

# Coding to Move (STEAM – Dance and Technology)

## Learning the basics of coding through dance

### Academic Year 2

Challenge your students with choreographic exploration of space and dynamics that echoes coding and programming.

This STEAM based creative dance workshop explores the connection between how we program a robot to move, and how we can look choreography through a programming lens to make decisions about how to move.

Learning Objectives:

- Learn a sequence of movement using programmed prompts.
- Create a sequence of movement using programmed prompts and manipulate it using the elements of dance.
- Present your coded sequence of movement.

Coding to MOVE guides students through a ballet-inspired physical warm up incorporating numeracy, language, and simple mathematic cues. Student dancers then meet Wendy and Wallace, our programmed, dancing robots and see them perform programmed movement that can be matched to visible sequences cards. Students then work together, led by their Teaching Artist, to experiment with creating movement based on pre-programmed or 'coded' instructions and will eventually apply spatial and dynamic manipulations to their improvisations. This workshop culminates in a presentation of student work to celebrate learning and skills. Relevant at any time of year and suitable for all students, especially those with an interest in technology and innovation. The cross-curricular benefits of this workshop are immense! This workshop provides opportunities for students to work across ACARA General Capabilities in Critical and Creative Thinking, Digital Literacy, Literacy (speaking and listening) and Personal and Social Capability.

Relevance to ACARA V9 The Arts: Dance Strands, Content Descriptors and Elaborations

Year 02

Exploring and Responding AC9ADA2E01	Developing Practice and Skills AC9ADA2D01	Creating and Making AC9ADA2C01	Presenting and Performing AC9ADA2P01
<ul style="list-style-type: none"> <li>• Use viewpoints to ask questions about dances</li> <li>• recognising and describing patterns of movement</li> <li>• identifying similarities and differences in dances</li> </ul>	<ul style="list-style-type: none"> <li>• Develop awareness of safe dance practice</li> <li>• Use improvisation to explore movement in response to stimulus and movement prompts</li> <li>• Use viewpoints to ask questions and identify movement possibilities</li> <li>• Explore fundamental movements safely</li> <li>• Move around spaces using a variety of travelling steps.</li> <li>• Move around spaces using a variety of travelling steps.</li> </ul>	<ul style="list-style-type: none"> <li>• Devise a dance sequence using patterns of movement, moving specific body parts and locomotor and non-locomotor movement working in small groups to teach own and learn others' choreography. Extend the sequence</li> <li>• Use ideas from an exploration of how to use technical skills to create a dance sequence</li> </ul>	<ul style="list-style-type: none"> <li>• Present a learned sequence, expressing ideas to an audience</li> <li>• Use viewpoints to develop questions when responding to dance.</li> </ul>

Post-workshop extension

Teachers could repeat the performance of the students' Coding to Move dance sequence for other informal audiences and/or take notes during the Queensland Ballet workshop. Observe and record students:

- Using ballet-movements when they are creating their dance sequence.
- Using the elements of dance: applying the instruction from the flashcard correctly to structure their dance sequences.
- Working safely in the dance space – being spatially aware, using the new fundamental movement skills (ballet technique), following instructions, respecting others, taking drink breaks etc.
- Sharing their artwork in the workshop activities, performance of their own 'coded' ballet