Shadow Puppets & Environmental Education
• Ancient form of story-telling (~2000 years)
• Originated in Central Asia - found in both China and India
• Uses articulated cut-out figures placed between a light source and a screen
Traditional Figures

- Leather with intricate detail carved out.
Modern Figures

• Cut from paper
• Vary from simple to intricate

https://www.handmadecharlotte.com/diy-campfire-story-shadow-puppets/
Can be a Fun Way to Teach Environmental Concepts

Photos from Canadian Canoe Museum
https://canoemuseum.ca/diy-puppets-theatre/
STEAM

- Science
- Technology
- Engineering
- Art
- Math
Advantages over other Puppets

- Shorter construction time (for basic puppets)
- Low cost (paper, rod)
- Less art skills required
- Less storage space needed
Why the Possum’s Tail is Bare

Sample Show
Getting Started with Shadow Puppets
Screens

**Frames:**
- Picture frame (reuse)
- PVC frame
- Build with 1 x 2's
- Cardboard box

**Material:**
- White cotton such as muslin - tight weave
- White shower curtain liner
- Rosco twin white theater screen
Picture Frame Example
How to Build a Quick and Easy Shadow Screen

Materials:
1/2 inch PVC
1. 2 lengths of 3 feet
2. 2 lengths of 2 feet
3. 2 lengths of 2 inches
4. 4 lengths of 6 inches
5. 4 T joints
6. 2 90 Degree elbow joint

Fabric:
1. (Pre-washed) 2 foot by 3 foot Piece of Muslin
2. 2 lengths of stretchy swimsuit material 2 feet by 3 1/2 inches
3. 2 lengths of stretchy swimsuit material 3 feet by 3 1/2 inches

Directions

1) Fold the swim suit material in half to make a tube. Then pin it to the sides of the muslin. Do this on all four sides.

2) Serge all the edges together or sew at the edge with a zig zag stitch so you end up with a rectangle of muslin with a stretchy pocket on each end. Leave the ends of the tubes open.

3) Thread the PVC through the tubes and connect at the top with the elbow joints and the bottom with the T joints. The third hole on the T joint should point down.

4) Take the 2 inch piece and put it in the empty part of the T joint at the bottom of your screen. On the other end of the 2 inch piece put the extra 2 T joints using the center hole. Now stick the 6 inch pieces into the remaining side holes for the feet and you are done.
Cardboard Box Screen

- 6 inches deep
- window with 2 inches on all sides
- tape or glue in paper or fabric for screen
• Possible Lights
  • LED Flashlight (single bulb)
  • Utility clamp light - experiment with different bulbs such as LED
  • Photography light and stand
• Best for light to come from top to avoid shadow of puppeteers and rod
Light

Govee LED Light Bulb
- Dimmable, Music Sync
- RGB Color Changing Light
- Bulb A19 7W 60W Equivalent, Multicolor
- Decorative No Hub
- Required LED Bulb with
- APP for Party Home (Don't Support WiFi/Alexa)

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Light Stand & Lg Screen

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Puppet

• Card stock (black)
• Can glue two pieces together for stronger puppet
• If using templates
  • adjust size for your screen
  • print it
  • cut out design
  • trace onto card stock
• Search for shadow puppet templates online
• Try to find ones with only one or two joints

https://canoemuseum.ca/diy-puppets-theatre/  “World of Shadow”
• If can’t find template you want, search for silhouettes
Draw Your Own

- First make an outline.
- Decide on pivot points - draw circle
- Draw a second of the same outline.
- Cut body from one, head and tail from other.

From Bradshaw's Guide to Shadow Puppets
Silhouettes to Puppets
Silhouettes to Puppets
Silhouettes to Puppets

From Bradshaw's Guide to Shadow Puppets
Articulations

- paper brads
  - standard (3/4 inch)
  - mini (1/8 inch)
- punch hole first
- jewelry wire 26 gauge
  - spirals on both side, used needle to make holes
Control Rods

- wooden dowels 1/4 inch
- bamboo skewers
- bendable straws (natural)
- Box and baler wire with dowel handle
Sample Attachments

From Wisniewski Worlds of Shadow

Bendable straw

Bamboo skewer and masking tape
Masking Tape
Resources

Good Info for Use in Education

WORLDS of SHADOW
Teaching with Shadow Puppets

MAKING SHADOW PUPPETS

Uses Overhead Projector
Resources

Good Info on Building

Beautiful Designs
Content Ideas
Short Stories

NATIVE AMERICAN
ANIMAL STORIES
Told by Joseph Bruchac

from KEEPERS OF THE ANIMALS
Michael J. Caduto and Joseph Bruchac
Foreword by Vine Deloria, Jr.
Illustrations by John Kahionhes Fadden
Copyrighted Material

Uncle Remus
THE COMPLETE TALES
as told by JULIUS LESTER
illustrated by Jerry Pinkney
• Council meeting announced
• Rabbit sent as messenger to tell others
• Rabbit invites possum
• Possum agrees to come if special seat
• Rabbit gives plan to grasshopper
• Grasshopper prepares tail - cuts and wraps with ribbon
• Possum dances at meeting and unwraps tail
• Others are laughing
• Possum sees tail and plays dead.
• Add Opening
  ~ night science with owl and possum
  ~ Native American boy talks to grandfather
  ~ Grandfather talks about qualities of animals

• Story - How the possum lost his tail

• Add Follow-Up - Grandfather teaches boy about possum natural history - add possum facts
Animals in Native Culture

- Fox - ability to camouflage
- Beaver - builder, achiever
- Owl - can see what others can’t, essence of wisdom
- Opossum - diversion, strategy and deception
- Rabbit - runner
Possum Facts

- Smart - outscored cats and dogs on finding food
- Have opposable thumbs on hind feet
- Can hang by tail
- Omnivores - eat a variety of food,
- Play possum - involuntary, roll over, stiff, bare teeth, secretes foul-smelling liquid from anal glands - scare off predators that don’t eat carrion, can last hours
- Carry young called joey’s in pouch
- Groom a lot
- Rarely carry disease - natural immunity
- free pest control - ticks, snails, slugs
- also eat rotting fruit so keep away vermin
- immune to bee stings and snake venom
Classroom
Ideas for Classroom

- have students make puppets for a story you choose
- assign students different parts to play as class

- students choose an animal to make a puppet
- have them look up facts and perform
Your Turn
• draw an animal and make into a puppet with at least one joint if possible
• look at 3-5 facts about your animal
• give a short performance for us
Contact Info

Linda Sigismondi

lindas@rio.edu