Before the Workshop
Designosaurs introduces students to Erth, an internationally renowned, ‘eye-popping’ visual and physical theatre company. The resource profiles Erth’s Dinosaur Zoo show at Sydney Opera House and takes students behind the scenes into Erth’s workshop to learn directly from professional puppet makers and puppeteers.

Specifically, students have the opportunity to research endangered animals and then use this knowledge to guide an endangered animal puppet design, creation and performance. Through the lesson series students explore Visual Arts, Drama, English and Geography inquiry learning.

ARTS:LIVE courses are supported by engaging videos, audio files, student activity sheets and home learning activities. Further information related to this course, including teaching tips, pedagogical approaches, glossary terms and more, can be accessed through the Designosaurs Overview webpage.
Course: Designosaurs

Lesson One: Research

Learning Area: English, Geography

Time: 45 Minutes

Year Level: 3-6

Content Descriptors (3-4):
- Uses an increasing range of skills, strategies and knowledge to fluently read, view and comprehend a range if texts on increasingly challenging topics in different media and technologies (EN2-4A)
- describes the ways people, places and environments interact (GE2-2)

Content Descriptors (5-6):
- Uses an integrated range of skills, strategies and knowledge to read, view and comprehend a wide range of texts in different media and technologies (EN3-3A)
- explains interactions and connections between people, places and environments (GE3-2)

Learning Focus:
- Students learn about the Visual and Physical theatre company - Erth and learn about their research process.
- Students complete a research task to develop their understanding of local endangered animals.

<table>
<thead>
<tr>
<th>Time</th>
<th>Teaching and Learning Strategies</th>
<th>Preparation and Resources:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 minutes</td>
<td>Introduction</td>
<td>Relevant online resources</td>
</tr>
<tr>
<td></td>
<td>Explain that students will be researching endangered animals, creating puppets based on this information and then devising an animal performance expo. Share the Puppet Making with Erth video with students and discuss the following questions:</td>
<td>- Puppet Making with Erth video</td>
</tr>
<tr>
<td></td>
<td>• Who are Erth and what do they do?</td>
<td>- Extinct and Endangered activity sheet</td>
</tr>
<tr>
<td></td>
<td>• How do Erth learn about dinosaurs?</td>
<td>- Links to endangered animal information.</td>
</tr>
<tr>
<td></td>
<td>• How do they know what a dinosaur looks like?</td>
<td>Additional resources required</td>
</tr>
<tr>
<td></td>
<td>• How do they know the ways that a dinosaur moves?</td>
<td>- Computers with internet access.</td>
</tr>
<tr>
<td></td>
<td>• How do they know what their food and habitat needs were?</td>
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<tr>
<td>25 minutes</td>
<td>Group research</td>
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<td></td>
<td>Working in small groups, have students complete research using the Extinct and Endangered Animals activity sheet.</td>
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</tbody>
</table>
Challenge students to find information on endangered animals in their local area, including their town, state or within Australia. Encourage students to think about what their animal looks like, how they move and how they could be represented in puppet form.

**Share findings**

Ask students to share their findings about endangered and extinct animals using the question prompts below:

- Did you find any local endangered animals?
- What did you find out about them?
- Did you find out about any organisations that are working to protect endangered animals? If so, how are they doing this?
- Why is it important to protect endangered animals?
- Can you think of any links between dinosaurs and endangered animals?

Explain that in the next lesson students will begin to design their own puppets based on one of the animals from their research.
**Course:** Designosaurs  
**Learning Area:** Visual Arts

**Content Descriptors (3-4):**  
- Represents the qualities of experiences and things that are interesting or beautiful* by choosing among aspects of subject matter (VAS2.1)

**Content Descriptors (5-6):**  
- Investigates subject matter in an attempt to represent likenesses of things in the world.(VAS3.1)

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### Time | Teaching and Learning Strategies | Preparation and Resources:
--- | --- | ---
20 minutes | **Introduction**  
Explain that students will be making a practice puppet and then creating their own puppet designs based on their research from the previous lesson.  
Share a completed example of dinosaur puppet and replay the Puppet Making with Erth video. Discuss the design and construction process outlined in the video.  
Demonstrate how to create the puppet using the template and following the template instructions and then hand out the Puppet templates and instructions, scissors, straws, elastic and split pins. Give students time to complete their puppet. Students who finish quickly can help others.  
The Puppet template is designed to scaffold students’ puppet making skills and this template can be used as a starting point for their various animal adaptations. There are also many other puppet making techniques that students can research and try. Assess students’ prior knowledge of puppet making and consider including an additional lesson for students to research and experiment with different puppet making techniques such as sock puppets, shadow puppets, finger puppets, stick puppets, paper bag puppets or marionettes. | **Relevant online resources**  
- Puppet Making with Erth video  
- Puppet template  
- Puppet Template Instructions  
- Extinct and Endangered activity sheet.  
**Additional resources required**  
- Paper or visual art journal  
- pencils, coloured markers  
- scissors  
- split pins (also called clock pins)  
- lengths of elastic string (approx. 40cm)  
- straws  
- hole punch.  
**Preparation**  
- Create a dinosaur puppet using the template provided.  

20 minutes | **Design challenge**  
Revisit students’ research about endangered animals and ask them to decide which animal they will make into a puppet. |
Students need to design a puppet head, a puppet body and plan the materials they will need (encourage the use of recycled materials). Ask students to draw their design and include the following components:
- body parts diagram
- required materials
- ideas about where the materials can be gathered from

Encourage students to think about how they could modify the existing dinosaur template to suit the animal they have chosen to create. Perhaps their animal has longer teeth, no teeth or a pointier snout? It can be useful to create an example or prototype of a modified puppet. Remind students to think about the ways that the animal moves and how this will impact their design. For example, does the animal move slowly or quickly? Is it large or small? Do they step heavily or bounce lightly? Do they have limbs or wings? Do they have feathers, scales, fur or skin?

Discuss a few of the animals students' have chosen as examples.

**Design sharing**

Ask students to share their designs with the class. Discuss the materials required and what is available. Some students’ designs may require further research and adaptation to make them achievable so review designs with students. Challenge students to collect recyclable materials from home and school to use in the construction of their puppets in preparation for the next lesson.

- Print a template for each student on A3 card.
- Invite in parent helpers (optional).
**Course:** Designosaurs  
**Learning Area:** Visual Arts

**Lesson Three:** Creature Creation  
**Time:** 45 Minutes  
**Year Level:** 3-6

**Content Descriptor (3-4):**  
- Represents the qualities of experiences and things that are interesting or beautiful* by choosing among aspects of subject matter (VAS2.1)

**Content Descriptors (5-6):**  
- Investigates subject matter in an attempt to represent likenesses of things in the world (VAS3.1)

**Learning Focus:**  
- Students create and develop their endangered animal puppets.

<table>
<thead>
<tr>
<th>Time</th>
<th>Teaching and Learning Strategies</th>
</tr>
</thead>
</table>
| 10 minutes| **Introduction**  
Explain that students will be creating their puppets based on their designs. Outline the materials that are available and set expectations for a safe construction activity.  
Note: It may take your students more than one 45 minute session to complete the content of this lesson. Allow adequate follow up time to ensure the majority of students have completed the lesson focus before moving on. |
| 30 minutes| **Puppet construction**  
- Allow students time to construct and develop their puppets. If students are struggling to get started encourage them to use their existing dinosaur heads and consider how they could modify it. |
| 5 minutes | **Conclusion**  
Ask a few students to share their puppets with the class and have them explain how it relates to their animal research and their original design. |

**Preparation and Resources:**

**Relevant online resources**  
- Puppet Making with Erth video  
- Puppet Template activity sheet

**Additional resources required**  
- Completed puppet designs  
- Recycled materials collected by students

**Preparation**  
- Print a template for each student on A3 card.  
- Invite in parent helpers (optional).
Course: Designosaurs
Learning Area: Drama

Lesson Four: It’s Alive!
Time: 45 Minutes
Year Level: 3-6

Content Descriptor (3-4):
- Takes on and sustains roles in a variety of drama forms to express meaning in a wide range of imagined situations. (DRAS2.1)

Content Descriptors (5-6):
- Devises, acts and rehearses drama for performance to an audience. (DRAS3.3)

Learning Focus:
- Students are introduced to the elements of puppetry.
- Students practice applying the elements of puppetry.

Time | Teaching and Learning Strategies | Preparation and Resources:
--- | --- | ---
10 minutes | Introduction
Begin the class by showing the Puppeteering with Erth video then discuss the elements of puppeteering presented including breath, focus, time and weight.
Pose the following questions:
- How do you bring a puppet to life?
- What elements were discussed in the video? Write these on the whiteboard.
- What puppeteering experience do you have? Encourage students to think about how playing with toys (such as soft toys, dolls or Lego) is one way to bring something to life.
- Show the Meet the Dinosaurs video and ask students to identify the elements being demonstrated.
- Use an animal puppet and ask a few student volunteers to try and demonstrate each of the elements.

25 minutes | Making moves
Using the completed animal puppets, challenge students to think about how their puppet will move. Encourage student to revisit the animal research from lesson one. It may be useful to locate and watch videos to see how their animal moves.

Relevant online resources
- Puppeteering with Erth video
- Meet the Dinosaurs video.

Additional resources required
- Completed Extinct and Endangered activity sheet
- completed puppet designs
- a whiteboard and marker or equivalent
- computers with internet access to research animal movements.
Organise students into groups and ask them to share information about their puppet with the people in their group. This could include the way the animal moves, what it eats, its’ habitat, and why it is endangered.

Invite students to practice manipulating their puppets using the elements of puppetry demonstrated in the Puppeteering with Erth video. Remind students that, like Cass and Nick, they may need more than one person to operate their puppet.

Conclusion
Ask a few students to present their animal puppet to the class and outline that in the following lesson they will be preparing to present their puppets to a wider audience.
Course: Designosaurs
Learning Area: Drama

Lesson Five: Endangered Animal Zoo
Time: 45 Minutes
Year Level: 3-6

Content Descriptor (3-4):
- Takes on and sustains roles in a variety of drama forms to express meaning in a wide range of imagined situations. (DRAS2.1)

Content Descriptors (5-6):
- Devises, acts and rehearses drama for performance to an audience. (DRAS3.3)

Learning Focus:
- Students plan an interactive performance.
- Students practice their performance using the elements of puppetry.

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<thead>
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<th>Time</th>
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<th>Preparation and Resources</th>
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</table>
| 5 minutes | **Introduction**  
Ask students to reflect on their puppetry experiences from the previous lesson. Explain that students will be creating an interactive performance as a class. The goal of this performance is to share knowledge about endangered animals and to demonstrate their puppetry skills. Discuss who they could invite and how the performance will work.  
This presentation could be delivered as a performance to another class, at assembly, or to the wider school community. Students could present their puppets in a classroom zoo expo event, where attendees can walk around the space and interact with the animals and/or student ‘zoo keepers’.

| 15 minutes | **Let’s make a zoo**  
Encourage students to think about how they would like to present their endangered animal performance. Pose the following questions then split students into groups to begin mapping out different components:  
- What props will you need? | Relevant online resources  
- Puppeteering with Erth video.  
Additional resources required  
- Completed Extinct and Endangered activity sheet  
- completed puppet designs  
- props and set materials (optional).  
Preparation  
Consider where and who students could perform to. |
Will you invite people to come or how will you advertise the event?
What space will you use?
How will you organise the space to incorporate all the different animals?
How could this event educate and encourage others to take action to protect endangered animals?

Consider grouping animals together into categories or hierarchies. For example, who are the herbivores and who are the carnivores? Which types of animals are in the zoo expo such as mammals, insects, vertebrates, amphibians, etc.?

**Practice session**

Revise the puppeteering that students completed in the last session highlighting the elements of puppetry. Provide some time for students to develop their ideas and rehearse their performance. Help students think about how they might interact with an audience and what questions their audience might ask about their animal.

**Note**: You may prefer to run the practice session as a separate lesson to give students more time to prepare and embody their puppet.

**Conclusion**

Bring the class together and clarify what needs to be done in order to be performance ready. This may involve creating a running sheet, delegating tasks or organising further rehearsal sessions. If there is time invite students to share some of their performance ideas. Wrap up the class by recapping the plans for the performance and clarify students’ plans.

**Extension**: Once students have completed their performance event, create an opportunity for them to debrief about their experiences. This could be done through a small or large group discussion or a written reflection. The following question could support this:

- How did it go?
- What did you do well?
- What interactions did you have?
- What did you do to bring your puppet to life?
- What do you think your audience learned about your animals?

There is option for students to share what they liked about other groups’ performances.
### Curriculum Alignment

**Course:** Designosaurs  
**Learning Areas:** Drama, Visual Arts, Geography and English  
**Year Level:** 3-4

#### Concepts and Learnings

<table>
<thead>
<tr>
<th>Concept</th>
<th>Lesson 1</th>
<th>Lesson 2</th>
<th>Lesson 3</th>
<th>Lesson 4</th>
<th>Lesson 5</th>
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<tbody>
<tr>
<td><strong>Drama</strong></td>
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<tr>
<td>Takes on and sustains roles in a variety of drama forms to express meaning in a wide range of imagined situations. (DRAS2.1)</td>
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<tr>
<td><strong>Visual Art</strong></td>
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<td>Represents the qualities of experiences and things that are interesting or beautiful* by choosing among aspects of subject matter. (VAS2.1)</td>
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<tr>
<td><strong>English</strong></td>
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<td>Uses an increasing range of skills, strategies and knowledge to fluently read, view and comprehend a range of texts on increasingly challenging topics in different media and technologies (EN2-4A)</td>
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<tr>
<td><strong>Geography</strong></td>
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<td>Describes the ways people, places and environments interact (GW2-2)</td>
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Extinct and Endangered Animals

Sixty five million years ago, the last of the dinosaurs went extinct. Humans had no impact on the demise of these animals. The extinction of megafauna (large animals) around the world was probably due to environmental and ecological factors. Here are some of extinct megafauna from the Australian region.

<table>
<thead>
<tr>
<th>Name: Megalania Prisca</th>
<th>Name: Australonycteris clareae</th>
<th>Name: Dromornis stirtoni</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Phoeniconotius eyrensis</td>
<td>Name: Nimiokoala greystanesi</td>
<td>Name: Silvabestius johnnilandi</td>
</tr>
</tbody>
</table>

Images by Dr. Anne Musser, Courtesy Australian Museum Archives

Research task

Today we are facing the global challenge to save animals that are threatened and endangered due to human impacts. Complete research to learn about the extinct animals above or find out about other extinct species.
Endangered Australian Animals

It’s essential to understand our impact on the environment and the animals we share it with so we can act to protect them and continue to co-exist into the future. In 2019, 86 Australian animal species are critically endangered. This means these animals are currently facing an extremely high risk of extinction. Taking action to reduce your environmental footprint by living more sustainably is one way to have a positive impact on the planet and all its animals and plants.

<table>
<thead>
<tr>
<th>Name: Southern Cassowary</th>
<th>Name: Great White Shark</th>
<th>Name: Northern Quoll</th>
<th>Name: Tasmanian Devil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Gouldian Finch</td>
<td>Name: Perentie</td>
<td>Name: Green Sea Turtle</td>
<td>Name: Australian Sea Lion</td>
</tr>
</tbody>
</table>

Make an Endangered Puppet

Choose one of the animals pictured above or research threatened animal species in your local area. Then use this research to inspire your puppet design. Think about what recycled materials could be gathered for to make your puppet. There are lots of puppet styles to research including marionette, sock puppet, finger puppet, shadow puppet and stick puppet. Which type will you create?
### Animal Research

<table>
<thead>
<tr>
<th>Animal name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Which group/s does your animal belong to?</td>
<td>(such as mammal, carnivore, nocturnal)?</td>
</tr>
<tr>
<td>What is its habitat?</td>
<td></td>
</tr>
<tr>
<td>What does it eat or need to survive?</td>
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<tr>
<td>Draw or describe what your animal looks like.</td>
<td></td>
</tr>
<tr>
<td>Draw or describe how your animal moves.</td>
<td></td>
</tr>
<tr>
<td>What sort of puppet will you make and what</td>
<td>what materials will be needed?</td>
</tr>
<tr>
<td>materials will be needed?</td>
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</tbody>
</table>
Puppet Template Instructions

Materials
You will need the following items:

- Scissors
- Hole punch or sharp pencil
- 2 x spilt pins (also called clock pins)
- Puppet template printed on card
- 40 cm elastic
- 7cm piece of straw

Getting Started
Follow the steps below to create a puppet head using the puppet template provided. See the next page for the steps to create your puppet's head.

Begin by cutting along all the lines that have a scissors icon. You will need an adult to use sharp scissors or a Stanley knife to cut out the slots near the eyes and the nostrils.
# Puppet Party
## Designosaurs

## Steps

<table>
<thead>
<tr>
<th>Steps</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
<td>Using a large hole punch or tip of a pencil, punch out the string holes and the pin holes then fold along all the dotted fold lines.</td>
</tr>
<tr>
<td><strong>2.</strong></td>
<td>There are three pin holes on each side of the jaw. Gather them together so they overlap then push the split pins through and fasten. This will allow the jaw to move.</td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>On the snout, push and fasten the two nose tips into the pre-cut slots.</td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td>Feed the elastic through the straw.</td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>Place the straw inside the upper jaw and then feed the elastic out through the upper jaw string holes then in through the lower jaw string holes.</td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>Tie the ends of the elastic together so that the jaws are pulled together tight.</td>
</tr>
</tbody>
</table>
After the Workshop
VR Storyboard

Use this storyboard to plan out your 360 video!

The person in the middle is standing inside your VR experience. This is where the camera will be when you are filming. The semi-circle shows the viewers field of view when the first enter the VR experience.

Draw where different parts of your scene will happen in relation to the camera – Don’t forget the camera will capture everything in the big circle so get creative with the space!
Ideas and Brainstorming

Use this page to brainstorm ideas for your own VR video