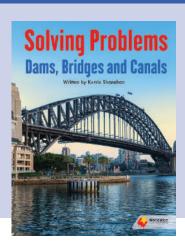


Lesson Plan

Advanced Fluent reading stage
Level R



Solving Problems: Dams, Bridges and Canals outlines the history and characteristics of these structures. It explores great engineering feats such as the building of the Panama Canal. The book also discusses the positive and negative impacts that dams, bridges and canals have on people and the environment.

Informative text types:

Report/Explanation/Factual recount/Discussion/Arguments

Science Curriculum links

Australia

- CS (ACSSU074) Uses of materials based on their properties
- ESS (ACSSU075) Earth's surface changes over time as a result of natural process and human activity
- ESS (ACSSU075) Effects of flood and extreme weather on the landscape
- UIS (ACSHE062) Science knowledge helps people to understand the effect of their actions
- NTTK: Materials are selected based on desired performance criteria
- **PW:** The properties of different groups of substances are linked to the way they are used in society or occur in nature

Key concepts

- Dams, bridges and canals are structures that help people in various ways
- Some dams, bridges and canals are complex structures that take years to design and build
- Dams, bridges and canals have improved the way people live but they can sometimes have negative impacts on people and the environment

Content vocabulary

channel, construction site, damming, design, drought, engineer, fumigated, habitat, hydroelectricity, irrigation, lock, momentum, redirect, reservoirs, span, stagnant, structure, suspension, truss

Text features

• Tables, labelled diagrams, map, text boxes, glossary

Reading strategy

• Identifying key information

First reading session

Getting started

Introducing the book

Give each student a copy of the book Solving Problems: Dams, Bridges and Canals. Have the students browse through the book. Say: As you browse through the book, think about what you already know about dams, bridges and canals. What connections are you making? Have the students discuss their thinking with the group.

Exploring vocabulary

Ask: What words or phrases would you expect to see in a book about dams, bridges and canals? Have students work with a partner and record a list of words. Say: When you are finished, read your list to the group.

If some words or phrases are not known, have the student who recorded the word explain what it means. Compare the students' vocabulary words with the words in the glossary.

Introducing the reading strategy focus

Say: Skilled readers can show that they understand a text by identifying the key information in it. So, how do you do this? How do you find the key information? Discuss and draw out that the reader can reflect on what they have read, ask themselves what the main ideas are, and list these. Say: You can identify the main ideas in a paragraph, page or section of a book.

Reading with teacher support

Say: Read the introduction and chapters 1 and 2 to yourselves. As you read, stop after each section and list on sticky notes any key information. Have the students discuss their thinking with their partner, and then have a group discussion. Ask: What is challenging about building dams and bridges? What are the key ideas? Have the students record their ideas on the Graphic Organiser and compare it with their partner's. Say: Be ready to talk about what you noticed with the whole group.

Second reading session

Building understanding

Choose to ask students to either read independently or, if they need more support, to meet with you in a small group.

Independent and partner work

Have the students read chapters 3 and 4 independently. Say: As you read, use the same process we used for the introduction and chapters 1 and 2. Read the chapters to yourself and keep track of your thinking by adding to your Graphic Organiser, then meet with your partner to discuss the key information you listed.

Have the students meet as a group to share and talk about what they have read and what they recorded on their Graphic Organiser. Monitor the group's progress and support them, if necessary.

Have the students read the rest of the book and complete their Graphic Organiser. On completion, have the students reread the whole book in preparation for the final reading session. Say: Be ready to talk about your thinking and to discuss your questions and wonderings with the group.

Reading with teacher support

Ask: What have we learned so far about dams and bridges? Share your ideas with a partner. Have the students read chapters 3 and 4 to themselves. Review what the students have read. Ask: What information do you have about canals? What is special about the Panama Canal? What are the key ideas? Invite the students to talk about their understandings. Have the students read chapter 5 to themselves. On completion, have the students reread the whole book in preparation for the final reading session. Say: Be ready to talk about your thinking and to discuss your questions and wonderings with the group.

Reflecting on the reading strategy

Encourage the students to talk about what they did to help themselves as readers. Ask: Why is it important to identify and remember key information?

Final reading session

Bringing it all together

Have students talk about the whole book. Use a range of questions to promote discussion and higher-level thinking. Where appropriate, have the students lead the discussion.

How are all bridges similar? In what ways can they be different? Why do they need to be different? Why do we need to build dams? How have they evolved over time? Why was the opening of the Panama Canal such an incredible achievement? (Inferential)

In what ways have dams, bridges and canals helped people to live better lives? In what ways has the building of these structures had a negative impact on people and on the environment? What do you think about the building of massive structures like the Panama Canal, the Hoover Dam, and the Sydney Harbour Bridge? (Synthesising)

Did reading this book change your opinion of dams, bridges, and canals? If so, how? What do you think now? What other information would you have liked to have read about in this book? What else could the author have included? (Critical)

Invite students to ask their own questions.

Going beyond the book

Have students demonstrate their understandings by choosing one or more of the following tasks. The tasks can be completed independently, in pairs or in a small group.

Speaking and listening

Have students role play being a reporter on the scene at the Westgate Bridge collapse. Have them interview several witnesses in their news report. Students can practise their role play and then present it to the class.

Vocabulary

Have students work in a group to create 15 content words written on cards and 15 matching definitions, also written on cards. The group can then use the cards to play a game of "memory", where students take turns turning over two cards at a time to find a word and its matching definition.

Visual literacy

Have students create a slide show that includes pictures of some of the world's most amazing dams, bridges and canals.

Writing

Have the students write a factual recount, using the prompt: *The building of a famous dam/bridge/canal*. Provide the students with a template detailing how to plan and write a recount. Remind them to begin with general information (what the structure is, where and when it was built, etc.), followed by the series of events involved in the building of this structure.

Getting started			
What is my recount about?			
Who am I writing for?			
Planning my recount			
1. Setting: orientation			
Who?			
What?			
Where?			
When?			
2. Significant things that hap	pened (in order)		
First (event 1)			
Then (event 2)			
Finally (event 3)			
3. Conclusion: Comment			
Can I summarise what I have written?_			
	Additional fe	Additional features I could use	
(:) Hint: What voice will I use?		Emails	Time line

Download the template at www.WorldWiseReading.com.au/teacherresources

Say: Use the factual recount on pages 18–23 as a model. Browse through the book for ideas on other famous structures. Encourage the students to talk about their ideas with a partner, then write the factual recount. Say: You will need to research the structure you are writing about.

Alternatively, the students could choose to write a description of a famous structure.

Graphic Organiser: What's the point?

Name/s: _

Key information Dams **Bridges** Canals

WorldWise Lesson Plan Solving Problems: Dams, Bridges and Canals © 2019 EC Licensing Pty Ltd.

© 2019 EC Licensing Pty Ltd. This work is protected by copyright law, and under international copyright conventions, applicable in the jurisdictions in which it is published. The trademark "Flying Start to Literacy" and Star device is a registered trademark of FC Licensing Pty Ltd in Australia and New Zealand. The trademark "WorldWise Content-based Learning" and Star device is owned by EC Licensing Pty Ltd.

In addition to certain rights under applicable copyright law to copy parts of this work, the purchaser may make copies of those sections of this work displaying the footnote: "© 2019 EC Licensing Pty Ltd", provided that: (a) the number of copies made does not exceed the number reasonably required by the purchaser for its teaching purposes; (b) those copies are only made by means of photocopying and are not further copied or stored or transmitted by any means; (c) those copies are not sold, hired, lent or offered for sale, hire or loan; and (d) every copy made clearly shows the footnote copyright notice.





ELEANOR CURTAIN PUBLISHING

Developed by Eleanor Curtain Publishing

Text: Kerrie Shanahan, Jenny Feely Consultants: Linda Hoyt, Lyn Reggett Designed by Derek Schneider Printed in China through Colorcraft Ltd, Hong Kong

Distribution details: www.ecpublishing.com.au/contact-us

More information: www.WorldWiseReading.com.au www.ecpublishing.com.au

