



Canoeing

Program Purpose: The purpose of this program is to teach students techniques of how to properly and safely paddle a canoe, by teaching basic skills and the importance of working together with your paddling partner.

Length of Program: 1.5 hour min; recommend 2 hours

Age: Grades 4th – adult

Maximum Number of Participants: 28 (requires 4 adults); 3 people/canoe maximum, 2 minimum. This means around a 1:8 adult to child ratio.

Objectives: After completing this activity students should be able to:

1. Learn the basics of canoeing; equipment use, paddle skills and water safety.
2. Practice teamwork skills necessary for partner canoeing; respect, maneuvering together and effective communication.
3. Nature Observation--learning from a unique on the water perspective of a beautiful State Natural Area!

Background Information:

A. History of Canoeing

Canoes were developed over the course of thousands of years by the native peoples of North America. The word 'canoe' originated from the word 'kenu' - meaning dugout. These seagoing boats were used by the Carib Indians of the Caribbean islands, and were made of large tree trunks which were shaped and hollowed, and were strong enough to travel between the islands.

North American Indians are responsible for creating the more well-known version of the canoe - a frame of wooden ribs covered with the lightweight bark of birch trees, and sometimes elm or cedar trees. These boats, which have remained virtually unchanged in design for thousands of years, proved to be ideal for traveling the numerous streams, rivers and lakes of North America. Once a matter of necessity, paddling is now mostly a means of recreation.

B. Wisconsin River

It can be very interesting and exciting to discuss the importance of the Wisconsin River. Fun Facts of the River: Several spellings and meanings were given to the name of the stream in early days. The Algonquian "weerkonsan" means "the gathering of the waters." The Ho-

Chunk, or Winnebago, word wees-koos-erah is quite different, meaning "river with flowery banks." With its partner, the Fox River, the Wisconsin provided a super-highway for Indian, explorer, adventurer, missionary, and settler and was a "main street" for the fur trade. The Wisconsin River travels nearly the entire length of the state and empties into the Mississippi just below Prairie du Chien, about 300 miles from here. Because there are nearly 50 power and storage dams along its route today, the Wisconsin has been called "the hardest working river in America." Facts on the river's hydro power: The Wisconsin River descends 1,071 feet in 430 miles. Twenty-six power dams utilize 640 feet of the fall of the river to produce an annual average of one billion kilowatt hours of electrical energy.

Preparation: Check the Wisconsin River flow rate prior to canoeing to confirm river flow is at or below 12,000 cubic feet per second (CFS).

- Unlock the canoes and boathouse
- Make sure there are enough PFD's and paddles for everyone in the group
- Be aware of age, group experience and dynamics to determine how much time to spend on skills, how to prepare adult role models for their role and how you are going to pair (2) or group (3) youth in canoes

Materials:

- 1 Canoe per 2 or 3 participants
- 1 Paddle per person
- 1 PFD per person
- 1 Radio for lead canoe
- 1 Lifeguard tube
- 1 Whistle
- 1 Throw Rope
- A wool blanket if cold out

Lesson Outline:

1. Introduction: Objectives and Background on Canoeing
2. Icebreaker/ Learner Assessment and Reiterate Objectives: Communication is Key!
3. Safety Discussion

Activities:

4. Learning Canoe Equipment: PFD and Paddle Fitting
5. Paddle Instruction: Skills Foundation
 - a. Paddle Parts
 - b. How to Hold it
 - c. 3 Parts of a Paddle Stroke
 - d. Forward, backwards and switch!

- e. Steering
- f. Optional Game: Simon Says
- 6. Canoe Intro
 - a. Parts of the Boat
 - b. Demonstrate Canoe Entry & Exit
 - c. Reiterate Safety and role of Adults
- 7. Pair or Group participants and launch Canoes!
- 8. On the Water Activities: Practice, Play and Explore
- 9. Return (Whistle) and Clean Up
- 10. Wrap Up: Summarize, Process, Take Lessons Home (Teamwork, Canoeing, Water Safety!)
- 11. Appendices

Introduction:

1. Introduction: Main Objectives

Introduce yourself and explain that today they are going to learn an important skill that can help them to see and explore many places on earth (after all, about 75% of the earth is covered by water)...how to paddle a canoe.

In order to paddle a canoe, what else is going to be very important to practice? Teamwork! Communication is key. We are also going to have a very unique view of this beautiful area- from the water.

2. Icebreaker/ Learner Assessment

This is a great opportunity for students to build trust as a group AND for you to discover who is comfortable around water or in canoes. This information can be very helpful for how you group students to paddle. Options for icebreakers: go around and say name and something they like doing near water (ex: swimming, fishing, etc) OR if you have been canoeing. A shorter icebreaker is to have everyone hold up their thumb to signal thumbs up, to the side or down for how much they “love water” or “feel comfortable in a boat.” If it is a group of middle school youth, it may help for them to all close eyes and hold up thumbs-to make it easier to answer honestly. End with a quick review: what are our three objectives today? Canoeing, Teamwork and Observing Nature!

3. Safety Discussion (questioning, expectations for both adults and youth)

Here is a great chance to get their brains thinking about appropriate behavior, which is especially important in order for this to be fun. What are some ways we can stay safe? Can use the idea of the 3ps: Partner, Paddle, PFD! Most important to touch on:

- PFD is ALWAYS on, fitted and buckled- for youth and adults.
- You must ALWAYS be able to see and communicate with the Instructor (they don't have to be following you, but they should be able to look around and locate you.)
- Respect - don't splash folks or touch other boats. Stay seated and do not try to get into another canoe out on the water.
- Whistle- it is a signal to quietly and calmly return to where we began (signals end of class, or used in emergency).

- Watch out for other boat traffic
- If going around the island-do not pass the lead canoe

4. Fitting PFDs and Paddles

Have students meet you up at the boathouse. Use basic weight rating on PFDs to distribute PFDs. Each child should be checked by an adult to make sure they are fitted properly. Best way to check is pull up on the shoulders to make sure it doesn't slide up over youth's ears. If a PFD is too large or not properly tightened and a youth falls in, it can slip off over their head.

Paddle Fitting-The paddle should rest on your toe and come to around your armpit, or about chest height. Take care of your equipment and your equipment will take care of you! Please don't hit friends or dig your paddle into the ground.

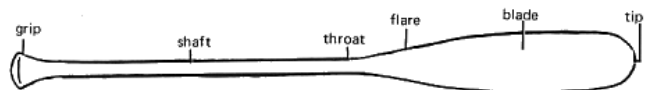
Activities:

5. Paddle Instruction: Skills Foundation

As Instructors it is important to remember; “learning to paddle is a life-long endeavor that must be student driven. We can provide learners with a good start and send them on their way.” The more the students can practice here, with your adjustments, the better the experience on the water is going to be for everyone. It is much easier to correct/aid the students when they are all on the beach than when they are all in boats all over the place and may be getting frustrated!

a. Paddle Parts

Parts of the paddle- Grip, shaft, throat, blade and tip.



b. How to Hold it

Have students spread out on the beach all facing you. Demonstrate how to properly hold a paddle with the top hand over the grip, and the lower hand near the throat with the palm in towards the body. Hands should be about shoulder width apart. The top hand is the “control hand.” Tips to help them hold it is to pretend to “give it a high-5 and curl your fingers over” or “hang from it” with one hand on the grip, the other near the throat. This sometimes is a fun way to familiarize them with hand placement, shoulder width distance apart.

c. 3 Parts of a Paddle Stroke

Make this a quick and fun demo of each stage of the stroke and demonstrate each dramatically. If you make each a distinct movement now, you can play Simon says with them later. Also-paddle from your belly button because torso rotation=using stronger muscles, which is more effective.

Catch Phase: The catch phase of a paddle stroke refers to the part of the stroke when the paddle enters the water. During the forward stroke, the catch phase means placing the paddle in the water as far forward alongside the canoe.

Power Phase: Refers to the main part of the stroke during which all the power is generated and the canoe is actually pulled through the water. Paddling past your hip when seated wastes energy, the power phase stops when paddle reaches your hip.

Recovery Phase: The end of the stroke when the paddle is removed from the water and the beginning of the setup for the next stroke- slice it forward and reach for the next catch.

d. Forward, backward and switch!

Demonstrate and have everyone practice basic forward strokes, switching sides. It is tricky for new paddlers to understand that switching sides means switching which hand is on the grip. Do the same teaching the backwards stroke- helps you to stop and reverse!

e. Steering

Ask them if they know where the paddlers sit? Back-Stern. Front-Bow. Roles: Front person is the engine, back is the steering wheel. One way to steer is for the back paddler to use a rudder, or a J stroke. A helpful reminder is “J my way” because whichever side they are paddling on, if they J, they will turn towards that side. Demonstrate that if they stick their paddle on the right side of the boat and J it will go to the right; if they stick their paddle in on the left side and J it will go to the left. This will only work, though, if they have a little speed going. Another way to steer is to switch which side you are paddling on. It is the Stern person’s job to make sure they switch sides, so as not to paddle on the same side as their partner (tippy canoes!). Here’s a great short way to demonstrate the concept of having partners paddle on opposite sides and in time with one another: “think of a bird.” Have them flap both wings like a bird flying. Then have them flap both wings on the same side, will that bird fly? No. How about if the wings are going at alternating times? Awkward. So remember to fly like a bird with your paddling partner! See appendices for additional tips and in the boat practice activities.

f. Optional Game: Simon Says with Canoe Skills

You can play this two ways- 1) you can have everyone stay where they are standing and play the traditional way. 2) you can pair or group them now and have them stand in 2 or 3s and pretend they are in the canoe and practice how to actually paddle and steer! You can alter these below by specifying “on the right” or “on my right” to keep them on their toes.

Simon Says Movements:

“Hang from your paddle” (hold paddle over head demonstrating proper grip, hands shoulder width apart)
Catch (reach and stick the paddle in the water far from center of the boat)

Power/Power Face (pull through the “putty,” be dramatic)

Recover/Slice (Slice the air)

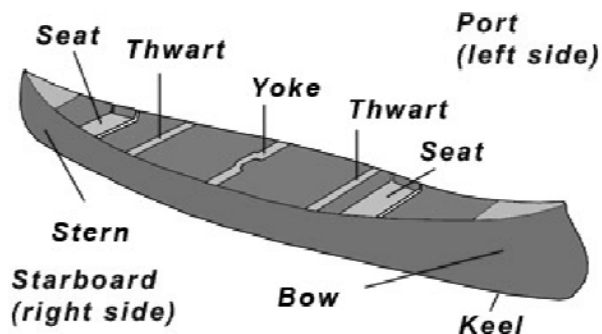
Turn Right (can J or rudder on right side)

Turn Left (can J or rudder on left side)
Switch Sides!

6. Canoe Intro

a. Parts of the Boat

Next, have the students walk down to where the canoes are, where you might want to have one down already to demonstrate. This can be a great time to give some of the background info on canoes- reiterating that the basic design has changed very little over thousands of years, even if the materials to make canoes has varied widely. Point out the different parts of the canoe including the bow (front), stern (back), gunwales (sides - pronounced “gunnels”), thwarts (metal/wood pieces that connect the two sides of the canoe).



b. Demonstrate Canoe Entry & Exit

Explain that when most people fall into the water is when they are entering and exiting the canoe. First, the canoe should be more than two-thirds in the water. Next, have one paddler steady the canoe by sitting on the end of it with both legs straddling the boat while the next paddler enters the boat. While walking into the canoe you should keep your center of gravity low and hang onto the gunwales as they walk towards the back seat “3 points of contact” means two hands and one foot at least. This technique should also be used as they exit the boat. The first person to shore should get there and Butt UP! This means 3 points of contact, butt up and then step out of the canoe. It does not mean, while sitting, stick one leg over the side onto shore and then stand up-doing this greatly increases chance of tipping the boat in only inches of water. The first person to shore then drags their end of the boat out of water and then sits on the end of the boat while the other paddlers exit the canoe.

c. Reiterate Safety and role of Adults (Review)

Once again, a quick reminder that safety is key, and you will need everyone (ADULTS!) to work together to maximize fun-time. Stress the point that no one should ever be standing up in the canoe while out on the water. Now is the time to make sure a “Lead” canoe with adult has a walkie if you are going on a paddle to the island/North shore. Make sure to check in with the group’s adults about their expectations for canoeing. Most groups anticipate paddling around Beaver Island; inform them that more attention will be devoted to skills

practice and paddling to Beaver Island or Beaver Beach will only be attempted if appropriate paddling ability is demonstrated.

7. Pair or Group participants and Launch Canoes! Pairing can be a socially painful experience, this may be a great time for you to determine how this goes by pairing students- experienced students in back, and able adults in back (especially for younger kids). Count how many canoes you will need and unload the canoes off the canoe racks and line them up along the water's edge. No one should be in the canoes while on land. If you have three people in any canoe, it is best to have the duffer (person sitting in the middle) not paddling- but they can bring their paddle if they want to switch sometime during the paddle. Switching will happen depending on how you are running the "in the boat time." If you are not planning on switching, make sure you are up front about it, otherwise kids may try to randomly land along shore and switch-and we don't want that to happen because entering and exiting is the most likely time for a boat to tip.

Make sure that when you send the first canoes out into the water, to instruct them to stay in the immediate area until you, in the life guard canoe, are on the water and give them further instructions. Don't forget to grab a lifeguard tube, whistle, throw rope (and wool blanket if temperature is below 60F) for the lifeguard canoe.

7. On the Water Activities: Practice and Explore
Warm Ups and Paddling Practice:
Spend ample time with your group practicing paddle strokes in front of the canoe beach or in the quiet backwater area below the circle compass course. Confine them to a defined practice area so you can paddle between canoes giving advice and helping with paddle strokes. Have everyone try to do certain maneuvers, or, with those who are more advanced, do races (down to you and back, go in a complete circle, zig and zag 3x, etc). Make sure all paddlers have appropriate skills if you plan to paddle up or down river and account for all skill levels- the fast/functioning canoes and the slow/struggling canoes.
See Appendix B for "Optional Basic Concepts/Review Activities."

Expedition Paddling!

If time and their paddling ability allows proceed up the river and around Beaver Island. If going swimming on Beaver or North Shore beach, youth need to wear PFD's and the lifeguard needs to set boundaries of where they can swim. Explain to the students that there will be a lead canoe. Make sure there is an adult in this canoe and is in a red or blue canoe. The students should never be in front of this canoe. Give the adult in this boat a radio. It is important to tell this adult that they should be able to

see the lifeguard canoe at all times...they forget this often! The lifeguard boat will be the last canoe.

8. Return (Whistle) and Clean Up
Depending on overall length of the class and how quickly you think the group will be able to put equipment away, you will want to blow the whistle with at least 15minutes left. It will take a while for youth to maneuver back to shore, and you may have to tow some boats back. Have participants carefully exit canoes, the same way they entered (3 points of contact, hold on to the gunnels, have a friend brace the front of the canoe, exit front to back.) Station yourself on shore to help people exit, accounting to make sure all have returned. Then station self at boathouse to receive equipment. Upon returning, make sure that all the canoes are locked back up, paddles are stored correctly and arranged by color, PFD's are buckled and hung up in the boathouse.

Conclusion:

Wrap Up: Summarize, Processing, Take Lessons Home (Teamwork, Canoeing, Water Safety!)

Though you may be crunched for time, it is very important to do a wrap up even if it is short. Some possible processing questions:

What went well working with your paddling partner?

What was challenging? How did you work together?

What were you able to observe from the river that you may not have seen if you were on land? Why might observing nature be easier from a canoe vs. other forms of water transportation?

What are some advantages of learning non-motorized transportation?

You may also want to ask about canoe skills: Which stroke was more challenging? Did you feel better on one side or the other? What were some parts of the canoe you can remember?

Or water safety: What is the most important piece of equipment you can have around water? PFD! What about a buddy?

Summarize their responses in a fun way! Finally- relate this to their daily lives! How can you be safe in your town near water? Who can think of water they would like to paddle near their home? Raise your hand if you are happy someone put this special area aside so we could paddle it- conservation! Be creative, just be sure to package the lessons in a way they can take the message home! Have them all high five each other for working on communication, canoe skills and nature observation. Or have everyone turn to their neighbor and give them a compliment about what they did in class today.

Appendix A:

Optional Paddle Tips:

- Introduce the idea of the power face/ non-power face. The power face (blade perpendicular to the canoe) of the paddle applies pressure to the

water during a stroke, the non-power face does not (sideways blade). Show them the blade will move more water. Or-if it's windy, to move less air you can slice it through the air forward on the recovery. Don't slice the water- you won't go very fast!

- When doing a propelling (versus steering stroke) the paddle shaft should be vertical-they will tire less rapidly.

Appendix B:

In the Boat Basic Concepts Practice Activities:

Review the idea of the power face/ non-power face.

The power face of the paddle applies pressure to the water during a stroke, the non-power face does not.

Example 1: For the concepts of power face, non-power face, and slicing the blade, you can assign simple problem solving tasks:

- Find a way to apply paddle to water so as to cause the boat to move.
- Find a way to move the paddle through the water without causing the boat to move.

The first one is almost too obvious, but it does underscore instructor commentary regarding power face, non-power face, and action/reaction, plus it sets up discovery of the important concept of slicing the paddle.

Partners Paddle on Opposite Sides and in Time With One Another: Birds

Example 2: The instructor can merely tell students to paddle on opposite sides and in time with one another, but personal experience and discovery can make a more powerful statement:

- Both paddlers paddle on the same side and in time.
- Paddle on opposite sides but not in time.
- Paddle on opposite sides and in time.

This is followed by brief observations and discussion by the paddlers. Opposite and in time should provide a stable, solid paddling platform. All others should produce a wobbly, unstable platform that interferes with efficient power generation.

Resources:

American Canoe Association Webpage on Canoe Curriculums: 2014
https://aca.site-ym.com/?page=Courses_Canoeing

Canoe Network: All About Canoes: May 2006
www.canoe.ca/AllAboutCanoes/

Dictionary of Wisconsin History, Wisconsin Historical Society. <http://www.wisconsinhistory.org/>

Heit, Bryan. Image for parts of canoe. 2004
<http://www.wildlifesouth.com/Featured/2009/Images-Canoe-Joe/Parts-of-a-canoe.jpg>

Parts of Canoe Paddle, "WebRing:" 2014
http://webpace.webring.com/people/gk/k_o_dionysus/outdoors/canoe/paddle.gif

Sayour, George "About.com" 2014.
http://paddling.about.com/od/technique/a/Paddle_Stroke.htm

Schwartz, Ralphie "Using Guided Problem Solving in Teaching Canoeing Strokes"
2003. <http://academics.northland.edu/outdoor-ed/files/2009/06/usingguidedproblemsolvcanoe.pdf>