbs and major muscle groups, and also to prevent injury. Deep stretches during a cool down is the best time to increase flexibility.



Cooling down

Activities in the classroom

Examples of cool-downs include:

- Walking around the room at a regular pace. It is important to not stop suddenly after physical activity. Walking at a regular pace will enable your heart rate to settle.
- Finding a comfortable standing or sitting position and closing eyes then taking a few deep breaths slowly. Focussing on breathing, and slowly relaxing the shoulders, chest, arms and legs.
- Deep breathing to return the oxygen to your blood which allows the heart rate to go back to its regular pace. Slowly rolling, stretching, opening and extending different areas of the body.
- Focus on a body part such as your arm moving up or down, or your neck rolling slowly in a circle and back again.
- Deep stretching such as a calf stretch, quadriceps stretch and so on. Hold stretches for 30 seconds to help maintain flexibility, holding for 1 minute will increase it.

Curriculum links and resources



Curriculum Links

Connecting with the classroom

Creative Arts (Dance)

- DAS2.1 Performs dances from a range of contexts, demonstrating movement skills, expressive qualities and an understanding of the elements of dance
- DAS2.2 Explores, selects and combines movement using the elements of dance to communicate ideas, feelings or moods
- DAS3.1 Performs and interprets dances from particular contexts, using a wide range of movement skills and appropriate expressive qualities
- DAS3.2 Explores, selects, organises and refines movement using the elements of dance to communicate intent
- DAS3.3 Discusses and interprets the relationship between content, meaning and context in their own and others' dances.

English

- EN2-12E recognises and uses an increasing range of strategies to reflect on their own and others' learning
- EN2-1A communicates in a range of informal and formal contexts by adopting a range of roles in group, classroom, school and community contexts
- EN3-1A communicates effectively for a variety of audiences and purposes using increasingly challenging topics, ideas, issues and language forms and features
- EN3-8D identifies and considers how different viewpoints of their world, including aspects of culture, are represented in texts

Curriculum Links

Connecting with the classroom

PDHPE

- PD2-4 performs and refines movement skills in a variety of sequences and situations
- PD3-4 adapts movement skills in a variety of physical contexts
- PD2-5 applies strategies to solve movement challenges
- PD3-5 proposes, applies and assesses solutions to movement challenges
- Pde-11 demonstrates how the body moves in relation to space, time, objects, effort and people
- PD1-11 incorporates elements of space, time, objects, effort and people in creating and performing simple movement sequences

Science and Technology

- ST2-4LW-S compares features and characteristics of living and non-living things
- ST3-8PW-ST explains how energy is transformed from one form to another
- ST2-9PW-ST describes how contact and non-contact forces affect an objects motion
- ST3-9PW-ST investigates the effects of increasing or decreasing the strength of a specific contact or non-contact force

Resources

More about the Sydney Opera House

Sydney Opera House: Our Story

- <https://www.sydneyoperahouse.com/our-story>

How we work – strategic plans and programs

- <https://www.sydneyoperahouse.com/about-us/how-we-work>

Community projects

- <https://www.sydneyoperahouse.com/about-us/in-the-community>

Careers and opportunities

- <https://www.sydneyoperahouse.com/about-us/careers-and-other-opportunities>

Creative Learning resources

- <https://www.sydneyoperahouse.com/learn/teachers-and-students/classroom-resources>

Get in touch

Got questions? Contact us with any enquiries about our education programs for schools via phone or email.

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