

UNIT DESCRIPTION

This Secondary (7-10) unit provides opportunities for young people to express their thoughts and feelings regarding human-induced climate change and envision possibilities for more sustainable futures. The unit uses drama conventions and strategies such as **transformation of time** and **whole-class role-play** to explore and share ideas, investigate problems, and suggest possible solutions. Students create and use time machines, embody dystopic and utopic futures, and reflect on ways to create the sustainable futures of their visions. This unit enables students to engage playfully and safely with challenging and complex issues.

YEAR LEVEL

Secondary: 7-10

LEARNING AREAS

Drama
Science
Geography

TIMEFRAME

1.5 hours (minimum). Can be divided over several sessions (suggestions are made for suitable places to pause). Could be further extended.

RESOURCES

Time to Act [video](#) featuring Dr Al Fricker

Images of [past visions of the future](#)

Brainstorming supplies (recycled Post-It notes, pieces of paper, textas, pens)

Collaborative Futuring (7-10)

Actively Imagining Alternative Futures

By Dr JO RAPHAEL, Dr DANIELLE HRADSKY & Dr MEG UPTON



Jo, Danielle, and Meg are all passionate about the power of the arts to create change, particularly in the areas of environmental sustainability, climate change education, and de/colonising education. This unit was developed for the Time to Act Professional Learning Workshops, and has been adapted for school settings.

LEARNING INTENTIONS

- Think and act creatively and collaboratively
- Create and perform drama that communicates ideas, perspectives, and meaning
- Consider environmental socio-scientific issues, strategies for action, and potential impacts

PREPARING THE SPACE AND STUDENTS

- You will need a large clear space for this unit. If students are unused to working physically in this space (e.g. you are using this unit in a Science class) spend more time on the *Warming Up* activities, particularly ones like *Walking in Space*, to relax students. Other sustainability-focused warm-up games can be found [here](#).
- If possible, collaborate on this unit with teachers from different learning areas (ideally, Drama, Science, and/or Geography). However, it can be done solely in one learning area.
- Students will be engaging deeply with challenging and complex socio-scientific issues. Consider letting parents/guardians know so that they can offer support at home if needed.

Collaborative Futuring was first developed by Jo and Meg in 2023 as part of the core Time to Act program. It has been adapted for the Time to Act Curriculum Library.

ACKNOWLEDGING COUNTRY

- Acknowledge the **Country** that you are on.
- Watch the *Time to Act* [video](#) (5:23 min) featuring Dja Dja Wurrung academic Dr Al Fricker.
- Ask students to reflect on their responses to this video using the following prompts:
 - What are three emotions that came up for you while watching?
 - What are two thoughts or questions that you have?
 - What is one action that the video made you want to take?

WARMING UP

Where Do You Stand?

- Allocate one end of the room as 10 (strongly agree) and the other as 0 (strongly disagree). Alternatively, allocate the centre of the room as 10 and the outer edges as 0, creating space for complex reasons rather than linear agreement/disagreement. Invite students to stand in the place that reflects how important the following things are to them (modify as appropriate for your group):
 - Include some *light-hearted practice examples* to get students used to the concept, e.g. 'dogs are better than cats', 'pineapple belongs on pizza', etc.
 - Climate change is human induced
 - I'm worried about climate change
 - Most young people I know are worried about climate change
 - Catastrophic climate change is inevitable
 - We have the means to turn things around
 - I am hopeful for the future
 - I am already doing things/I want to do things to contribute to a sustainable future
- After each prompt, allow 1-2 minutes for discussion with the people nearby, and invite sharing from different perspectives.

Walking in Space

- Invite students to walk randomly through the space without touching anyone or anything. Experiment with different tempos (fast, slow) and directions (straight lines, curved, etc.).
- Give instructions, e.g. 'Stop', 'Go', 'Jump', 'Clap'. Once students are used to following these instructions, reverse them (Stop = Go, Jump = Clap, etc.).

10-Second Instructions

- Flowing directly on from the previous activity (Walking in Space), ask students to form groups of a particular number and create a **tableau** of an object or place. Once students have created the tableau, ask them to add an additional **element of drama, convention, or expressive skill**. For example, "Form groups of...
 - ...three and create a motorbike. Add **sound**.
 - ...six and create a washing line waving in the breeze. Add **movement**.
 - ...four and create a renewable energy source including movement and/or sound.
 - ...five and create a forest. **Transform** into a depleted forest.
 - ...10+ (half the class) and create a time machine (transition into first main activity described below).

SETTING THE SCENE

- Allow students 3-5 minutes to create their time machine. It must:
 - Combine **elements of drama, expressive** and **performance skills** to communicate that time is being **transformed** (e.g. sound, movement, energy)
 - Include a way to enter and exit (use of space, actor-audience relationship)
 - Have an interactive control panel that begins the time transformation (symbol, timing)
 - Once the two time machines are ready, decide as a class how far back in time the first time machine will travel (e.g. 68 million years ago – the dinosaurs!). Explain that you will play the role of the Time Traveler (**Teacher in Role**). Prompt the other half of the group that when you exit the machine, they will become the relevant time period (role-playing T-Rexes, giant plants, pterodactyls, etc.).
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- Enter the time machine and 'start' it using the control panel. Exit the machine and engage briefly with the past environment.
- Re-enter the time machine to travel back to the present. Report back on your experiences.
- Decide as a class how far forward in time the second time machine will travel (e.g. 300 years in the future). Again, prompt the half of the class not acting the time machine to become the future. They can decide whether this future is dystopian, utopian, or something in between.
- Enter the second time machine and 'start' it. Exit the machine and engage with the future.
- Ask the people of the future for a message they want taken back to the 2020s (our present).
- Re-enter the time machine to travel back to the present. Report back on your experiences.
- Debrief/discuss this activity with the class.
 - Do we know what the future will be like?
 - Is there one certain future or multiple futures?
 - What makes futures probable, plausible, possible, or preposterous?

INTRODUCING CONCEPTS

Futuring

- Explain to students that **futuring** is a strategy for imagining and responding to potential futures. Imagined futures can be:
 - Probable (likely to happen based on current knowledge and trends)
 - Plausible (could happen)
 - Possible (might happen)
 - Preposterous (unlikely to happen)

To imagine futures, we draw on our knowledge of the past and present, and current trends. By identifying, creating, and disseminating images of the future, we shape the possibility space for action. Thus, futuring enacts relationships between past, present and future (Oomen et al., 2022). People have always engaged in futuring of some kind—in different times and places **futurists** have been known as prophets, diviners, seers, and oracles. Today, futurists attempt to systematically explore and analyse predictions and possibilities about the future. Futurists can work as scientists, consultants, forecasters, policy analysts and makers, but also as science fiction writers, artists, and other creatives.

- Discuss how futuring collaboratively is more beneficial than futuring alone (e.g. multiple perspectives, consideration of alternatives).
- Examine images of [past visions of the future](#). Discussion questions could include:
 - What socio-scientific issues do you notice? What solutions have these futurists envisioned?
 - What worldviews on sustainability are being expressed? How might these worldviews have influenced people of the time's support for sustainability?
 - What resources are being used in these futurist technologies? Are they renewable or non-renewable?
 - How accurate were these futurists' predictions?
- Remind students that the future is not yet determined; there are many possible alternative futures. Sometimes even preposterous or outlandish ideas can become possible.
- Explain what **socio-scientific issues** are (complex, often controversial topics that combine scientific and social concerns). Brainstorm some socio-scientific issues from the past that we have managed to address (e.g. depletion of the ozone layer, acid rain, polio epidemic, sewage/waterborne diseases, widespread smoking, use of DDT, etc.). Consider:
 - How did these changes occur?
 - How long did the changes take?
 - How possible do you think these changes felt before they occurred?

NOTE: If you need to break this part of the workshop up, *Introducing Concepts: Futuring* would be a good final OR starting activity (final activity of Session 1 or first activity of Session 2).

IMPROVISING

Future News

- Ask students to imagine that we have time travelled to at least 2050 (further into the future is fine). It is time for the climate news. Use a visual/audio prompt (e.g. a projected futuristic news desk, news stinger, etc.) to set the scene.
- Place students in pairs and ask them to decide who is A (the reporter) and B (the interviewee). Brainstorm ideas for interviewees (e.g. politicians, scientists, engineers, farmers, students, etc.).
- Give students 1-2 minutes to simultaneously improvise their interview.
- Use Teacher in Role as a news anchor to spotlight different interviews. Prompts could include:

Good evening, and welcome to Climate News. A lot is happening right now and our journalists are in the field to tell you all about it. We're crossing now to...Over to you, X...

- Once everyone has shared, debrief/discuss with the class:
 - Was the future news generally hopeful or pessimistic?
 - What socio-scientific issues were focused on? What responses were predicted?
 - What human-induced environmental changes had occurred? How were these changes impacting the sustainability of places?

EMBODYING

Museum of the Future

- Using Teacher in Role as the news anchor, announce that an exciting new museum is about to open, celebrating the progress we've made in addressing the climate crisis and inspiring further actions.
- Place students in groups of 5-6 and ask them to create a museum exhibit/diorama (a **tableau** that comes to life). Their exhibit should:
 - Show a socio-scientific issue that was occurring in 2024 or before which contributed to the climate crises.
 - Consider environmental, economic, social, political, and other factors.
 - Include movement and sound.
 - Include a guide who can explain the exhibit to visitors.
 - *Optional for Drama-focused classes:* Ask students to experiment with combining some or all of the following to construct dramatic meaning:
 - **Elements of drama:** Character and relationships, mood, sound
 - **Expressive skills:** Voice, movement, gesture, facial expression
 - **Performance skills:** Actor-audience relationship, energy, focus
- Allow students 5-10 minutes to devise and develop their exhibits.
- As a class, travel around the different exhibits, listening to the guides and asking questions as appropriate. Remember and remind students to stay in character as people in 2050.
- Discuss in character:
 - Do these socio-scientific issues still exist? If not, how have we addressed them?
 - What ethical, environmental, social, and/or economic considerations did we have to take into account when responding to these issues?
 - What impacts have our responses had?

Where Does Responsibility Lie?

- Choose one of the exhibits (teacher-led or as a class) to unpack more.
 - Invite the exhibit to re-form in the centre of the room. Make sure they are physically comfortable as they will have to stay there for some time.
 - Guide the rest of the class to identify and embody contributing factors (e.g. environmental, economic, social, political, etc.) to this socio-scientific issue. For example, if the issue is 'fast fashion', other students might take on roles as envy, social media, advertising, CEOs, cotton farmers, depleted rivers, factory workers, impacted species, governments, and so on. The aim is to visualise and understand the complexity of the issue.
 - *Option 1:* Once everyone has identified and taken on a role, ask everyone to fully embody that role. Spotlight different students around the room and ask them to verbalise:
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- What is their position on the issue?
 - What are they feeling/thinking?
 - What is their motivation/desire/hope?
 - **Option 2:** If you have some students who are reluctant to embody roles, ask some students to physicalise the factors, and others to verbalise what different factors/stakeholders might be thinking/feeling/motivated by (as above).
 - Relax roles and discuss as a class:
 - Where does the responsibility lie for this issue?
 - Where are the opportunities for change?
 - What strategies/responses do they suggest?
 - What might be some of the impacts of these strategies on the different factors/stakeholders?
 - Reflect on past socio-scientific issues that humanity has managed to address (from *Introducing Concepts: Futuring*).
 - Ask students to re-embody their roles. Spotlight different students and ask them to verbalise a change that their role could/should make.

Stepping Outside

- Invite students to close or lower their eyes to create focus. Explain using Teacher in Role that we have been inside the Museum of the Future, but now we're about to step out into the world of 2050. In this future we have managed to address some, if not all, of the climate/environmental crises of the 2020s (our present). Ask students to reflect on what the world of 2050 looks, feels, sounds, smells, and tastes like.
- Invite students to simultaneously step forward and embody someone or something from this more sustainable future (could be a person, plant, animal, idea, value, mineral, etc.).
- Spotlight briefly on each student and ask them to share who/what they are.

NOTE: This is a good place to pause/finish this section. Allow time to debrief/come out of role. Reflect on emotions experienced, thoughts/questions they now have, and actions they would like to take (similar to reflection from Acknowledging Country).

RESEARCHING, CREATING & PRESENTING

This unit could finish with stepping outside the Museum of the Future. Alternatively, you could continue this work (two options are suggested below). These options could be undertaken with minimal research and 20-30 minutes planning/rehearsal time, or you could extend them through multiple lessons and use the final performance as an interdisciplinary assessment task.

Option 1: Conference of the Future

- Explain to students that, as a class, you will be creating a conference in 2050, celebrating 25 years of progress towards climate justice. Students will play roles of delegates and presenters at the conference. Each presentation will include a holographic slide presentation, video, interview, or similar.
 - Organise students into groups of six and provide each group with the following instructions:
 - Select a socio-scientific climate/environmental issue from the present (mid-2020s) that you will address.
 - Decide on your roles. These can include the more-than-human (perhaps in the future we've worked out how to listen to animals/the environment).
 - Research your issue, including complex contributing factors (environmental, economic, social, political, etc.). Identify ethical scientific responses and/or strategies for action. Consider potential impacts (probable, plausible, possible, and preposterous) on the environment, society, and economy.
 - Your presentation takes place 25 years in the future, when this strategy has been implemented. Develop a 3-5 minute presentation, including a holographic slide presentation, video, interview, or similar (drama performance) that addresses the following questions:
 - What is the issue?
 - Who are you? What is your relationship to the issue?
 - What changes have occurred since the mid-2020s?
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- What strategies have you implemented/are you implementing?
- What policy changes/legislation was required?
- Who has a voice in creating this change?
- What impacts is it having?
- What remains to be done?
- Share these presentations as a whole class roleplay, with Teacher in Role as the conference convenor, introducing and facilitating each group's presentation. Allow time for questions from other delegates (students who aren't presenting at the time).

Option 2: Start Up Convention

- Similar to the above, with groups of students representing start-up companies pitching their entrepreneurial ideas in response to the climate crises for potential funding from the government and/or private organisations. Here, you could have students also develop environmental, economic, and social criteria in role as the government/private organisation that they use to evaluate each other's ideas.

After students have presented, allow time for coming out of role, debriefing, and reflecting on experiences. A reflective activity is suggested below.

DE-ROLING/REFLECTING

- Invite students to lie down on the floor or find a place where they can sit comfortably and close their eyes. You may like to play some relaxing music. Guide students through this reflective meditation:
 - Take some deep breaths in and out, allowing the air to fill every part of your body, relaxing tense muscles, and feeling your body sink into the 'earth' around you.
 - Reflect on the emotions you have experienced today. Try to name three different emotions you have felt throughout the session. After you have named each emotion, allow it to leave your body with your breath.
 - Focus in on your mind. What thoughts are running through your brain? What questions do you have? Articulate these clearly (you may like to imagine them written on a piece of paper) then file them away. Give your brain permission to become still.
 - Consider your body. What actions are you inspired to take? What could you put into practice straight away? Today or tomorrow? Choose one achievable action, and imagine it sinking into the earth around you, as a commitment to the planet.
- This reflection can stay internal or be shared with the class. To share, invite students to sit up and verbalise one or more of the emotions they have experienced. Not everyone will want to share but allow enough time for anyone who wants to do so.
- Ask students to turn to a partner and share one of the thoughts or questions. These don't need to be discussed, just heard.
- Physicalise your action in a frozen or moving image. Practice what it feels like to actually do what you committed to do.
- Share the following quote with students:

What will future generations think of us? Perhaps they will see us as selfish and myopic. Or perhaps they will look back on us with gratitude, for the steps we took to leave them a better world. The choice is ours.

William MacAskill (2022, August 16). How future generations will remember us: History is a long series of moral abominations. *The Atlantic*. <https://www.theatlantic.com/ideas/archive/2022/08/future-generations-climate-change-pandemics-ai/671148/>

LVL 9 AND 10	<p>experiment with ways to combine the elements of drama, expressive and performance skills and design areas to construct dramatic meaning for audience in improvisations and devised drama VC2ADR10D01</p> <p>reflect on, analyse, evaluate and document their own and others' drama work to inform choices and interpretations made both as artists and as audiences VC2ADR10D02</p>	<p>create drama for audiences using narrative and non-narrative forms, elements of drama and style-specific conventions to communicate ideas, meaning and intention VC2ADR10C01</p> <p>plan, rehearse, refine, present and perform improvised and devised drama in different contexts to a range of audiences in a range of spaces VC2ADR10P01</p>	<p>the use of scientific knowledge to address socio-scientific issues and shape a more sustainable future for humans and the environment may have diverse projected outcomes VC2S10H03</p>	<p>the dynamics of global climate change can be modelled and explained; mitigating human-induced climate change requires addressing various activities including power generation, deforestation, etc. VC2S10U11</p>	<p>human-induced environmental changes and their impacts on the sustainability of places and environmental functions VC2HG10K10</p> <p>the influence of people's environmental worldviews on their support for environmental sustainability VC2HG10K13</p> <p>the environmental, economic and political constraints, including climate change, on the world's capacity to sustainably feed projected future global populations VC2HG10K04</p>	<p>justify responses and develop and evaluate strategies using environmental, economic or social criteria, recommend a strategy and explain the predicted impacts VC2HG10S06</p>
	LVL 7 AND 8	<p>investigate ways in which elements of drama and conventions of theatre styles are used to communicate ideas, perspectives and meaning in drama VC2ADR8E01</p> <p>develop and refine the use of elements of drama, performance and expressive skills, and design areas relevant to specific drama styles and/or forms VC2ADR8D01</p>	<p>devise drama, manipulating and refining the elements of drama, performance and expressive skills, and conventions relevant to specific styles or forms VC2ADR8C01</p> <p>rehearse, refine, present and perform improvised and devised drama to different audiences, using performance and expressive skills, and conventions relevant to styles and forms VC2ADR8P01</p>	<p>proposed scientific responses to socio-scientific issues impact on society and may involve ethical, environmental, social and economic considerations VC2S8H03</p>	<p>the sustainable use of Earth's resources is influenced by whether the resources are renewable or non-renewable; the processes involved in resource extraction and energy production come with both benefits and risks to sustainability VC2S8U09</p>	<p>strategies and responses to manage and improve the liveability and environmental sustainability of Australia's cities, and to adapt to climate change VC2HG8K21</p> <p>the distribution and variability of Australia's water resources and the forecasted impacts of climate change on them VC2HG8K03</p>
<i>Exploring and Developing Practices</i>		<i>Creating and Presenting</i>	<i>Use and Influence of Science</i>	<i>Earth and Space Sciences</i>	<i>Knowledge and understanding</i>	<i>Skills</i>
DRAMA		SCIENCE		GEOGRAPHY		

GLOSSARY

COUNTRY	The lands, waterways, and sky to which Aboriginal and Torres Strait Islander peoples are connected, as well as the laws/lores, places, customs, language, beliefs, cultural practices, and so on associated with that land.
DE-ROLING	Consciously coming out of character and returning to your own self/identity.
DESIGN AREAS	Design areas (also <i>production areas</i>) are the technical aspects used within a performance. There are many design areas, including costume, lighting, make-up, masks, props, puppetry, set pieces, sound design, and projection.
CONVENTIONS	Conventions are drama techniques that are incorporated into a performance; for example, speaking directly to the audience, using exaggerated movement, singing, tableaux, etc. Drama conventions are often associated with a particular style or form; for example, silence and exaggerated movement are associated with the style Mime.
ELEMENTS OF DRAMA	Elements of drama (also <i>dramatic elements</i>) are essential features of every performance. Actors manipulate dramatic elements to shape and enhance meaning. The elements of drama in the Victorian Curriculum are character and relationships, climax, conflict, context, setting, contrast, dramatic meaning, mood, sound, space, time, symbol and tension.
EXPRESSIVE SKILLS	Expressive skills are used to create and express a character. They can be used in different ways in different <i>drama styles</i> . They include voice, movement, gesture, facial expression, and stillness and silence.
FUTURING	Imagining, exploring, and responding to potential futures. Futurists are people who practice the art and science of futuring.
PERFORMANCE SKILLS	Performance skills are used to communicate story, enhance meaning, and realise intention in drama works and theatre performances. Performance skills include actor–audience relationship, energy, focus and timing.
ROLE-PLAY	Pretending to be a particular character(s) and to behave and react in the way that the character would. Can be done individually, in pairs or small groups, and/or as a whole class.
SOCIO-SCIENTIFIC ISSUES	Socio-scientific issues are complex, often controversial, challenges that combine scientific and social concerns (e.g. climate change).
TABLEAUX (ALSO FREEZEFRAME, FROZEN IMAGE)	A 'living picture'. A <i>convention</i> involving telling a story by freezing in position. Can be done individually or in a group. To tell the story clearly, performers should use strong <i>expressive skills</i> : facial expressions, exaggerated physical shapes, and different levels (e.g. standing, crouching, kneeling).
TEACHER IN ROLE (TIR)	Teacher takes on a role related to the story, participating directly in the role-play. TIR is particularly useful as a way to challenge the students or introduce conflict.
TRANSFORMATION (DRAMA)	A <i>convention</i> involving changing from one character, time, place, or object to another within a story. For example, changing from a fish to a bird; travelling to the past or future; shifting from a pond to a city office; turning the same piece of cloth into a frog's egg and then into a lily pad.