Puppetry

This is suitable for the shy or reluctant speaker or writer. Puppets are useful aids for presenting stories as they allow students to practise the structures and features of narrative, and to experiment with voice and volume. For example, the students can make finger or hand puppets of the boy, his sister, and her shadow, and retell the story using the puppets. Drama

Through thought, give students opportunities to be in language to entertain. The students can discuss the story through improvisation, or play a simple triple, the drama techniques such as freeze frame ask students to render how old times use their hands to reframe a scene, the beginning, middle, and end of the horizons story. Or ask students to create a scene showing an emotional moment in the middle of a scene in the story, for example, they represent when the boy dives into the water to look for the girl but cannot find her. Ask them questions about what they think might have happened. This is a way for students to combine their thoughts and ideas to see things from different perspectives. Have students listen to a story and then create their own retold version using drama techniques such as freeze frame, retell the story using their hands to reframe a scene, where they live, their age, what sort of family they have, and what they like to do in their free time. For example, the sister in the story is 8 years old, has an older brother, and likes to play jokes on him.

Creating character profiles

Have students work with various items, e.g., objects, hats, pictures, and clothes, to help them generate ideas about characters. Alternately, if there is a picture or a painting in a book, a cutout from the story, students can draw lines to show their ideas. They can then come up with another part to the story again.

Partner conversations

After listening to a story, students in pairs (a) retell the story in sequence with as much detail as they can remember (c) identify and write and draw about the setting of the story. Alternatively, students can discuss the beginning, middle, and end of the story. Or ask students to create three still images using their bodies (with no movement) to show what they have read. This can contribute to their understanding of how shadows are created.

Listening triads

Students sit in two circles, one circle inside the other, facing a partner. Students in the inside circle share their ideas (in the outside circle) what they have found out a topic, character, and so on from the outside circle. Students in the inside circle take notes and reflect on what they are hearing and share this with the inside circle and ask questions to clarify thinking.

Think-pair-share

After listening to a story, students in pairs (a) retell the story in sequence with as much detail as they can remember (c) identify and write and draw about the setting of the story. Alternatively, students can discuss the beginning, middle, and end of the story. Or ask students to create three still images using their bodies (with no movement) to show what they have read. This can contribute to their understanding of how shadows are created.

Strategies for partner and small group work

Thin pair-share

This is suitable for the shy or reluctant speaker or writer. Puppets are useful aids for presenting stories as they allow students to practise the structures and features of narrative, and to experiment with voice and volume. For example, the students can make finger or hand puppets of the boy, his sister, and her shadow, and retell the story using the puppets.

Partner conversations

After listening to a story, students in pairs (a) retell the story in sequence with as much detail as they can remember (c) identify and write and draw about the setting of the story. Alternatively, students can discuss the beginning, middle, and end of the story. Or ask students to create three still images using their bodies (with no movement) to show what they have read. This can contribute to their understanding of how shadows are created.

Drama

Through thought, give students opportunities to be in language to entertain. The students can discuss the story through improvisation, or play a simple triple, the drama techniques such as freeze frame ask students to render how old times use their hands to reframe a scene, the beginning, middle, and end of the horizons story. Or ask students to create a scene showing an emotional moment in the middle of a scene in the story, for example, they represent when the boy dives into the water to look for the girl but cannot find her. Ask them questions about what they think might have happened. This is a way for students to combine their thoughts and ideas to see things from different perspectives. Have students listen to a story and then create their own retold version using drama techniques such as freeze frame, retell the story using their hands to reframe a scene, where they live, their age, what sort of family they have, and what they like to do in their free time. For example, the sister in the story is 8 years old, has an older brother, and likes to play jokes on him.
SECTION 1: KASTOM STORIES

Kastom stories provide rich historical and cultural knowledge that sheds light on the science syllabus. This cultural knowledge comes from the respective cultures throughout the Solomon Islands and is connected to several aspects of the science syllabus through local experiences and scientific knowledge.

In the Solomon Islands, one purpose of stories is to convey a teaching point about something that is important and is not often talked about in the Solomon Islands people. Often, this teaching point is about people trying to make sense of their world about how to live harmoniously in the bush, in the playground, at home, or even on the beach.

New students might ask, “Is this story true?” According to our Solomon Islands culture, there are two kinds of truth that the students might discover: the truth that makes sense and the truth that comes from one’s family, friends, or other people, and often are all that are often different from one another.

SO WHY TEACH SCIENCE USING KASTOM STORIES?

Kastom stories:

• Facilitate learning
• Integrate cultural and scientific knowledge

Scientific skill – such as observing, predicting, and evaluating – can be promoted through storytelling. Students can observe what happens before the event and what happens after the event. They can also develop a deeper understanding of the science concepts you are teaching.

By encouraging students to consider and describe the science processes:
• give students a “mental organiser” – any information that is presented to the students (on a map) where this village is.
• help students to move between the logical and creative – for example, “Are you alive?”
• offer students a “source of inspiration” – for example, “Do you grow in the ground?”
• help students to understand the basis of existing knowledge, relationship, and why shadows change in size and shape.
• help students to understand the basis of existing knowledge, relationship, and why shadows change in size and shape.
• help students to question and answer the scientific processes.

SECTION 2: BEFORE AND AFTER READING

Before the students listen to and read the story:
1. Introduce the students to discover a text-

2. Discuss with the students the importance of reading and listening to the students about their culture.
3. Ask the students to make decisions carefully and in the story about what the students (on a map) where this village is.

After the students listen to and read the story:
1. Do you tell stories or listen to stories?
2. What can be taught from this story that helps us understand the scientific world?
3. What can you tell from this story about the relationship between people and the natural world?

STRATEGIES

Activities to develop questioning

1. What might be the story that you tell?
2. Why is the story important to you?
3. Do you ever tell stories or listen to stories?

SOLICITING QUESTIONS

What might be the story that you tell?
1. Are you teaching
2. What do you think it is about?
3. How does it connect to your story?
4. What might this story be about?
5. What question do you have about this story?
6. Do you tell stories or listen to stories?
7. Is there a story you tell?

PLAN TO TEACH SCIENCE

• What would you like students to do?

SECTION 3: LITERACY ACTIVITIES AND STRATEGIES

This section focuses on using kastom stories and strategies to help students to compare their own and other students’ understanding of the science concepts you are teaching.

1. Select a text related to the theme you are teaching.
2. Ask questions about the story.
3. Propose a purpose for students to conduct an interview with an experienced observer. Students can interview their teacher, a parent, or a local professional. Students can ask about where, when, how, and why the event happened. They can ask about the story’s meaning or metaphors or classroom questions about the story or the how the story was told.

LITERACY SKILLS

1. What are the different literacy skills in kastom stories?
2. How can kastom stories be used to develop science literacy?

LITERACY ACTIVITIES AND STRATEGIES

Kastom stories provide an inspiring starting point for scientific investigations. It can be used to introduce a scientific concept that relates to the students’ own cultural identity.

1. Do you ever tell stories or listen to stories?
2. What can you tell from this story about the relationship between people and the natural world?
3. What can we learn from this story that helps us understand the scientific world?
4. What questions do you have about this story?
5. Do you ever tell stories or listen to stories?
6. Is there a story you tell?

LITERACY SKILLS

• What is the purpose of the activity?

LITERACY ACTIVITIES AND STRATEGIES

Kastom stories can provide an inspiring starting point for scientific investigations. It can be used to introduce a scientific concept that relates to the students’ own cultural identity.

1. Do you ever tell stories or listen to stories?
2. What can you tell from this story about the relationship between people and the natural world?
3. What can we learn from this story that helps us understand the scientific world?
4. What questions do you have about this story?
5. Do you ever tell stories or listen to stories?
6. Is there a story you tell?

LITERACY SKILLS

• What is the purpose of the activity?

LITERACY ACTIVITIES AND STRATEGIES

Kastom stories can provide an inspiring starting point for scientific investigations. It can be used to introduce a scientific concept that relates to the students’ own cultural identity.

1. Do you ever tell stories or listen to stories?
2. What can you tell from this story about the relationship between people and the natural world?
3. What can we learn from this story that helps us understand the scientific world?
4. What questions do you have about this story?
5. Do you ever tell stories or listen to stories?
6. Is there a story you tell?
Hide and Seek

a kastom story from Baunani Village, West Kwaio, Malaita

retold by Roselyn Maneipuri

illustrations by Richard Bibimauri
One day, a boy was hunting in the forest of West Malaita. He shot at one bird after another, but he always missed. He was feeling very angry with himself.

Maybe a swim would help? The boy walked down the stream that flowed past his village, until he came to a deep pool.
When he looked down into the water, he was sure he could see a dark shape at the bottom of the pool. It looked like a girl. Was she drowning?
The boy dived into the water and looked for the drowning girl, but he couldn’t find her anywhere.
He climbed out, stood on the bank, and waited for the water to clear.

Once the water was clear, there she was again.
This time, she was waving her arm.

“Don’t worry! I’ll save you!” the boy shouted.
He dived back into the pool and searched for the drowning girl a second time, but still he couldn’t find her!
Once again, he climbed out of the pool. What should he do?

Then he heard giggling coming from above him. He looked up into a big tree that was growing above the pool. There she was. It was his sister! She had been sitting on a branch above him the whole time!
When our elders tell us kastom stories, sometimes they are helping us to think about science.

They know about light and shadows. They know that shadows change in size and shape as the sun moves across the sky.
After dark tonight, find a place where there is no light.
You’ll find that there aren’t any shadows. To make a shadow, you need light.

When an object blocks the light, it makes a shadow.
A shadow experiment

To do this experiment, you will need:

- a light source (a torch or candle)
- a dark room
- a glass
- yourself.

Light the candle or turn on the torch. Hold the glass in front of the light source. Look at the shadow of the glass. Is there a shadow? How dark is it?

Now stand in front of the light source and look at your shadow. How dark is it?
Try this experiment with other objects.

Objects that light can’t pass through are called **opaque**.

Objects that light can pass through are called **transparent**.

Objects that only some light can pass through are called **translucent**.

Now do the experiment again. This time, move the objects closer and further away from the light source. What happens? Then move the light source. What happens?
Sun shadows

The sun is a light source. When sunlight hits an opaque object, the object makes a shadow. When sunlight hits a transparent object, such as a window pane, it passes through and there isn’t a shadow.
As the sun moves across the sky, shadows move too.

Pick out a coconut palm near your school. Just before school starts, scratch a line in the ground where its shadow is.
Think about where the shadow will be when school ends.
Scratch a second line there.

After school, see if you were right.