Kids Don't Float
Lesson Plan: Lesson One

Goal: To teach kids how to be safe while recreating on and around the water. This lesson is designed to teach children the proper way to choose and fit a life jacket and how to survive a cold water immersion on an age appropriate level.

Objectives: Students will be able to:

1. State the first three stages of cold water immersion and why wearing a life jacket is helpful during each stage
2. Explain survival techniques of each stage
3. Properly fit a life jacket
4. Choose the appropriate type of life jacket for the desired activity
5. Choose a serviceable life jacket

Standards Used:

Alaska State Standard-

Standard 1: Demonstrate competency in motor skills and movement skills needed to perform a variety of physical activities.

Standard 2: Apply movement concepts to the learning and performance of physical activities.

Standard 3: Participate regularly in physical activity.

Standard 4: Apply fitness concepts to achieve and maintain a health-enhancing level of personal fitness.

Standard 5: Exhibit personal and social behavior that respects self and others in physical activity settings.

Standard 6: Value physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

National Standard-

Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.
Standard 2: Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
Standard 3: Students will demonstrate the ability to access valid information, products, and services to enhance health.
Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.
Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
Standard 8: Students will demonstrate the ability to advocate for personal, family, and community health.

Time Required: 45 minutes (one class period)

Materials Needed:

- Presentation
  - Prezi located on the internet, search "*Kids Don't Float* Prezi"
  - 1 *Kids Don't Float* teaching kit, check out from Resources
  - *Kids Don't Float* lesson one quiz- www.AlaskaBoatingSafety.org
  - Kids Don't Float evaluation- online www.AlaskaBoatingSafety.org
- Chill Out Activity
  - 1 five gallon bucket or a clean container
  - 1 bag of ice or enough ice to fill the container
  - Hand towel or paper towels for students to dry their hands

Introduction:

A. How do you play on or around the water? (*Fishing, swimming, boating, paddling, tubing, etc.*) Outdoor activities are a great way to stay active, and a great way to participate regularly in physical activity.
B. You can achieve and maintain a health-enhancing level of physical fitness, by boating swimming, paddling and tubing on Alaska's waters.
C. The drowning rate for children and teenagers in Alaska is almost 2 ½ times the national average. (This includes both boating and non-boating fatalities.)
D. Wearing a life jacket is the best way to remain safe around the water. As of January 29, 2013, twenty-four children have survived falling into the cold water thanks to a *Kids Don't Float* life jacket.

Body of Lesson:

A. Surviving a Cold Water Immersion
    a. Cold factors
        i. Individuals respond differently to cold water can be affected by
            1. Speed of immersion (Did you tip toe in or fall off the dock?) How fast you go into the water can affect your reaction to the cold water.
            2. Habituation (Do you swim in cold water frequently or are you visiting from somewhere such as Florida where you are used to warmer water?)
            3. Aerobic fitness (Are you strong and fit?) Participating regularly in physical activity will increase your chance of survival in cold water. Achieving and maintaining a health-enhancing level of physical fitness is important.
            4. Pre-existing medical conditions (Do you have medical concerns?)
            5. Body type (Are you a bigger person or a smaller person?)
            6. Protective clothing (Are you wearing a swimsuit, T-shirt, hoodie or big jacket?)
            7. Water conditions (Is it a calm lake, the ocean, choppy water or big waves?)
            8. Alcohol/drugs or medications (if consumed can keep the body from functioning properly and it cannot naturally respond)
    b. Three stages of cold water immersion
        i. Cold shock (gasping and hyperventilating) Within the first three to five minutes.
            1. Get breathing under control
            2. Get yourself calm and under control to conserve body heat and energy. Do things like counting down 5,4,3,2,1 and concentrate on taking deep slow breaths)
            3. Wearing a life jacket will help keep your head above the water and help keep your airway clear
        ii. Cold Incapacitation (arms and legs begin to lose sensation and functioning, you become numb and your muscles do not work as well, cramping) Within the first ten minutes.
            1. Tighten life jacket since it may fit differently when your clothes are wet
            2. Make a plan. For example, try to self-rescue by climbing a boat ladder, grabbing a rope, pulling yourself out of the water, or swimming to safety

3. Prioritize and perform the most important functions first. For example, call for help. Use a communication device (cell phone, satellite phone, VHF marine radio, or deploy an Emergency Locator Beacon), or attract attention by using distress signaling devices when rescuers are near (mirror, whistle, flares)

iii. Immersion Hypothermia (body temperature begins to drop) After about thirty minutes.

1. The definition of hypothermia
    a. When your core body temperature drops
    b. How fast your body cools depends on factors such as; your fitness, health conditions, what you ate, clothing you are wearing, habituation etc.
2. What to do
    a. Keep movements to a minimum
    b. If swimming is not an option, get into a Heat Escape Lessening Position (HELP) or huddle position to help conserve body heat and energy. Elders, children and injured go in the middle of the huddle.
    c. Be prepared to activate distress signals when potential rescuers are in range.
    d. STAY POSITIVE, your mental state is very critical, so tell jokes, talk to each other, fully convince each other you will survive.

c. 1-10-1 Principle (Remember this is a general guideline. Times vary for each individual.)
    i. 1 minute - get breathing under control - because of gasping during Cold Shock stage.
    ii. 10 minutes (or more) - for meaningful activity - because your fingers will become numb and will not work very well, perform meaningful activity right away- Cold Incapacitation stage.
    iii. 1 hour (or more)- before loss of useful consciousness- because your core temperature will slowly drop. Concentrate on staying warm, slowing heat loss by getting into the HELP position or the huddle position if more than one person is in the water, and staying positive is essential. Even if you become unconscious you can still experience a full recovery. Immersion Hypothermia stage.
d. Cold water immersion does not have to be scary if you know what to do, so stay positive and remember 1-10-1.

Class Activity: Chill out!
WARNING: Some people have a certain health risk to this activity; ask students if anyone has a cold related health condition prior to start. Please do not make this a mandatory activity or control how long hands are kept in the cold water. Monitor length of time in the water and excuse students who demonstrate discomfort.

Objective: 1: State the first three stages of cold water immersion
2: Explain survival techniques of each stage

Purpose: To demonstrate the physical effects of cold water on our bodies, loss of fine motor skills, and numbness in fingers.

Materials: Five gallon bucket (or clean container), two life jackets, a bag of ice, and a towel for clean up.

Procedure: Put ice in bucket and fill ¾ full with cold water. Have the students put their hands in the ice water. Then have them put on the life jacket and fasten the buckles. 2-3 students can do this activity at a time.

*An alternative for large groups may be selecting two students as demonstrators. One student will put his or her hands into the cold water while the other student's hands stay warm and dry. Then have both students put on a life jacket and fasten all the buckles. Does having cold hands seem to make it more difficult to quickly put on a life jacket?

Discussion points: What is the first reaction when your arm enters the water? (Cold shock) Maybe not as pronounced because it is just your arm, but what would it be like if it was your whole body? Gasp reflex occurs, counting backwards from five helps get breathing under control. How does it feel after a few seconds of being in the water?

Was it easy or difficult to buckle your life jacket with cold fingers? Are your fingers numb? Would it be difficult to buckle buckles, zip zippers, or pull straps on life jacket when in cold water? During the second stage of cold water immersion, when swim failure occurs, blood flow is restricted as blood vessels constrict causing loss of feeling and dexterity.

That is why wearing a life jacket BEFORE an accident is the best insurance of survival. This is why within the first 10 minutes prioritize and perform the most important functions first such as dialing a cell phone, using a radio, using a whistle to get someone's attention or, grabbing onto a rope or object for self rescue before use of your hands is minimized.

B. Alaska Life Jacket Law
    a. All children under the age of 13 **are required to wear** a U.S. Coast Guard approved life jacket when in an open boat or on the deck of a boat.
    b. Everyone when on board an open boat or open deck, even excellent swimmers and experienced boaters, *SHOULD* wear life jackets.
    c. Even on docks or near open water, everyone should wear a life jacket.

Class Activity: Life Jacket Fashion Show

Objective:
1. Properly fit a life jacket
2. Choose the appropriate type of life jacket for the desired activity
3. Understand that not all life jackets are created equally ex. Intended use is different among life jackets. It is important to read the label.

Purpose: This activity showcases different types of life jackets, how they are worn, special features, and different scenarios/use. Prompts discussion that not all life jackets are created equal, and when students understand the different features, they can make an informed decision about the best life jacket for the situation.

Materials needed: Various styles of off-shore and near-shore life jackets.

Procedure: Choose "life jacket models" to wear life jackets, and if possible, have more than one student wear each type. If time allows, have one student be the host/hostess who will read the following information about each life jacket (or you be the host/hostess). One type at a time is called down the "runway" while you discuss the uses/features of each life jacket and ask the class which one they prefer.

C. Choosing and Using Life Jackets
    a. How to choose a life jacket
        i. Off-Shore Life Jacket (Type I)
            1. U.S. Coast Guard approved for off-shore use
            2. Turns unconscious wearers face-up in water
            3. Best use- everywhere, especially rough, open or remote waters
            4. Not appropriate for impact activities (personal watercraft, tow sports i.e. tubing or water skiing)
            5. Bright orange color: highly visible with reflective tape
            6. Has the most flotation material which means it floats the wearer highest in the water
        ii. Near- Shore Life Jacket (Type II)

1. U.S. Coast Guard approved for near-shore use
2. Turns some unconscious wearers face-up in water
3. Intended for inland waters, calm, and areas where there is a good chance of quick rescue
4. Bright orange or other colors
5. Not appropriate for impact activities (personal watercraft, tow sports i.e. tubing or water skiing)

iii. Multi-Use Life Jackets, Vests, Float Coats (Type III)

1. U.S. Coast Guard approved for use in calm, inland waters or areas of quick rescue
2. Not designed to turn a wearer face-up in water
3. Read the label for specific instructions and approval for different types of use
4. Some styles not designed for impact activities
5. Wide range of sizes and colors available

iv. Immersion (Survival) Suits

1. Survival suits are not U.S. Coast Guard approved life jackets but may be a useful aid during a delayed on-set emergency situation.

b. How to inspect and fit a life jacket "The best life jacket is the one you wear."

i. Reading

1. Read the label on the life jacket and make sure it is U.S. Coast guard approved, the proper size for the intended user and worn for the appropriate activity.

ii. Checking

1. Life jackets must be in "serviceable condition"
2. Make sure there are no rips or holes, flotation material is not squished or showing
3. Check that straps, buckles, and zippers all work

iii. Fitting

1. Fasten all straps, buckles, and zippers
2. Adjust for a snug, comfortable fit

iv. Wearing

1. Wear life jacket for its intended use- is it approved for waterskiing, tubing, personal watercraft (example: jet ski) etc.?
2. Is it intended for off-shore or near-shore use?

c. Pledge To Live Card (found in the supplemental kit available upon request from Office of Boating Safety 907-269-6042)

i. Take the Pledge To Live card home and ask your loved ones to promise to always wear a life jacket when in an open boat or on deck.
ii. Wearing a life jacket is the best defense against cold water immersion.
iii. WEAR IT ALASKA

Additional Class Activity (if time allows): Life Jacket Relay Race

Objectives: Properly fit a life jacket.

Purpose: For students to experience difficulty of putting on a life jacket in a hurry. Wearing a life jacket before an emergency arises ensures a greater chance of survival.

Materials: Two life jackets and space for the race.

Procedure: Divide the students into two equal teams. Have them form two lines. Place a life jacket at the feet of the first person in each line. At the signal to go, the first person in each line will pick up the life jacket, put it on properly, run to the designated place, return to the starting point, remove the life jacket, and give it to the next person in line. The race is over when the first team to have each person complete the exercise is finished.

Discussion Points: How difficult is it to put on a life jacket when you are in a hurry? It is always best to have the life jacket on to start with than having to put it on in an emergency, especially if the life jacket is stored. Remember, Alaska Law requires children under the age of thirteen to wear a U.S. Coast Guard approved life jacket when in an open boat or on the deck of a boat.