



Lake Instructor

Resource and Background Manual

March 19, 2017

Charles Burchill

This document provides some supporting information for instructing courses based on the requirements outlined in the Paddle Canada Lake Canoe Manual (6th edition 2013). Some material was updated in February 2015 based on the Paddle Canada website. This document should not be used alone but in conjunction with the associated Lake or Style canoeing reference material, Paddle Canada resource material, program manuals, stroke resource manual and other supporting documentation.

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Editors:

Charles Burchill

I learned how to hold a paddle at a young age while visiting my grandparents' cabin in the woods of Meadow Lake provincial park, Saskatchewan. Although I do not remember when I first paddled a canoe my passion was well developed as young teenager when I spent most of my small income from papers and camp honoraria on a paddle, PFD, and canoe.

My first formal canoe training happened at YMCA Camp Stephens as a camper and counselor. I went through the early CRCA (Canadian Recreational Canoeing Association) paddling program in the mid-1970s. I taught canoeing and wilderness awareness for a City of Winnipeg camp in the late 1970s and early 80s. I received my Red Cross Small Craft Safety instructor certification in 1982. In 1999 I received my CRCA Flatwater instructor certification, and Lake Water instructor in 2008. I was involved with the development of the Paddle Canada "Style" Canoeing program in 2010/11.



A handwritten signature in blue ink that reads "Charles Burchill".

Eric Gyselman

My history with canoeing is typical of my generation: family cottage, fleet of boats, vintage canoe. The canoe was the craft of choice for evening fishing and poking around the backwaters and streams. Over time, I realized that I was passionate about these simple craft. It just kind of snuck up on me.

I had no formal canoeing instruction. My paddling was strictly learned from experience: "I'm still dry and going in the right direction; I must be doing something right". That all changed when I joined Paddle Manitoba. Cam White was President at the time and Director of Paddle Camp. "You should come out and try for your Instructor's Certification" was how he started. Early hesitation on my part quickly gave way to Cam's persuasive nature and in May 2007, I found myself on the dock at Pioneer Camp. Well, as it turned out, I did get my Instructor level that year. With newfound enthusiasm, I began to teach and I took some other courses in Advanced Canoe Tripping and Moving Water, followed by two years of Mentoring at Canoe School to get my Instructor Trainers certification. That brings me to this year's Canoe School and another class of candidates who, like I was, may be more than a little apprehensive. But relax, you will learn a lot and you will have a tired smile on your face by the end of the weekend, no matter how it turns out.



Chris Milne

Chris' first love was hiking and backpacking (don't hold that against him) in central Ontario and in other places around North America. However he fell in love with the canoe in his mid-twenties and has pursued this means of exploring the wilderness ever since. Chris believes that "the canoe holds in perfect tension, beauty and functionality". Chris is an Instructor Trainer in Advanced and Solo Lake Canoe with Paddle Canada and has been instructing since 2005. He has worked for Pioneer Camp for the past 8 years.

Jeremiah Heinrichs

Jeremiah was born in a canoe. He also happens to be a long standing Canoe School veteran. He was first certified as a Paddle Canada Instructor in 2005 and has been active in the Manitoba paddling community ever since. Jeremiah has been an Instructor at Canoe School for the past 7 years. He is now an instructor Trainer in Advanced Tandem and Solo Lake Canoe and Style Canoeing with Paddle Canada. Jeremiah's passion for paddling (particularly solo) has been contagious in the Pioneer Camp community for years.



Introduction

This manual was developed to provide background and supporting material for instructor candidates interested in teaching canoeing and associated skills. It includes information on being an instructor, what that might mean, and associated responsibilities. Teaching and learning theory is covered along with the development of lesson plans, how to identify outcomes, engage your students, assess and provide feedback. The original manual was created for use at Canoe School, a long standing canoe instructor training program held at Manitoba Pioneer Camp. The manual should not be read as a novel but used as a resource or reference for teaching skills. Look through the table of contents for what you need and peruse that section. Some information is duplicated in part, or whole, in various parts of this document – this was intentional where material was appropriate for more than one section.

There is a limited amount of canoe and paddling specific information presented in this manual, the material is more about the teaching process, preparing to teach, and methods to assess and provide feedback. The manual should be used in combination with other resources that provide more information on specific courses and the associated skills along with identified outcomes (e.g. Paddle Canada Lake Canoe Manual, Style Resource Manual).

To get the ball rolling – what is Teaching? To teach is to pass on knowledge and wisdom to another person or group through demonstration, storytelling, guidance, or example. The process for sharing or imparting knowledge may be informal, as between friends, or formal using a structured method and setting. To actually teach something to someone there also needs to be a learner to receive and take in information and knowledge. A learner (student, pupil, friend, or participant) is someone who takes the information you have given to build on their own knowledge and then continue the process on their own.

The combination of Teacher & Learner unfortunately suggests that teaching and learning is a one-way street – the teacher teaches and learner learns. If you approach your life as an instructor from this perspective the educational outcome will most likely be unsatisfactory. When building an educational relationship remember it is possible for teaching and learning to happen in both directions. Always try to engage your students in the learning process, something as simple as asking leading questions or as complex as experimentation/trial and error.

'Teaching is listening, learning is talking' - Deborah Meier

An instructor is anyone who wants to pass on their knowledge (teach) to others in a more formalized structure. Being an instructor does not need to be difficult but it does take practice and preparation. As a canoe instructor you have a special role in the educational realm; you get to teach outdoors. Outdoor education is a special privilege that comes with some special responsibilities with regard to supervision and risk.

There are some very significant responsibilities that an instructor must consider and be willing to accept when teaching an outdoor course. Along with knowledge of the actual

skills and material, you are taking responsibility for the safety and enjoyment of the participants. Take the time to prepare course and lesson material ahead of time and ensure that there is an appropriate and achievable progression for your students to follow. You are representing a national organization and your opinions and actions must also reflect those of Paddle Canada. As an instructor you have agreed to become a leader and mentor in the paddling community; you will be judged not only on your teaching skills but by your actions as well. If you have done your job well students (learners) will continue to expand and enhance their own knowledge in the future – you can influence their whole life. Be prepared to provide feedback that is honest and clear; giving good feedback can be one of the most rewarding and most difficult tasks of an instructor. Present a positive and professional image of yourself and the program.

Instructor Responsibilities

- Be prepared and organized, have a lesson plan
- Know your students/participants – their limits, knowledge, and experience
- Communicate expectations and requirements
- Be on time
- Have the right equipment in good order
- Know your site – provide an appropriate and safe environment
- Be knowledgeable about your topic
- Be able to demonstrate necessary skills
- Have a risk management plan

‘You can teach a student a lesson for a day; but if you can teach him to learn by creating curiosity, he will continue the learning process as long as he lives.’ ~Clay P. Bedford

At the end of a long difficult day you might wonder why you ever wanted to become an instructor. There is a lot of work involved, often with only limited recognition of the time and skills required. It is helpful to reflect back on what it means to be an instructor and what you give your students after every course. There is a huge emotional and spiritual payback to leading and being part of the development of someone’s life. I have had students come and find me many years after taking a course and tell me how much the experience meant to them. If this only happens once it is worth all of the effort. Through the process of preparing and teaching a course your skills and understanding of the topic will also be broadened immensely. These are very non-tangible benefits - as a Paddle Canada instructor there are some very direct and specific benefits as well.

Paddle Canada Instructor Benefits

- National Program Accreditation and association with National Certification Organization
- Insurance coverage for sanctioned courses
- Instructor Support Program: National First Aid Discounts with Wilderness Medical Associates, Sirius Wilderness Medicine, and the Canadian Red Cross
- Pro-Deal Purchase Programs from Northwater, Outdoor Research, Keen, Level Six, and more
- Use of Paddle Canada logo in advertisements.

To become an instructor you need to start with the willingness to learn the skills and then understand how to pass those skills onto others.

Instructor and Learner

Both instructors and students come to each course with their own styles, skills and knowledge. As an instructor you should recognize this fact and be willing to adjust to both your students and conditions throughout the course. Understanding the combination

of both instructor and learner will help make the course both successful and more enjoyable.

Your role is to provide information, teach skills, and impart knowledge in a way that is meaningful and useful to the participants of the course. You have a responsibility to ensure that you are prepared and the environment is conducive to student learning and safety. By being a positive role model your energy and enthusiasm will help keep your students engaged and attentive during your lessons.

To be an effective instructor you will need to have the necessary canoeing knowledge and skills as well as a good feeling for the methods of teaching and an understanding of how your students learn.

You will be on ‘stage’ during the course. This means that you should take care of yourself with plenty of rest, and be well nourished (this seems trite to say but it is amazing how many instructors arrive at a course physically unprepared). Present an appropriate image through your dress and actions. Spend time before your course to ensure that all of your materials are in order and reflect on any strengths or weaknesses in your own skills and knowledge; identify any places you may need some additional support. This does not mean you must ‘tell’ your students everything – approach your courses with an attitude of directed discovery, have your student tell you what they know (or think).

As teacher you must

- Convey ideas clearly and meaningfully
- Observe and understand how your students respond both as individuals and as a group
- Be motivating and enthusiastic
- Manage behaviour and direct activities in an appropriate direction
- Be approachable and friendly
- Organize and present material in a useful and helpful progression
- Present material and ideas in a variety of ways, and be flexible enough to change between methods when necessary
- Show empathy towards others and understand their needs

As a nationally certified instructor with Paddle Canada, you will hold influence over the participants involved in your courses. You will be viewed as an “authority” in the paddling world and you should be aware that your words and actions will shape the future of paddling in your local area and potentially across Canada (this may sound grandiose but the small details you discover may lead the way on the national stage – e.g. writing responses to ‘Ask a Pro’ in the Paddle Canada newsletters). You are a leader and as such you should also pursue growth in your leadership skills and habits.

It may be easy to play the role of instructor during your course; however, your participants may be watching you even outside the class and your conduct may influence the way that they act as future instructors. It is important to role model appropriate behaviour through social, verbal, visual, and ethical actions.

Good instructors are not just people who effectively communicate the ins and outs of canoeing, but they are people who inspire a love for paddling among the people that they interact with. Be aware of the influence you have!

Your students, as learners, bring their own unique background, knowledge and feelings to each course. They will have expectations and fears and may, or may not, be willing to engage at one level or another. Start building a rapport with your students immediately by learning their names and find out about their existing knowledge and expectations – why are they at the course. You should also review any relevant information provided on registration or medical forms completed for the course. Be cognizant of any fears or concerns that your students have and try to address them in a realistic and empathetic manner, but don't unnecessarily draw attention to those feelings within the whole group.

Use the students background and interests to help direct and modify your lesson plans to draw the student in to the material and help motivate them to learn and participate. Ask your students [leading] questions and have them work out the answers. Working in the outdoor arena with diverse student needs and interests often means making adjustments to your lesson plan as conditions change. Keeping an open mind and having a variety of teaching strategies will help both you and your students.

Paddle Canada has provided a set of standards with regard to working with students and the physical environment. As an instructor you have a responsibility to review these standards and follow them during Paddle Canada sanctioned courses. If you are teaching as an employee or volunteer with another organization you are responsible for finding out and following the appropriate policies and procedures associated with that organization as well.

The Paddle Canada Standards of Conduct are available from the Paddle Canada Website: <http://www.paddlingcanada.com/resources-and-policies/972-standards-of-conduct-for-paddle-canada-instructors.html>

Location Knowledge

You will be teaching your course at an outdoor location where there may be uncontrollable conditions. You have a responsibility to understand and anticipate the environment and how conditions may change the learning experience.

Start off by doing a site evaluation before your course starts so you understand where to find any necessary equipment or facilities. It is amazing how quickly a program can fall apart if you (or your students) can't find a bathroom. Check for any safety concerns and organize, or think about, any modifications that will be required. If the course will be of

Horse Riding

A number of years ago I met a young man that had never been in a boat – water was actually something that you drank but swimming or boating was frightening and foreign. He was out with some friends to see what this boating stuff was all about. He was sitting bolt upright on the bottom of the canoe holding onto the gunwales with white knuckles - his head was swaying back and forth with every motion of the boat.

I wondered how to get him more connected with the boat and adjust to the movement. I asked if he was familiar with riding a horse; 'of course' was his response, but more usually camels. I asked how he rode on a 'camel' - if he moved with the animal feeling the sway and motion underneath, not fighting against it. I suggested he try to apply the same feeling to riding in the canoe, kneeling, leaning against the seat and letting the canoe rock and move underneath him. It turns out that was all he needed, some advice, a little humour, and understanding.

a longer duration ensure that there is an appropriate place to eat, get water, and take breaks (out of the elements).

Instructor Requirements

To become an instructor with Paddle Canada you must meet a number of requirements. Once having achieved a particular instructor level you must work maintaining that level through teaching, professional development, or re-certification activities. Requirements may be updated periodically, always refer to the Paddle Canada website for current information.

Initial Certification

Instructor

The initial certification for any level is obtained through taking an instructor level course. The following is a summary of the requirements found in the Paddle Canada Lake Canoeing program for instructor candidates.

- **Minimum Age:** To be certified to teach Paddle Canada Lake courses you must be at least 16 years of age for all Introduction and Intermediate levels and 18 or older for Advanced certification.
- **Skill level:** You must be paddling with skills represented at the next higher level in the program and be able to comfortably demonstrate the skills within the program you will be teaching.
- **Instructor Training:** You must successfully complete the appropriate skills level instructor course. Skills and knowledge appropriate to the next higher level than will be assessed during the instructor course.
- **First Aid Training:** You must have at least basic (16 hour) first aid training with CPR. If you are leading a wilderness trip or you are away from EMS access then Wilderness First Aid training is required.
- **Swimming/water safety:** Swimming or water safety certification is strongly recommended.
- **Teaching:** At higher levels (Intermediate/Advanced) you must have taught at least two of the lower level courses.

If you have already taken an instructors course in one stream then the corresponding instructor level in another related stream may be granted once the necessary skills level course has been completed (e.g. an instructor with a Tandem Lake Instructor certification can apply to Paddle Canada to be certified as a Solo Lake Instructor once they have completed the Intermediate Solo Lake skills course).

Instructor Trainer

You may apply to become an instructor trainer (teach instructor courses) by having the appropriate level instructor certification, running two or more courses at the identified level, apprenticed/mentored on at least two instructor trainer courses at the identified level, and have a recommendation from the course instructor where you apprenticed.

Apprenticeship (mentorship) on courses means that you (the instructor trainer applicant) must teach at least 50% of the time during the course. As part of the apprenticeship you must be monitored and assessed by the instructor trainer on the course.

You can find the necessary forms for applying to be an instructor trainer on the Paddle Canada website under the Canoeing course material.

Maintaining Certification

As an instructor you are expected to keep current and maintain your skills in each of your instruction disciplines. This means that you are expected to teach courses, attend clinics, and follow the literature. The following is a brief summary of the requirements to maintain instructor or instructor trainer certification. You should refer to the current Paddle Canada documentation to ensure you are following the current process (<http://www.paddlingcanada.com/resources-and-policies/1282-instructor-certification-maintenance-policy.html>)

To maintain certification you must:

Annually:

- Maintain annual membership in Paddle Canada and the provincial/territorial affiliate association where one exists.
- At the beginning of the second year as a Paddle Canada instructor member, successfully complete the new-instructor online educational module. The module is designed to reinforce teaching concepts and course administration tasks, and to correct typical skill errors. It involves reading assigned articles and/or watching videos, and completing the online test. There is no charge for this module.

Within a four year period, you must actively:

- Teach or assist on one Paddle Canada course at their highest level of certification. Paddle Canada reserves the right to adjust the instructor's certification level to the highest level taught during that certification period.
- Complete one or more of the professional development options below:
 - Option 1: Successfully complete an appropriate Paddle Canada certification maintenance clinic. Items generally covered in a clinic include program changes, evolution of best practices, new teaching techniques, administration and a review of the standards for each skill level.
 - Option 2: Successfully complete an appropriate online certification maintenance module. It involves reading assigned articles and/or watching videos (concerning teaching theory or a new rescue technique, for example) and completing the online test.
 - Option 3: Attend an appropriate Paddle Canada-recognized symposium or paddling event, as confirmed by an IT also in attendance at the event.
 - Option 4: Successfully complete any other Paddle Canada instructor course.
 - Option 5: Successfully complete an individualized set of requirements set and evaluated by an appropriate instructor-trainer (IT). The requirements must test paddling skills, teaching skills and current best practices. It could include written or practical tests, video submissions and in-person evaluations. The IT is responsible to register the requirements with Paddle Canada and report the results.

Provided the annual requirements continue to be met, the certification period of four years is automatically renewed whenever the instructor successfully completes a higher-level instructor course in the applicable stream linked by prerequisites, or whenever all of the above certification renewal requirements are achieved. Renewing an IT certification automatically renews the related instructor certifications.

Lapsed Instructor Certification

- Instructors who do not maintain the annual requirements will automatically have their instructor certification status changed to lapsed.
- To regain active certification, the lapsed instructor who is in their first year of default must complete the annual requirements. The lapsed instructor who has defaulted longer than one year must complete the annual requirements and pay the lapsed-instructor surcharge.

Inactive Instructor Certification

- Instructors who do not meet all of the Certification Renewal Requirements within the four year certification period will have their certification status changed to inactive.
- An inactive instructor must be a current instructor member of Paddle Canada before the reactivation process is started.
- To regain active certification, the inactive instructor must audit and be assessed on at least one full skills course taught by a qualified instructor-trainer. The reactivated certification will be at a level not higher than that of the registered course.
- An inactive instructor auditing a course must be listed on the course registration and course report but the inactive instructor does not count as part of the instructor to student ratio.
- After two years of holding an inactive certification, that is a total of six years since their previous certification or certification renewal, the instructor's certification status will be changed to retired.
- To regain active certification, the retired instructor must undertake the normal provisions of a complete instructor course or mentorship.

Paddle Canada Canoe Instructor and Instructor Trainer Progression Structure Chart (updated 2012)

The following can be for either a tandem or solo progression (not shown as combined) in Lake, Moving Water, and Style. Big Canoe starts at the Intermediate level. Coastal just has one Instructor Level. Poling under development.

	Intro Instructor	Intermediate Instructor	Advanced Instructor	Intro Instructor Trainer	Intermediate Instructor Trainer	Advanced Instructor Trainer
Prerequisites to be completed BEFORE the assessment process:						
Canoeing Basics	Intermediate skills certification	Advanced skills certification	Advanced skills certification	Taught a minimum of 2 Intro skill certification courses	Taught a minimum of 2 Intermediate skill certification courses	Taught a minimum of 2 Advanced skill certification courses
		Taught a minimum of 2 Intro skills courses	Taught a minimum of 2 Intermediate skills courses			
Number of courses to assist on DURING the assessment process:						
During any Instructor Course the IT may ask the Instructor Candidate or the Instructor Trainer candidate to assist with a skill(s) or instructor course(s) to demonstrate skills in lieu of a “conditional pass” or a “fail”. Number of assists will be determined by the Instructor Trainer.						
n/a	n/a	n/a	n/a	Assist on a minimum of 2 Intro Instructor Courses	Assist on a minimum of 1 Intermediate Instructor Courses	Assist on a minimum of 1 Advanced Instructor Courses

Lesson Plans and Course Development

Lesson plans and course outlines are a critical and important part of instructing any course. You may think that seasoned instructors only come to a course with an outline of the necessary skills and theory (if even that) but rest assured they started out with, and maintain, detailed lesson plans to ensure that all of the skills and requirements are met and there are clear objectives and learning criteria. Seasoned paddlers need lesson plans just as much as novice instructors – without a plan even seasoned paddlers will often skip important skills or progressions that they do unconsciously.

A course syllabus is the overall course content, direction, and the corresponding lessons that will be followed during the course. When developing a whole course some of the material may only be identified once (e.g. site description and overall risk assessment/management documentation). An overall course syllabus may represent a single lesson plan and take a short period of time or it may include many lessons and span a whole season or year. Along with a broad listing of the lessons you should identify the broad outcomes/goals of the course, how much time each task will take (to ensure you keep within your time requirements), and the expected progression of skills or theory – including how they build from one to the next.

A lesson plan is specific documentation of the skill or theory that you want to share with your students and how it will be taught and how you will engage the students. It includes a brief description of the actual material/skill that will be covered, the objective and outcome of the lesson, and how you will assess if the outcomes have been met. A lesson plan is created to ensure that you cover all of the relevant material in a logical and meaningful progression. In the plan you should allow for some alternatives and contingencies, for example if the weather is not conducive to an outdoor or on-water session. Lesson plans help focus and organize your thoughts and identify clear goals for both you and your students – identify the brass ring so to speak. Once a plan is created you will have a record for future use that can be modified based on feedback and reflection and pulled out for subsequent use – many instructors have a library of course outlines and lesson plans that they draw on regularly.

Lessons always have an introduction and conclusion, and they follow a pattern or predetermined flow; a natural progression. The lesson plan itself may also contain information that your students will never see (e.g. student information and risk assessment) but is critical to the formation and execution of the lesson itself. All of the components are important to consider. Portions of the lesson plan should be reviewed as you develop the course – treat the plan as a living document. An example would be adjusting the expectations once you have done a site review and risk analysis. Changing an expectation may then affect the overall lesson statement or objective.

Lesson Plan Components:

- Title
- Lesson Statement or Objective.
- Fit within course
- Expectations
- Assessment/evaluation, standards
- Audience – age, number, background
- Place/Location
- Materials and Equipment required
- Timeframe
- Pre-trip briefing, plans, notification
- Risk assessment
- Content or Teaching Plan - IDEAS/IES methods
- Reference material and handouts
- Summary & Follow-up
- Evaluation/reflection
 - o Student Evaluation,
 - o Self-Evaluation

When developing a whole course with multiple lesson plans try to keep an overall theme going to link the lessons together – just as in a single lesson follows a plan so should a whole course. Try to mix up teaching techniques where lessons allow – role-playing and storytelling for theory sessions are a great alternative to discussion/lecture methods.

Once you have a lesson plan created try it out! Go through the lesson with friends or family or even on your own; talk it through – this will help build confidence, check timelines and ensure that all of the materials are ready. Make sure you go through every piece of your lesson, skipping over parts because you ‘know it’ is cheating and those sections will inevitably be the parts that hang you out to dry.

Talking to Yourself

When first developing a skills session I often take my canoe down to the river and go through a whole lesson talking to myself to make sure material works together. Several times I have gained an audience standing on the shore or bridge – they started out wondering what I was doing and then were caught up in my practice lesson.

One of your peers or another instructor should be able to pick up and use the plan, understand the content, and be able to present the material with minimal input time – of course you would do a better job since you have done all of the homework and thought, it is your work. Taking the time to lay out a complete lesson, focusing on the content and methods, will pay off with big dividends. Make sure that your lesson plans are accurate and the content is correct and well researched.

The following list of components may seem overwhelming, long, and complicated. Once you have written and taught a number of courses you will find that you can rip through these points unconsciously, but when first starting you should be meticulous and complete. Some of the items may be relevant to the course as a whole so would only need to be done once.

Components of a lesson plan *(in a little more detail)*

1. **Title.** This may sound a little contrived but it is a great thing to do, it really focuses what you want to do and makes it easy to index or add to a table of contents in your book of lessons. Be concise and clear.
2. **Objectives.** This is a statement, or two, of what you want to accomplish during the lesson. These are the specific reasons for the lesson and have measurable or observable outcomes. An objective may be to pivot the canoe 360 degrees within a 1.5m corridor. If you are developing a larger more complex course or lesson you might want to include an overall Goal or Aim – Safely paddle a canoe in a lake environment. Some lesson plans will split Outcomes from the Objectives.
3. **Fit within course:** If this is a lesson that fits into a larger course then be clear about how this component fits with the overall goals of the course or program. If it is a step along a continuum or progression (e.g. pivots lead to turns/circles or side displacement) that that should be noted. This may or may not be a topic that is discussed with the participants but you should be aware of how things fit together.
4. **Expectations:** These are both your expectations for the class as a group and as individuals. It may be as simple as engagement and participation, attending on

- time, etc.... You may want to include the assessment methods that you are using and the method you will be using to teach
5. **Assessment, Evaluation Standards.** This is the specific plan for assessing the learning and how the objectives will be met. This may be a test or demonstration of ability – it is a tool for you to use. Answer the questions: a) how do you know the lesson was successful, b) were your objectives met, c) how were you successful as an instructor? In the case of doing pivots it may be a rubric including completed pivot, within 1.5m, smooth speed, little cart-wheeling, communication, start (initiate movement), and stop. Each part of the rubric will have Pass, Weak, Fail components and feedback/comments.
 6. **Audience.** This is a statement, primarily for yourself, which identifies the group that you are teaching. Include the age of the group, the number of people in the group, learning expectations (if known). This may be your own expectations to start with and can be modified once you meet with the actual group of people.
 7. **Place/Location:** Where will your lesson be taught, how will you get there, are there any logistical or safety issues that need to be dealt with?
 8. **Materials and equipment.** Make a list of what is required for your lesson, collect and test the material and equipment beforehand. You may include the materials and equipment assessment as part of your site review to ensure everything is in place.
 9. **Time frame.** This should include the time to actually carry out the specific lesson. You should include getting to the location, setup, take down, and any follow-up evaluation. Once you have done a trial run you can modify this as necessary, or modify your lesson plan to fit within the time available. The time frame must be appropriate for the overall time of the whole course.
 10. **Pre-trip briefing.** If you will be traveling or taking a trip, even if it is short, you will want to do a pre-trip briefing. Who is sweep, who is lead, are there any requirements for notification.
 11. **Risk assessment.** This is an overview of the potential risks associated with your lesson. This may include tipping over in cold water, accidents while moving equipment or canoes, medical concerns of participants, wind/wave potential. You may want to include in the risk assessment any additional group management criteria – meeting points, area for practice, whistle notifications. If there are any potential risks, such as a slippery wet dock, what will you do to minimize the risk?
 12. **Content/methods.** This is the big part – how you will actually teach the lesson itself. The teaching methods section of this manual provides a number of additional ideas and directions that you can take. Generally look for ways to engage your students and have them provide information (student centered instruction) rather than you telling them.

Describe the content and methods that will be used to present information. Teaching skills will usually follow the IDEAS or triple Ds method. When first starting make detailed notes and plans – these don't need to go with you in the boat but it really helps to think the whole process through ahead of time.

IDEAS Method

- **I**ntroduce
- **D**emonstrate
- **E**xplain
- **A**ctivity
- **S**ummary

Triple Ds Method

- **D**escribe
- **D**emonstrate
- **D**o
- **S**ummarize

In some cases where the material is more complex you may want to break down the lesson into individual parts. For a complex maneuver you would demonstrate the whole maneuver, then each part or component, then work on each part, completing with the whole. An example would be completing a canoe over canoe rescue – by demonstrating the whole rescue, then working on each part (rescue canoe, re-entry).

Teaching theory lessons may follow the Paddle Canada suggested IES

- **I**ntroduction - what are you are going cover (Introduction)
- **E**ngagement or **B**ody
- **S**ummary

An example would be use of a GPS: start with the GPS basic – see the sky, set a point, then find a marked location, then transfer information to/from a map. Fill in information as you move about and read a map (datum, reading a point, etc....)

Part of the content section should include a few contingency ideas – what to do if the conditions are not safe or appropriate for the lesson.

13. **Reference material and handouts.** You may not need to hand out any material at the end of your lesson but this is a useful section when researching and writing your lesson. It allows you to go back and check references, look for updates, and keep up to date on the information. In canoe courses, along with other experiential education sessions, try to keep the amount of hand out material to a minimum – include basic information and where participants might search or obtain further information.
14. **Summary.** Once your lesson is complete finish up with a brief summary. This might include information on where to go from here – what is next. Include a reminder to practice skills. Review how this lesson fits in with the whole program or course.
15. **Finally evaluation and reflection.** It is important to allow time for feedback and evaluation of the lesson itself. In the context of a whole course you may want to leave evaluation forms for student until later in the course but you, as the instructor, should take a few minutes after every lesson and jot down some notes

to yourself about meeting expectations, things that worked well, what didn't work and why?

You will find further information about actual assessment and evaluation methods in the Assessment and Evaluation section of this manual. Providing critical feedback is an important skill that instructors should learn and practice – in short be positive, be specific, and provide clear direction/correction.

How much time and work should you put into lesson plan - how much background material is enough? These are difficult questions and the answers depend on many factors – a great way to say there is no simple answer. The easiest response is to spend as long as necessary for you to complete a lesson plan that will be helpful to yourself, contains accurate information, and will keep you out of trouble. This might range from a few minutes to several hours – as a general rule I expect to spend at least two hours on a new lesson plan (even if it is only 10-15 minutes) and then an additional 3 hours for every hour of actual lesson time. Yes that is a lot of work but it pays off when you come to teach the material. Remember every time you pull out your lesson plan to use in a new course review the material to see if it needs to be updated or modified.

Take Home Material

I often question myself about how much should be handed out with each course that I teach. When teaching a basic canoe skills course I always provide one double sided sheet – this includes some words of wisdom, legal requirements, basic information that is often forgotten (parts of the boat for example) and where to find further reference material. In longer courses I still try to keep the amount of material printed to a minimum but I do provide reference and background material (e.g. this manual).

Learning and Teaching Styles

When teaching in an outdoor environment there are a series of considerations that may change the way you teach and how lesson plans are developed. Some of these are about you, your individual style, background, the way you learn, how you interact with others, your skills, and your knowledge. Others are directed at who you are teaching, their age, background knowledge, interests, and skills.

Many models have been proposed to help understand the way people learn and there are corresponding models on how to teach both individuals and topics or skills. Models are useful when you are considering alternative teaching styles and strategies but it is important to recognize that these are just models – they are not the answer or the only way.

There is not one style that works for everyone or all situations – there is no silver bullet. Start with the methods that you are comfortable with and then expand to see if there are alternatives that support or facilitate your existing approach. It is important that you as an instructor be involved and engaged with the course and canoeing – if you are excited about a topic your students are more likely to be as well. Share your knowledge and methods with other instructors through certification clinics, co-teaching courses, reading, and continuing education.

When teaching outdoor skills (canoeing, navigation, hanging tarps, etc...) there are a few principles that you should consider no matter what style of learning or teaching is involved.

Preconceptions and Existing Knowledge

Students will come to your classes with their own beliefs and knowledge. You should have some idea about where your students are ‘coming from’ before starting a lesson, if possible even before you start to write your lesson plan. People may come with a fear of water or other concerns and for them even getting into a boat may be difficult – don’t dismiss their concerns but spend some time to acknowledge their concern and explain ways that they can safeguard themselves and how your course provides a safe learning environment. Match them with someone that is comfortable around the water and in the boat.

Many times you will have someone attend a canoeing course that already has extensive canoeing experience. Their experience may be helpful and you can encourage these people to help participate with their own stories and experiences. Extensive prior experience can be a double edged sword so be wary since many people with a lot of experience have ingrained habits. If they are open to suggestions this may not be a major problem, other than getting them out of their routine. Don’t be closed minded either,

So you’re coaching a stern rudder to a kinaesthetic, activist. They also happen to be left brained, emotionally intelligent, ENTP on the Myers-Briggs type indicator and a Plant in Belbin. They’re also a bit cold, and they really don’t want to fall in. **They’re also a person!** As with all people they’ve got a really complex set of needs and wants, some of which you are aware of, some of which they are aware of and some of which neither of you have cottoned onto.
George Fell

often people with a lot of experience have worked out efficient methods for doing things. Their method may be un-orthodox; you might learn something new or interesting.

Asking at the beginning of the course about experience and expectations helps you to find out about pre-conceived ideas and existing knowledge. Watching and listening to people that already have experience will help ascertain if the experience is good or bad.

Relevance

Once you have introduced yourself and the course, and you have an idea of the participants' background and expectations you can adjust your lesson plans to make the topic more relevant. It is a difficult skill to develop but making adjustments or pulling real life examples really helps with the learning experience. Make discussions, examples, and demonstrations something that the students can relate to.

Propellers and Canoes

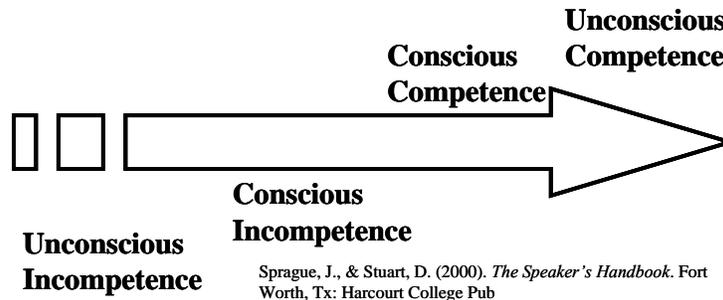
A few years ago I was explaining a sculling draw to a group of novice paddlers. One person was having a difficult time until I found out that they were an amateur pilot and I could talk about how the change in paddle pitch was like the variable pitch of propeller on his plane. Not a perfect analogy but it helped.

Practice and Experience

The importance of practicing is repeated throughout this manual. Give students time to practice and experience skills on their own – be available if they have questions; canoeing is a skill that needs to be developed through use. Unfortunately the time allocated in many courses only allows you to provide a glimpse of various skills before having to move on to new topics. Take some time step back and let the learners experience how things go together on their own. Although not always possible, try to run courses over a number of weeks (e.g. an 8 hour course could take 4 weeks – two hours every Wednesday evening). This allows time for students that are engaged and motivated to practice and tryout new skills between sessions. Provide some suggestions on where your students can find places, and times, to practice such as local club outings.

Competence and Development of Mastery

You might find it helpful when teaching to think of skill development, or mastery, as going through several phases. This is especially important when you are teaching people that already have some skills and want to hone or 'bone up' on a few things. This model also helps explain why some experts do not make the best instructors – what has become intuitive or unconscious is skipped over because they no longer realize what they are doing. For the 'expert' going back and making a clear lesson plan with all the nitty-gritty little steps is often a necessary step to ensure the unconscious is brought back to the surface.



A new or novice learner is unaware of the skills necessary for good boat control, safety, and enjoyment. They are unconsciously incompetent. They may not even recognize what they do not know. This is a critical period and part of your task as an instructor is to show them (teach them) the necessary skills and knowledge. The goal might be to paddle a canoe in a relatively straight line.

As knowledge is gained through learning paddlers will become aware of the skills they require and what is needed. They become conscious of their limitations and knowledge. At this point learning will often accelerate dramatically as your students understand and can comprehend paddling skills and goals. Your students understand that getting a canoe to go in a straight line is more than just paddling; trim, corrective strokes, wind all play a role – but students may not be aware of all of the components.

With practice your students will begin to master all of the skills but they will need to continue to consider or think about all of the components of each task. To make a canoe go in a straight line your students have all of the skills but must make a considered effort and remember all of the components. Your students are conscious of their abilities and the requirements and are competent paddlers.

Finally, when a skill is fully mastered (is it ever?) the art of paddling becomes unconscious and your students think about where they want to go rather than all of the things required for that to happen. Novice or new instructors are typically at this stage. They are expert paddlers but now they will have to start the process of learning to teach skills rather than just padding. This is also the reason that a many great paddlers have difficulty instructing, they no longer think about the necessary components of the skill and find it difficult to revert back to the conscious competent stage. The next time you are having difficulties transferring or teaching a maneuver think about the whole process and individual skills required.

Learning Styles

Learning styles represent the various models that a learner may incorporate and remember information. Learning styles may be based on a variety of personal characteristics and may be relatively stable or change over time. The same individual may use multiple strategies to process and remember different kinds of information under different situations. There are many different models for conceptualizing learning styles, each presents different classifications for individual styles, different ways of measuring learning styles, and different ways of integrating learning styles into education. There is

little agreement on which models are most effective for improving learning outcomes. Moreover, there is much debate about whether a single learning style can effectively be used at all in educational settings.

The purpose of this manual is to provide you with a general introduction to learning style theory using a specific model that has worked for a wide variety of people in outdoor environments. The Dunn and Dunn model has been chosen to demonstrate a typical learning style (see: Dunn, R., Dunn, K., & Price, G. E. (1984). This model is a variation on the VARK (**V**isual, **A**uditory, **R**eading, **K**inesthetic) model of learning that has been successfully used in a wide number of education applications and is probably the most popular model in the development of many outdoor education courses.

According to Dunn and Dunn learning is affected by the learners' reaction to the environment, sociological preferences, emotional state, psychological characteristics and physiological characteristics. A learner's perceptual strengths may be auditory, visual, tactile or kinesthetic (many different models use variants of these four characteristics). The Dunn and Dunn model is centered on the belief that most people are able to learn but that individuals learn differently and that learning can be improved through understanding and accommodating learning styles. A single individual may learn different skills or information in more than one of these parameters based on their current situation, needs and motivation.

- Visual learners learn best by seeing
- Auditory learners learn best by hearing
- Tactile learners learn best by touching and feeling
- Kinesthetic learners learn best by doing

It is not recommend that you test participants for learning style, but rather you should be aware of the different learning styles and vary your instruction to accommodate different styles and thus improve the overall experience of the participant and instructor. Be flexible and use a variety of techniques in your lesson planning. Everyone will have some combination of learning styles, and the style used will change based on the conditions.

Here are some suggestions for how to instruct based on different learning styles.

Daniel Willingham noted: when arguing against using 'Learning Styles' like VAK.

- Learners are different from each other, these differences affect their performance, and teachers should take these differences into account.
- ... interest and attention are preconditions of learning and vary from student to student, depending on the subject.
- ... students differ in their background knowledge, and that difference influences their learning.
- ... some students have specific learning disabilities, and these affect their learning in specific ways....In each of these cases, a specific difference in the student calls for individual diagnosis and attention
- ... we should ... present information in the most appropriate manner for our content and for the level of prior knowledge, ability, and interests of that particular set of students.

Visual Learners (learn by seeing)

- Demonstrate skills clearly and accurately.
- Make sure participants can see your demonstrations
 - be aware of paddle side
 - Remember that the bow paddler may not necessarily see what is happening in the stern; they may need to stop paddling to watch a stern paddler who is giving them instructions
 - some demonstrations might be better done on a dock
- Use printed materials like handouts, slides or flip charts
- Use diagrams, wooden models or paper cut-outs to show how a canoe moves
- Switch places with a participant and show them the skill while they watch what you are doing.

Auditory Learners (learn by hearing)

- Incorporate discussions and lectures
- Use language that is clear and descriptive
- Use videos and other A.V. with good supporting narration or stop the video at critical points to provide your own narration
- Give explanations of what you are demonstrating

Tactile Learners (learn by feel)

- Include hands-on, interactive training using training aids, such as scale models or paddling equipment
- Allow participants to hold on to their paddles or other equipment while you facilitate theory portions of your course
- Have participants put their hands in the water to feel current or the movement of the canoe

Kinesthetic Learner (learn by doing)

- Focus on performing skills and learning through trial and error
- Allow enough practice time and use coaching techniques to instruct
- Provide minimal instruction, have participants try a skill and then reflect on what they have done
- Use practical exercises and scenarios for dry-land portions of your course

Although people may show a preference for one learning style most of your students will likely have a blended learning style and learn through a variety of delivery techniques. When preparing a lesson plan you should plan to vary your delivery throughout the course and teach each part using a teaching style that is complementary to the content and the associated learning styles. Don't try to force learning or teaching style that does not complement the skill being taught.

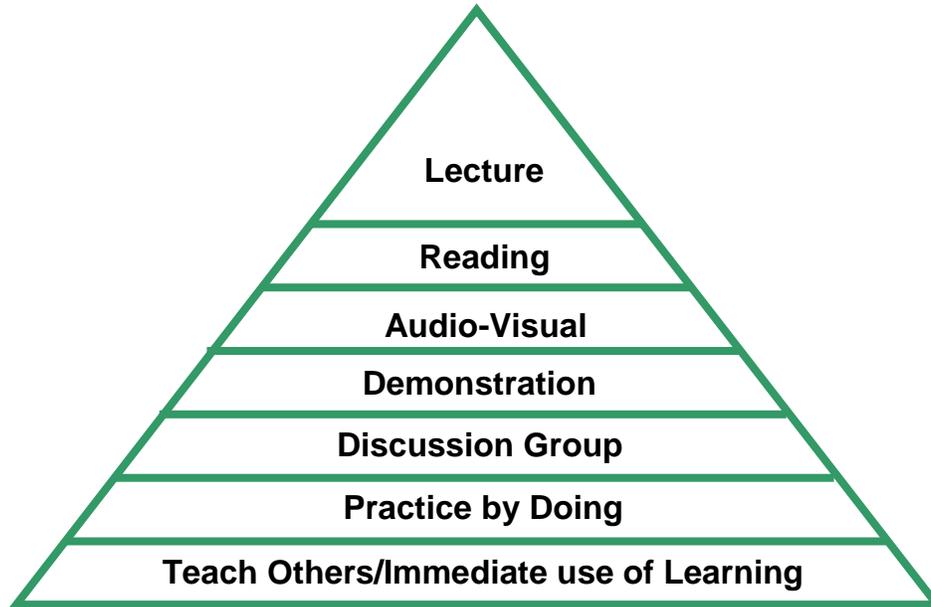
For example of how you might want to apply the Dunn & Dunn (VARK) model, you may start your lesson on the dock and discuss basic safety procedures. You could teach this section by passing around safety equipment, telling a personal story of what can happen when safety precautions are not followed and demonstrating how to fit a PFD and then have participants select and put on PFDs.

When you move onto the water to teach paddle strokes ask your students to make their canoe move in a certain direction without telling them what stroke to use. After experimenting form a flotilla and use a diagram or model of a canoe to show and discuss the forces on the paddle and canoe. Demonstrate a stroke and then have students practice that stroke on its own before putting it all together to perform a maneuver.

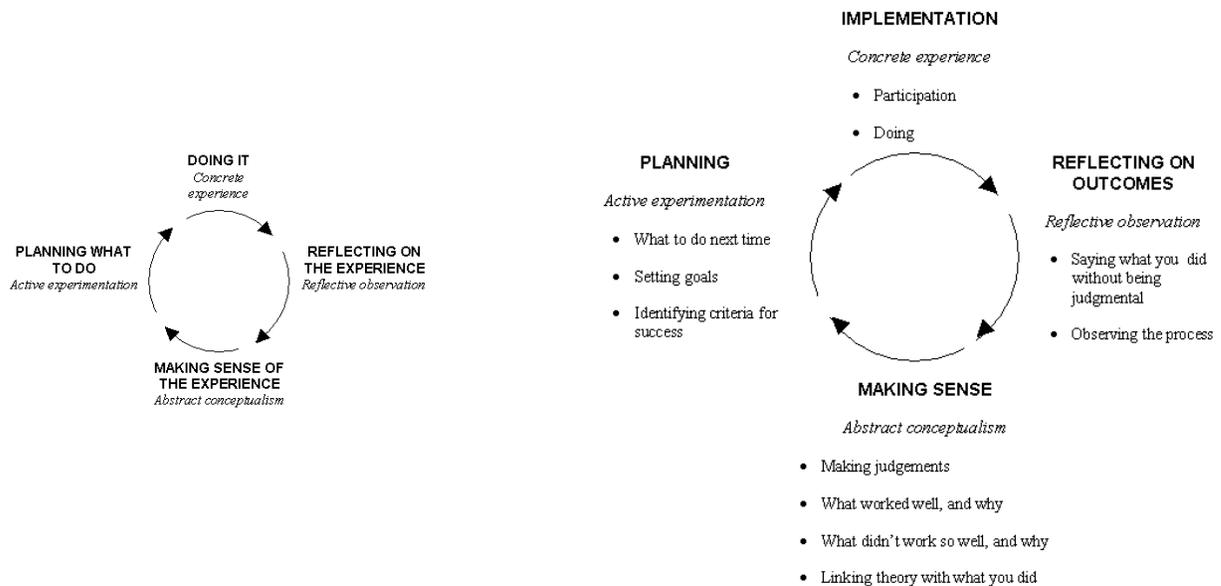
There has been some compelling arguments that subjects should be taught (see teaching styles) in a form that matches the content (visual content should be taught using a visual model, physical/tactile subjects should be taught using a kinesthetic or tactile approach). Canoe courses may be weighted towards a kinesthetic model with ingredients from visual and auditory senses for support.

Some researchers have asserted that for successful learning experiences students need to experience a variety of instructional methods and that direct instruction needs to be accompanied by methods that further students' understanding and recognize why what they are learning is useful (keep it relevant). Learning styles are a useful tool to help with teaching material and thinking about alternative models for gaining or sharing information. The important thing for you to remember as an instructor is work on a style, with some variation, that keeps your students engaged.

The cone of learning has been widely used by many educators to argue for the use of discussion groups, experiential models of teaching, and practice. The cone is usually drawn with a series of percentages indicating 24 hour retention rates - those numbers are unsubstantiated. The original work by Edgar Dale was meant as a "visual metaphor" depicting types of learning with the level of abstraction increasing up the cone. With that in mind there has been some recent research that suggests that practicing and using skills help with recall and memory (go figure) – I am all for practice and use of learned skills. Moving up the cone goes from being directly applicable (hard skill) to more intellectual and philosophical (soft skill). Where you choose to teach within the cone depends on the goal of the lesson and the expected outcomes. In most cases teaching canoeing, and related skills, will focus on the methods identified in the lower part of the cone of learning.



David Kolb had suggested that learning comes through a series of interconnected experiences that feedback, or into additional learning. Basically it is learning from experience and then applying those experiences to continue to learn more.



Modified Kolb learning cycle

The Kolb learning cycle integrates both practical and theoretical rather than having a division of the two concepts. Learning must be tested out, reflected, practices, understood and applied. A link needs to be made between theory and action once this happens the student can start to learn on their own. It isn't enough just to do, and neither is it enough just to think; nor is it enough to simply do and think. Learning from experience must involve links between the doing and the thinking.

All you really need to know is that people learn in different ways so use a variety of teaching methods.

Factors Affecting Learning

All those fancy learning models aside, there are additional factors you should be aware of that affect the way individuals learn and pickup new material. Keep these factors in mind when developing your lesson plan and then putting the plan into action; adjust accordingly.

Age

Age has a significant influence over how someone learns and teaching styles need to accommodate the overall age of the audience. The following provides some broad guidelines and traits of learners that should be considered when developing course material. These traits have been broken down into groups for ease of presentation but changes happen as a continuum and are specific to each individual. The table starts at age 5 since that represents the lower age of children that you will be teaching.

Age Group	Characteristics	Teaching Strategy
5-11 Elementary Aged, Childhood	<ul style="list-style-type: none"> • Understand cause and effect • Want concrete information • Interpret language literally • Variable growth rate, co-ordination may not be well established • Immediate orientation • Can work in groups but may be self-oriented • Poor or no understanding of fractions and proportions • Short attention span 	<ul style="list-style-type: none"> • Encourage independent and active participation • Use logical explanations • Be accurate in explanations • Allow time for questions • Provide group activities • Use drawings, models and other visual aids • Use analogies to make processes real • Keep lessons to the point and fairly short • Focus on 'fun' activity
12-17 Adolescence	<ul style="list-style-type: none"> • Abstract and hypothetical thinking is developed • Can build on past experiences • Longer attention span • Understands and can use logic and scientific principles • Strongly motivated by social acceptance, may have feelings of vulnerability • Peer groups are important • Wants to be independent 	<ul style="list-style-type: none"> • Establish trust and authenticity. • Know material and skills beyond lesson requirements • Clearly identify expectations and objectives (focus/goals) • Use peers for support

	<ul style="list-style-type: none"> • Needs affirmation • Dramatic physical growth may have period of awkwardness • Personal awareness (puberty) • Desire to excel and become involved with learning process • May challenge authority 	<ul style="list-style-type: none"> • Make information meaningful and relevant to life • Use audio/visual and reading material • Use games with teams or groups • Set clear ground rules and expectations
18-40 Young adults	<ul style="list-style-type: none"> • Autonomous and self-directed • Uses personal experiences to help understand and build on concepts • Intrinsic motivation (they want to be there) • Able to analyze critically • Want to be involved with decision making about learning • Look for life or problem centered learning • May look for individual feedback • May be hesitant to try new skills or strokes 	<ul style="list-style-type: none"> • Use problem centered facts • Draw on meaningful and life experiences • Focus on application • Allow pace to be set by the group/individual • Be highly organized • Build on clear rational progression • High level of skill development • Longer practice periods • Allow for independent learning – provide one-on-one instruction
40-65 Middle age adults	<ul style="list-style-type: none"> • Sense of self is well developed • Concerns about aging and physical changes • At peak in career • Reflects on family and society contributions • May be re-examining goals and values • Has confidence in abilities and a knowledge of self-limitations • Strong informal learning ability • May look for individual feedback • May be hesitant to try new skills or strokes 	<ul style="list-style-type: none"> • Focus on maintaining independence and re-establishing normal life patterns • Assess positive and negative past experiences with learning • Provide information to coincide with life concerns and problems • Provide additional resource information for self-directed learning
65+ Older Adult	<ul style="list-style-type: none"> • Decrease in short term memory and abstract thinking • Increased reaction time • Focuses on past life experience 	<ul style="list-style-type: none"> • Use concrete examples • Build on life experiences • Make information relevant meaningful

	<ul style="list-style-type: none"> • Auditory and visual abilities are starting to decline • Fatigue and lower energy levels • Chronic illnesses are common • Selective learning • Intimidated by formal learning • May need a lot of reassurance, support and encouragement • Anxiety about learning new skills especially in formal sessions 	<ul style="list-style-type: none"> • Present one concept at a time • Allow time for processing and response – slow the pace • Keep explanations brief • Use analogies to illustrate abstract information • Face client and have clear sight lines • Avoid colour coding • Increase safety precautions • Establish realistic short-term goals
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Adapted from Nurse as Educator (1997), Outdoor Education (2006) and CRCA Resource Manual (2004)

Environment

The environment that you are working in plays an important role in each person's ability to take in information and learn new information. If your students are uncomfortable they will not be good learners. With outdoor education there may often be some level of discomfort as part of the experience – an example would be going in cold water as part of learning to do canoe rescues. Use potential discomforts as part of the learning experience where necessary, but don't make your students uncomfortable 'just because'. Keep your students in mind and how they feel. Be willing to modify your course/lesson based on the present conditions and have alternatives ready.

Make sure your students can see you and the skills/material that you are presenting. Eye contact is important so if you wear sunglasses remove them or use clear lenses rather than polarizing or tinted. When working under sunny conditions have your students back to the sun so they don't have to squint to see.

You and your students will be in a canoe for a considerable portion of time. Some courses require an understanding of paddling in wind and waves but as an initial learning point find a sheltered place to discuss the lesson, plans, and complete any initial instruction.

Some people find it difficult to sit in a canoe for long periods of time and most, if not all, will have problems kneeling. Look for and suggest alternatives such as kneeling pads, cushions, barrels or 'saddles', etc... Encourage people to move in the canoe or at least change how they sit regularly.

When students arrive ensure that they are wearing or have appropriate clothing for the conditions. Under sunny conditions ensure they have a hat, sun screen, water. When it is cold or rainy – fleece, gloves, rain gear. Make sure they have a change of clothes in a dry bag or available when you return to shore. Some of these items are also covered under risk management.

Remember canoeing should be enjoyed first and then work later.

Feedback and criticism

How feedback is provided is important for the learning process for this reason a whole section of this manual is devoted to assessment and feedback. In general feedback should be: a) specific and contain precise information about what the learner is doing well and where work is required, b) comments and suggestions should be constructive and suggest positive steps for improvement, c) be about things that can be changed and achieved, d) feedback should be given as soon as possible. When working with children, and possibly older adults, limit suggestions to one concept or idea at a time.

Providing feedback as soon as possible does not necessarily mean immediate – give your students some time to practice and try out techniques; although you should provide feedback immediately if there is something dramatically wrong.

Practice

People learn and hone skills by practicing. In any skill based activity (e.g. canoeing, playing the piano, or programming a computer) the more time spent practicing the more skilled and confident your students will become. An instructor can speed up the process of learning by planning a practical and methodical route through developing new skills but nothing replaces practice and practical application.

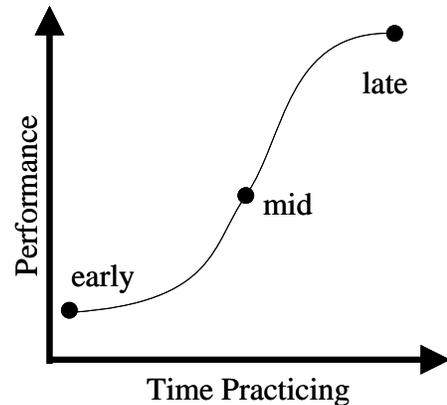
Improving skills and confidence is personally satisfying but in adventure activities such as canoeing well practiced skills have a much more significant outcome; the level of risk is reduced, the chance of an accident or error is reduced, and if there is an accident your students will be able to deal with it appropriately.

As an instructor it is part of your responsibility to encourage ongoing practice and use of the skills that have been taught. A practical rule of thumb for practice time: for every instruction/learning period the practice period is 2-3 times longer (e.g. twenty minutes on water training should have one hour associated practice or time using the skills). Practice time does not mean sitting in a canoe and paddling in circles (over and over again) but it does mean getting in a boat in a variety of conditions and paddling.

Practice can be both focused and generalized. Your students should be encouraged to work on both. Focused practicing is taking the feedback that you have provided about a skill or technique and working on that independent of other skills. Generalized practicing is just going and paddling – this kind of paddling increases your students comfort in a

canoe and potentially exposes them to a wide variety of conditions. It is also the most likely kind of practice that your students will do independently but the least likely kind of practice that will improve specific skills. Both kinds of practicing are required.

As an instructor you need to be aware that improvement in skills associated with practice does not follow a linear trend. At first there are only small incremental changes as your student first starts to understand the skills and what is required. At this early stage it is important that you provide feedback and clear direction (as necessary). Once they recognize the skills and they are conscious of the requirements practice has a significant return and improvement accelerates. Once your students are close to mastering a skill the incremental improvements once again become smaller and perfection of a technique gets closer. Once again your students may need direction but at this stage it is about very fine or small changes – this is the point at which your actual paddling and instruction skills must be very good and your recognition of minute changes to detect problems becomes increasingly important.



Ambrose, S. A. et al. *How Learning Works 7 Research-based Principles for Smart Teaching*. John Wiley & Sons. 2010

Pre-existing Skills and Knowledge

Building on pre-existing knowledge and skills makes learning new skills easier and more successful. In some cases people will bring existing knowledge to the course based on past instruction or informal education – sometimes their knowledge is incorrect or incomplete. Don't dismiss their understanding out of hand but try to work with their current knowledge and skills; illustrate that there are alternatives and reasons for those alternatives.

To gauge the level of existing skills and knowledge start out by asking your students about their skills and background, playing a skills based game (e.g. canoe polo), or quickly reviewing the paddling skills covered during the course.

Readiness to Learn

Every individual comes to a course for their own reasons (sometimes they are told by their mother or employer, others might be going on a trip). To take in and use new information the learner needs to be ready and have a desire to expand their knowledge. Providing a positive environment is a key factor here but there are other ways to encourage someone to travel down a new and possibly frightening path.

I Can Solo – done it all my life
Many times I have worked with solo paddlers that strongly insist that they can paddle from the stern of the canoe with good control – they just throw something big up at the front end to balance out the canoe (a dead deer for example). Although from this position they can make the canoe go forward very well it is more difficult to turn and maneuver the canoe in other ways.

Reach out and try to understand their background, make canoeing or associated skills relevant to their beliefs and understanding. Use stories, personal experiences, teaching aids and demonstrations.

In some cases an individual may not be ready to learn or they may have a limited desire due to some fear or anxiety, or just a lack of interest (mother says I have to come). If this is the case it may not always be obvious – with children and teens for example the anxiety may come out as behavioral issues or distancing themselves from the course or the group.

- Be supportive and encourage involvement with the lesson in a positive way.
- Stress the enjoyment rather than completing the task.
- Let the student or learner work at their own pace when possible and decide when they are ready to move on.
- Suggest and encourage but don't force someone to participate in an activity that they find frightening.
- Build to the skill based on existing understanding and knowledge.

Group Size

Paddle Canada has set student ratios for all of their programs and courses. These ratios were set based on experience at teaching the specific courses and the largest number of individuals that instructors can manage safely and effectively.

Even Numbers

I personally like to teach tandem courses with an even number of students if possible – this allows me to solo and give everyone more attention. As a solo paddler in a tandem course I can also demonstrate all of the bow and stern skills and strokes.

Larger groups, even within the defined ratio, can be difficult to manage, and providing the time that is required for every student is often a problem. Although 10 is the maximum number of students for many tandem courses I prefer 6 because it gives me more time with every student and I can keep track of their skills, and yet there are enough individuals to move about and change paddling partners. Expect courses to run for longer periods, beyond the minimum, once the numbers approach the maximum number of participants.

Groups and cliques

Periodically a group will register for your course for pre-existing reasons, or near the start of a course a group forms a natural bond. These groups can be healthy and supportive when learning new skills but they can also be detrimental when one (or a few) individuals in the class feel they are left out. The ‘group’ may not even realize what is happening. As an instructor you need to be aware this can happen and have methods to ensure that everyone is included. Don’t become one of the ‘group’ yourself.

Camp Cliques

I have seen cliques form very quickly when teaching at camps where a number of the students have come from the camp and are already friends and colleagues. The ‘Camp’ group spent most of their time socializing and supporting each other which had the result of others in the class feeling excluded. In these kinds of situations it is good to know ahead of time and build activities that mix up the group and have people working with new partners and building new relationships.

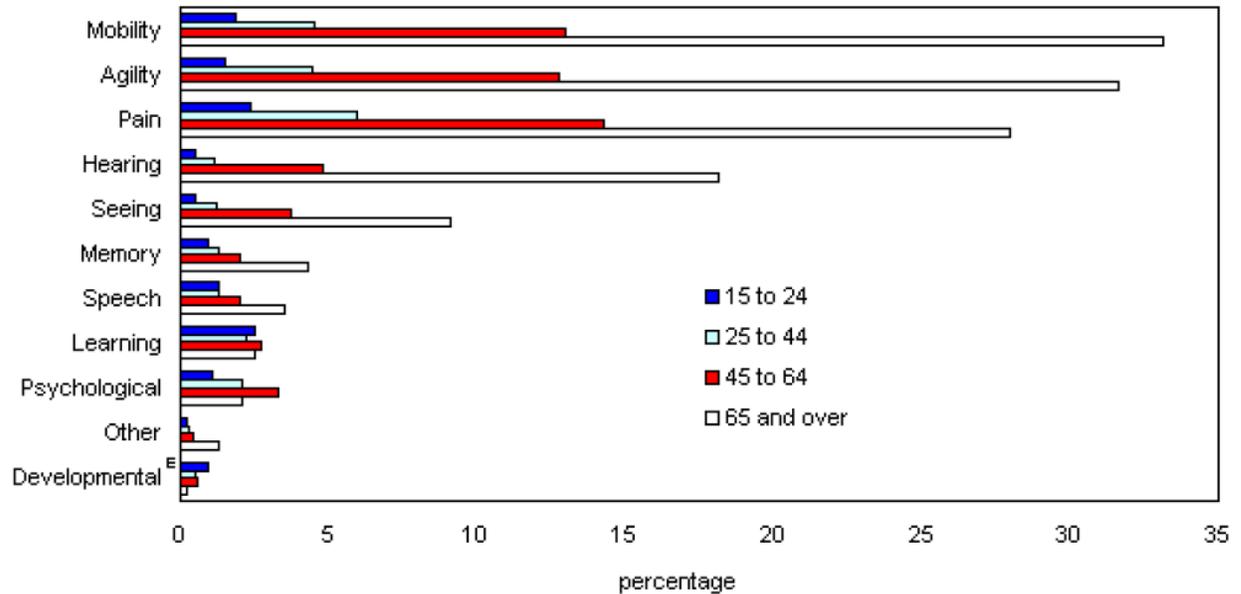
Abilities: Physical, emotional, and intellectual hurdles.

There are barriers to learning based on each individual’s cognitive and physical abilities that need to be considered when developing and teaching lessons. The following are some common abilities and learning hurdles that you may encounter. Paddle Canada has a non-discrimination policy and strives to be inclusive of all individuals irrespective of background and ability. It is outside the scope of this manual to provide a description and alternative teaching methods for every potential learning barrier the important lesson here is that you are aware that there are additional learning barriers and that the more information you can get about the potential barrier the better you will be able to instruct the course. Talk with the individual and, if appropriate, talk with the primary care givers, aides, and supporters for the student. Consider alternatives and modifications within your lesson plan that will help meet the needs of the student.

Hearing Challenged

Several years ago I taught a course with an individual that was deaf. Unfortunately this was not identified on the registration form as they did not consider it a handicap. At the time I had a fairly long beard and moustache and the student had a lot of difficulty reading my lips. The course was only a day and not much could be done – if I had known I would have trimmed my long hair and offered to bring an interpreter with me (my spouse was quite versed in ASL and is an excellent canoeist).

Physical and intellectual impairments may provide some challenges for you as an instructor. Be careful not to make the student’s condition the “challenge”, plan activities that the entire group can complete, find out about any adaptive equipment that may be required. Remember that physical condition does not imply cognitive or developmental delays – get the facts about your students before starting the program so you can be prepared and professional.



Prevalence of disabilities in adults 15 years of age or older by type of disability and age, Canada, 2006
(Statistics Canada, Participation and Activity Limitation Survey, 2006.)

Mobility impairments

Some individuals that want to canoe will have some level of physical mobility limitations. These can range from limited flexibility or ‘poor knees’ to significant difficulties with arthritis, CP, stroke recovery. Check with the student at the start of the course and then periodically during the course to assess their comfort and participation. Adjust your teaching style, locate or think about adaptive equipment or alternative ways to do things.

One of the most common problems that you will encounter is the ability to kneel – remember kneeling is not required when canoeing. In some situations it will make the boat more stable and easier to control but there are alternatives. Simply lowering and spreading your knees will often be adequate, sitting on a kneeling thwart or custom seat when solo paddling, use of a pedestal seat (barrel, filled stuff sack, etc...).

There are a few options that may provide some help:

- Trying using a lower seat (marathon style) with a foot brace.
- Use a stable pedestal seat. Ensure that the seat will not slide around wither through the use of a matt, Velcro, or fitted base.
- Keep the area warm. Leggings have been suggested as a way to keep knees and ankles warm. Related to this spend some time to warm up before the paddle
- Shorten the time for paddling down and provide breaks
- When getting in/out of the canoe provide extra support for balance. ‘Raft’ up with the dock to provide support on both sides.

- Some people find getting out with a dock (or shore) at water level allows easier step in/out. Other people find sliding over from a seat/gunwale high dock easier. Adjust, ask, try....
- Use of a more stable platform may be important, a wide bottom canoe, outrigger, or sponson, might be helpful.

When going on a trip remember the rule of thumb that the group only moves as fast as the slowest member.

Deaf and Hard of Hearing

Some students that you work with may have permanent or temporary loss of hearing. Working in an outdoor environment there may also be auditory distractions that affect everyone – wind, plane noise, etc... Remember that any hearing impairment might interfere with a student's ability to learn and being aware of these difficulties will make you a better instructor. Include any aides or helpers in the conversations and learn how they will/can participate.

When teaching deaf or hard-of-hearing students

- Use a normal tone of voice
- Ensure that there are clear sight lines between yourself and the student
- Avoid backlit or dark presentations
- Make sure in discussions that only one person talks at a time
- Use clear visual aids
- Where possible find a quiet area for discussions, conversations and presentations.
- If necessary arrange for an interpreter.

Visual Impairment

Teaching a canoeing course with a visually impaired or blind individual can be done but it will probably require a change in your teaching style – more hands on. It is important in such a visual environment (canoeing) that you talk with the student ahead of time to sort out any expectations and additional requirements. Include any aides or helpers in the conversations and learn how they will/can participate.

Teaching individuals with visual impairments

- Introduce yourself directly
- Give clear and specific directions, avoid using only visual cues (e.g. pointing)
- Use a normal tone of voice
- Provide a physical orientation to the learning environment for the student
- Ensure that only one person talks at a time.

Intellectual and Developmental

Intellectual and developmental impairments or delays come in many forms. The most common that you may encounter are Autism and Asperger's spectrum disorders, fetal

alcohol syndrome, and intellectual disorders. These syndromes are lifetime conditions that can, with education and treatment appear to diminish overtime but the disorder remains throughout the person's lifetime. There are many other intellectual disorders that may be congenital, chromosomal, or brought on later by head injury, stroke, or some infections.

Autism and Asperger's are a complex and poorly understood group of neurological disorders that affect communication and social interactions. There is a whole range of associated behaviors ranging from patterned behavior, difficulty mixing with people, attachment to specific objects, unresponsiveness to social cues, and restricted patterns of interest.

If you have a child that has Autism Spectrum Disorder (ASD) or Asperger's syndrome in your class choose to work in a quiet environment where distractions are minimized; keep the atmosphere as calm as possible. Yes – this is more difficult in reality when teaching canoeing... Talk or correspond with the child's primary care giver to find out any specific conditions or situations that might cause problems or raise anxiety levels. When starting the class set clear behavior guidelines to minimize inappropriate behavior. Use props and pictures to reinforce the spoken word.

Fetal Alcohol Syndrome (FAS) consists of a wide range of affects that stem from alcohol use during pregnancy. There may be physical symptoms (heart, liver, kidney problems; vision and hearing problems; slow growth and poor coordination) and intellectual or behavioral difficulties (math and reading problems, poor concentration, mood control, and social awkwardness or emotional difficulties). Many individuals that suffer from FAS also have poor impulse control and difficulty connecting actions and consequences.

Similar to ASD create a quite non-distracting calm environment. Keep the student near you to help keep them focused and to manage any behavior issues. Don't expect consequences to work effectively; consequences must be concrete, simple, and must be applied immediately and consistently. Teach in short sessions and allow for frequent breaks. Speak slowly and give adequate time for questions. Always remember to encourage effort and success.

Attention deficit/hyperactivity disorder (ADHD)

ADHD is a condition affecting children and adults that is characterized by problems with attention, impulsiveness, and over activity. The condition appears, and may be diagnosed, before children are seven years old. Adolescents and adults with ADHD tend to develop coping mechanisms to compensate for some or all of their symptoms.

If you have a student that has ADHD attending your class, collect as much information about the student as possible since each individual expresses and deals with their condition in a different way.

Many [ADHD] students that do not do well in a classroom environment have great success in an outdoor learning situation. You still need to be aware the disorder and develop strategies to help your students focus and succeed. Work with the student's primary care giver to help develop a plan that suits the student.

Some suggestions for teaching students with attention disorders:

- On longer courses establish a routine. If possible in a short course try to fit the course or lessons into an existing routine.
- Begin each lesson with a review
- Gain the students attention before starting
- Give brief instructions
- Use concrete relevant and interesting examples. This can be quite difficult and may be where the primary care giver is the most help.
- Allow to student to move, keep lessons short and to the point with some directed activity
- Spend some time to become more knowledgeable about learning and attention differences.
- Celebrate the student's strengths and contributions.

Learning disabilities and attention disorders can cause repeated failures in many activities as a result the student often has a poor self-image. When the problems go unrecognized students are prone to behavioral and emotional difficulties and will often be labeled as a troublemaker.

Teaching Styles

Teaching and learning are opposite sides of the same coin – one cannot happen without the other. An instructor often uses a teaching style that they are comfortable with and matches the way they like to learn. Work through your lesson planning process and think about alternative methods for teaching the same material, try not to get trapped in 'this works for me' mode of teaching. But don't abandon a method that works without some consideration for the 'next-best-thing'. It is important to have a clear understanding of your students and your students' background along with the context or environment in which you are teaching.

There are at least as many different methods for teaching material as there are for learning material. The following information is provided to get you thinking about what options are available and how you might want to put your lessons together – this is not an exhaustive list or a 'you must teach this way' manual. Paddle Canada has strongly encouraged an engaged teaching method (Facilitator in the table below). Although this method has much strength, it also has limitations, you should be aware of the alternatives and scope for teaching.

“The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires.” - William Arthur Ward

There are many different styles of teaching particular topics. The following are general approaches to teaching and interacting with students – each of these presentation and teaching styles can be used within a specific teaching method such as the IDEAS or IES method discussed later.

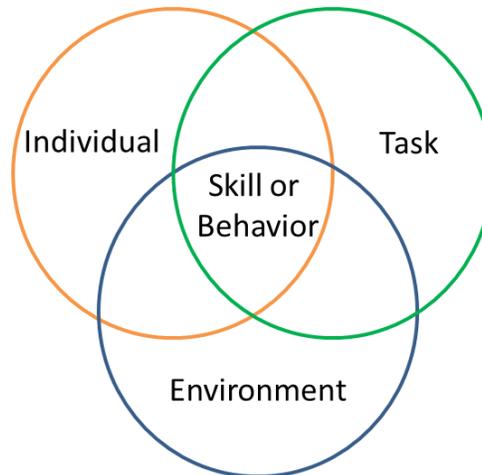
Style	Teachers Role	Students Role	Comments
Formal authority (Direct Teaching)	<ul style="list-style-type: none"> - Teacher provides all of the knowledge to the students using a lecture format. - Content is focused - No concern with building a relationship with students or group dynamics. 	<ul style="list-style-type: none"> - Listen and ask questions usually of clarification. - Primary role is listening or receiving knowledge - Takes notes and follows along only asking questions when something is unclear - Formal learning 	This is a very formal teaching method usually found in classrooms rather than in outdoor learning environment.
Demonstrator/Model (Direct Teaching with some Discovery)	<ul style="list-style-type: none"> - Teacher is the model and demonstrator. - Presentation is teacher centered - Coach and guide - Shows by example the process and helps master tasks 	<ul style="list-style-type: none"> - Students observe the teacher as the model. - They practice what is shown by the teacher. - Students follow the example set by the teacher. - Has components of formal and informal learning 	This method is often used or combined with other styles in an outdoor learning environment. The demonstration – practice - summary process is a very powerful and direct way of teaching new material. It may be limited in that it does not provide an opportunity for participants to develop their own solutions.
Facilitator (Discovery Method, with some Direct Teaching)	<ul style="list-style-type: none"> - Teacher creates a situation for students to practice what was taught - Student centered learning 	<ul style="list-style-type: none"> - Students are responsible for seeking help from peers - Students learn according to their desire and experience 	Once a concept, such as force and torque, is understood this is a useful method for having students explore and expand their learning. This technique can take the

	<ul style="list-style-type: none"> - Lessons focus on group activities 	<ul style="list-style-type: none"> - Students learn how to apply knowledge - Often informal learning with some formal follow-up 	form of role playing, scenarios, or assignments.
Delegator (Discovery Method)	<ul style="list-style-type: none"> - Learning takes place according to the students initiative - Teacher acts as a counselor or consultant - Student centered learning 	<ul style="list-style-type: none"> - Individual students are responsible for the learning - Students learn through self-direction and own projects - Informal learning 	This is the final phase in the learning process of students. Generally the students are highly motivated and take the initiative to continue to learn on their own, following up when some clarification is needed. As instructors we need to support this phase by providing access and information on informal teaching tools.

Modified from Anthony F. Grasha (1996)

Constraints-led Approach to Teaching

A constraints-led approach to training is a useful model for teaching outdoor technical or hard skills. The model is a learner-centered approach that has a reasonable amount of literature describing both the methods and the utility of the techniques. Constraints standpoint will augment your ability to understand the learner as well as how to structure the learning journey. Allowing you to build a course having a clear progression from basic to complex skills where the progression builds on prior steps without the need to relearn, or unlearn skills. An overview of the approach by Eric Brymer and Ian Renshaw is useful to review (An introduction to the constraints-led approach to learning in outdoor education. Australian Journal of Outdoor Education, 14(2), pp. 33-41, 2010).



The method is very similar to the Delegator or Facilitator styles mentioned earlier and following the Kolb cycle of learning. The constraints-led perspective is learner-centered and presupposes that effective motor learning depends on a distinctive interaction between the person, the task, and the environment. While teaching a new skill you allow the student to practice or develop the skill within some defined constraints. In general, as long as the biomechanical principles of the movement/skill are sound and the movement is not going to cause injury, good instructors allow their students to solve problems in ways that are best suited to their own individual constraints. The key point is therefore to encourage students to solve problems using techniques that are most suitable to them individually. Overall a systems approach is taken placing a skill in context with the overall requirements. The learning progression may not be linear with rapid advances, and even some set-backs and trials.

Constraints are the factors that influence learning and performance and in general can reference the individual, the environment, and the task. These factors influence the behaviors or outcomes that emerge during a learning experience. As an instructor you need to understand the relationship between these constraints and work within these to allow your students to explore new skills. You can set or modify some of the tasks and provide environmental boundaries for students to work within, and provide guidance with regard to the constraints from the individual and environment that cannot be controlled.

Individual constraints include factors such as body size (height, weight, and limb lengths), fitness (e.g., strength, speed, aerobic capacity, and flexibility), mental skills (e.g., concentration, confidence, emotional control or motivation), perceptual and decision-making skills (e.g., recognizing patterns of play, anticipating by reading the movements of opponents), and personality factors (e.g., is a risk-taker, or likes to play safe).

Environmental constraints include both physical and social environmental factors. Physical factors include gravity, ambient temperature, natural light, terrain, auditory feedback or other environmental features that are not usually adaptations of the task. These constraints could include cultural norms (e.g., India produces great spin bowlers), as well as family support networks, peer groups, societal expectation (e.g., the

expectation that football players will be rugby players in New Zealand and soccer players in England).

Finally, *task constraints* are factors that are usually more closely related to performance and include the rules of the sport, equipment used, paddling area and number of people.

In the Constraints led approach it is important to look at the skills or behaviors as a whole and match those to the needed outcome and the progression from one skill to another. Learners need simplified but realistic learning environments where they can assimilate information without distractions enabling them to make intelligent and informed decisions based on a complete understanding of their own capabilities in any given environment.

Rather than breaking down a skill into small component parts look at the whole maneuver or task and work toward that goal. In some cases simplify the outcome but keep the basic principle the same – e.g. look at paddling a straight course in a calm area, extend this skill to where there is wind or waves. Consider confining the skill to a smaller area. In the case of straight line paddling don't focus on the exact position of the paddle but focus on where the canoe is going. When students build or increase their skills the constraints will decay and they can move onto higher or more complex skills.

Just as a reminder – a complete lack of direction and input (allowing only self-learning and experiential activities) will not provide meaningful results in your course. Provide structure and some constraints to move your students forward in the direction you want them to go. Eric Bymer had this to say: “The essence of the constraints-led perspective is to facilitate new movement solutions by designing learning environments that provide controlled boundaries of exploration in dynamic settings through the provision of relevant task constraints.” My friend Kim had this interpretation: “in other words: take them out on the river but don't let them wander too far when completing their assigned tasks.”

“I never teach my pupils. I only attempt to provide the conditions in which they can learn.” - Albert Einstein

William and Hodges Summary (adapted from Williams & Hodges, 2005 Practice, instruction and skill acquisition in soccer: Challenging tradition. Journal of Sport Sciences, 23(6), 637-650.)

- **Demonstrations** may actually limit potential as they are over constraining and force the learner to adopt a movement pattern that may not be the most effective for the individual. A **demonstration** should always be coupled with its outcome effects so that learners are encouraged to problem solve and determine how their actions and effects are related. Allow learners to observe a range of people doing **demonstrations** so they can appreciate subtle variations in technique and how it alters outcomes.
- The **problem solving approach** (setting problems for athletes to solve or posing questions) encourages learners to take more responsibility for their learning.
- There are **different ways to achieve the same end result** and learners should be encouraged to explore these opportunities so as to develop flexible and adaptable movement patterns.
- Performance in practice should not be seen as a sole measure of the effectiveness of coaching. The most appropriate measure is to **observe the learner under actual conditions. Practice should be as variable** as possible so that learners can explore and discover their own solutions. The practice session should **mimic the range of variations** experienced during a match or actual conditions. **Blocked practice** helps to develop confidence. Blocked practice is repetitive practice to hone in on technique or skill.
- **Small sided games** or activities are more effective for learning skills than drills.
- Providing feedback on every practice attempt limits learning potential as it prevents the learner from searching for solutions. Encourage learners to increase their own ability to use **intrinsic feedback** (feedback about their own movements). **Over prescriptive coaching** may be detrimental to learning. Using **guided discovery** enables learners to take more responsibility for their own development.
- Coaches should **manipulate the individual, environmental and task constraints** to help shape the learners performances through guided discovery and self-exploration.
- In the **constraints-led approach**, coaches shape and guide rather than direct. Game intelligence can be developed by the use of game related activities.

(D)EDICT and FERAL – Teaching Motor Skills

Glyn Thomas discusses both directed and experiential approaches to teaching motor skills in the paper: Skill instruction in outdoor leadership: A comparison of a direct instruction model and a discovery-learning model (Australian Journal of Outdoor Education, 11(2), 10-18, 2007). These approaches are not new, and certainly the (D)EDICT approach has been used and well described, but the paper provides a nice overview of two additional methods.

(D)EDICT is based on Demonstration, Explanation, Demonstration, Imitation, Correction, and Testing. This method is closely related to the IDEAS method suggested by Paddle Canada. In short this is a very structured approach to teaching with little opportunity for self-discovery or exploration. This method uses Demonstrations as the starting point to show exactly what should be done and how. Correction and practice come at the end of the process. This method has been widely used and is the ‘normal’ or standard approach with a lot of organizations – it is easier and at the initial stages shortens the learning curve. One part of directed approaches that is often missed is providing students enough time to practice (trial) new skills.

FERAL is based on the process of using Framing, Exploration, Reporting, Adjusting, and Learning. In short this is a more unstructured approach teaching and focuses on the ability of participants to imagine and discover solutions on their own. Although Glyn Thomas coined this term and it seems to fit the ‘wild’ nature of the learning process it is not a new method. The method uses existing strengths and knowledge allowing students to imagine what is possible to complete a potential outcome, and then trying out solutions for themselves. An important part of this method is reporting back to the group on solutions and what might work (the best) and coming up with a common theme. The instructor in this case can certainly guide the discussion and bring their knowledge to the problem. One area that instructors need to be aware of is their own limitations and biases – a good solution may just be different, not wrong.

Both methods have strengths and weaknesses depending on the students, environment, background knowledge, and motivation. I find that the EDICT method works best with individuals first learning new skills (e.g. introductory level) where there is little background understanding or knowledge to build upon. Over the longer term learning purely with direction may limit the ability to advance into new and novel areas. The FERAL method works well with self-motivated students that have prior skills and knowledge to build on. Instructors need to be careful when using this method to note or correct inefficient or incorrect skills before they become engrained (the trick is identifying something that is a problem from one that is just different). Glyn Thomas concludes with the following statement: “I would encourage outdoor leaders to experiment ... find the approach that best suits their individual contexts, and to share their conclusions with other practitioners.”

Motivation

Individual motivation has been mentioned several times with regard to both learning and teaching styles. Unfortunately getting participants motivated can be difficult, finding the right ‘catch’ may be illusive for some. Daniel Pink, in his book Drive, identified three elements of motivation: Autonomy, Mastery, and Purpose. The original theories and subsequent experiments were around work place motivation and academic skills but the same general elements can be applied in other contexts (such as teaching skills). It is important to remember what will get individuals geared up and keep them focused. It is also important to remember that this is a model, rather than a hard rule, to help provide context for your students’ learning experience. In my experience Purpose is likely the most important and common driver of a motivated learner.

Autonomy

Within certain constraints, such as basic skills knowledge, allowing people to work on a skill on their own can be very powerful. This doesn’t mean anarchy but providing time for people to practice and make mistakes or advancements on their own. Provide some basic direction, include meaningful feedback, a choice of how to accomplish a skill, and encouragement. The constraints based methods mentioned earlier provide individual learners some autonomy in the way they come to a final solution. Our self-direction is a natural inclination. Pink pointed to a simple example of how children play and explore all on their own.

Mastery

Mastery is all about self-interest and wanting to get better at doing things. If you feel like you’re not getting anywhere, your interest flags and you may even give up. A sense of progress, not just in our work, but our capabilities, contributes to our inner drive. Step through your course or lesson plans using ‘Goldilocks tasks’ – challenges that are just beyond the current skill level of your students, not too hard but not too easy. This can be somewhat problematic if your students come with a range of skill levels and background knowledge. Give those with more advanced skills or learning abilities time to practice on their own with some more advanced ideas or trial opportunities to practice.

When looking for challenges you will need to ensure that you provide at least the basic set of skills and knowledge for your students to master a task.

Purpose

When talking about new skills ensure that you provide enough background information on the purpose of a skill. Learning a duffek to turn the canoe may not be as interesting to a student until they realize, or see, how useful this skill (stroke) is when trying to land at a dock in the wind or turn into an eddy. Try to provide real world applications of each broad skill, maneuver, or task as part of your core lesson plans.

Maslow's Hierarchy of Needs – and Motivation

In 1943 Abraham Maslow proposed a hierarchy of human motivation in his paper: "A Theory of Human Motivation" in Psychological Review. The most fundamental layers of his hierarchy must be met before a desire for higher levels will be desired. Maslow also coined the term "metamotivation" to describe the motivation of people who go beyond the scope of the basic needs and strive for constant betterment. It is important to note that an individual may require or have these 'needs' at a number of different levels at the same time – although often portrayed as a pyramid with each level above the next even Maslow didn't present the needs in a triangle. Maslow acknowledged the likelihood that the different levels of motivation could occur at any time in the human mind, but he focused on identifying the basic types of motivation and the order in which they should be met.

When developing and running your courses recognize these needs. Although part of the learning process may be to step outside of the normal comfort zone with regard to physiological and safety needs dismissing these will mean your students will not advance or will lose interest in your course.

The following levels or needs were identified, in the following order:

Physiological Needs

The basic and core set of needs include those that are required for basic survival: air, water, and food; clothing and shelter. You will need to recognize and ensure that these basic needs are met, or acknowledged.

Safety Needs

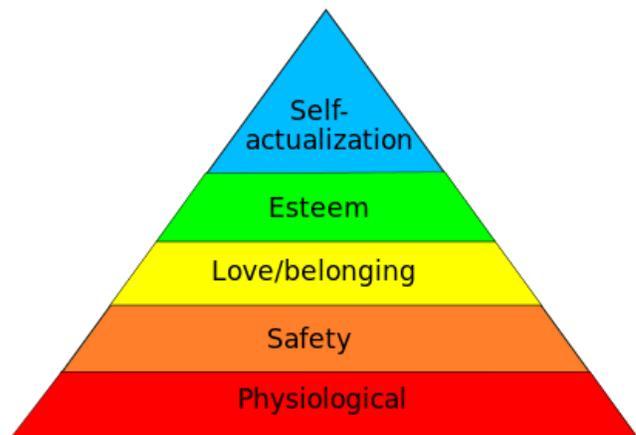
Ensuring that individuals feel safe and secure is the next level. The feeling of safety is covered under understanding risk but it is important to note here that both perceived and real safety issues and risk must be understood and accounted for by you as an instructor.

Safety and Security needs include:

- Personal security
- Financial security
- Health and well-being
- Safety net against accidents/illness and their adverse impacts

Love and Belonging

Feeling part of a group, or a sense of belonging, basic acceptance is important. You can provide this feeling as an instructor by being approachable and communicating well with your students. Respect their interests, fears and needs. Works at having your students



interact with each other through introductions, storytelling, participation (with each other) and discussion. Although a Maslow's hierarchy is much broader reaching than a short course the concept of inclusion is still important and applies.

Esteem

All individuals have a need to feel respected – including self-esteem and respect. This represents the desire to be accepted and valued by others. How you as an instructor provide feedback and the rate/way that you provide instructor can build esteem or break it down. Review the section on feedback and teaching styles for methods and ideas.

Self-actualization

With the earlier needs being met an individual may recognize in themselves the level that they can achieve or reach, and potentially extend beyond that goal. This is where setting obtainable and realistic goals within your course becomes important – reaching these goals and build esteem and allow a student to continue to grow beyond the confines of your course.

Lack of Knowledge

There are times where you will be caught off guard by a question or situation arising in a lesson; it happens. You cannot be an expert in everything and there is no way to anticipate every possible question.

DON'T MAKE STUFF UP!

If you are asked a question outside of your background, knowledge, or skills be open about your limitations. If the question is outside of the scope of the lesson re-direct the question or say that it is outside of the topic and that you don't have the answer. If it is a question related to the topic, again be open about not knowing the answer, take note of the question and find the answer. Make sure you follow-up with the individual or the group as a whole when you have found a suitable answer or solution.

There will be times that the answer to a question will require either more background information or a complex discussion that is beyond the scope of the course. Again recognize and accept the question, provide an overview of the topic, but explain that the whole answer may not be suitable current level of the course. If possible provide resources where the student can find further information.

Group Management

Learning how to manage students is a difficult task and takes practice and patience. There is no complete answer and no one (no matter what you think or they say) does it perfectly. There are some strategies that can help – keep a sense of humour and be patient with yourself and others as you develop your own style. Talk with peers about how they have dealt with specific situations. Set a positive tone throughout your course and work to understand your students, their background and expectations – where are they coming from. An effectively managed group will learn more and be more enjoyable

for you to teach. A huge factor in managing a group within a course is how well you prepared for the lessons you will be teaching.

To run a successful paddling course, day trip, or canoe trip, you must create an environment that is optimal for learning and safety. The most important aspect of group management is communication (refer to the communication section).

Some suggestions to managing and communicating with groups on the water are:

- Established communication signals and communicate them to the group
 - For example: 1 whistle = “look at me/attention”, 2 whistles = “gather together at my boat”, 3 whistles = “emergency, get to shore as quickly as possible”
- Organize the group according to the current or anticipated environmental factors
 - On windy days, keep your paddling to protected areas
 - Anticipate needs on cold or hot days
- Defining boundaries during a waterfront course
 - The instructor should be able to keep a visual on each canoe
 - The boundaries should be such that each participant is able to hear the instructors signaling device
- Designating lead and sweep canoes when traveling
 - Communicate that all canoes are to stay between the lead and sweep canoes
 - Ensure that the lead and sweep canoes are aware of their responsibility
- As much as possible stay upwind from your participants when on the water
 - Sound travels with the wind and participants will be able to hear instructions or signaling devices much easier
 - In a rescue scenario you will be in a position where you can travel with the wind to get to the participant in trouble.

Management Strategy

Probably the most important part of management in a course or a lesson is establishing a set of rules for behavior. Clearly outlining your expectations and role at the start of the course defines the boundaries and what is required. This does not mean listing all of the “do’s and don’ts” but establishing the process for communication and authority structure. Students will watch how you behave, act, talk, and interact – you are a role model and will get back what you display.

Conflict Management/Resolution

Although it is rarely heard of, conflict can indeed occur while paddling. This is particularly true at the end of a long hot (or cold) day or at the end of a difficult canoeing course.

Not all conflict is bad, learning is often brought about conflict and how it is resolved and managed. Conflict is as natural a phenomenon as breathing; it is not inherently bad. In fact, without conflict, there would be no opportunity for change, or growth. It has resulted

in greater social justice when groups have demanded change; and it has enriched our personal lives when our differences have led us to develop creative and inclusive

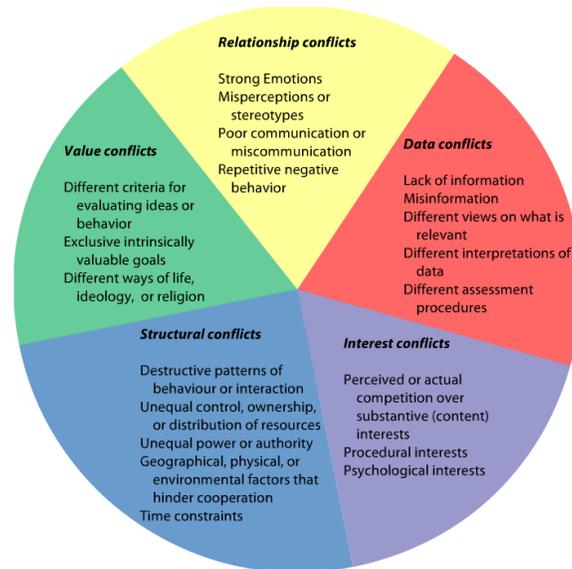
solutions. Conflict can be destructive; out of control conflict is damaging and sets up the individuals involved for failure.

There are many models of conflict and conflict management/resolution available. A simple model has been provided here that may help illustrate where problems can arise.

Conflict is a disagreement through which the parties involved perceive a threat to their needs, interests or concerns. A conflict should not to be shrugged off by a mere, "it will pass..." Participants in conflicts tend to respond on the basis of their perceptions of the situation, rather than an objective review of it. As such, people filter their perceptions (and reactions) through their values, culture, beliefs, information, experience, gender, and other variables. Creative problem-solving strategies are essential to positive approaches to conflict management. We need to transform the situation from one in which it is 'my way or the highway' into one in which we entertain new possibilities that have been otherwise elusive.

Managed Conflict	Out of Control Conflict
Strengthens relationships and builds teamwork	Damages relationships and discourages cooperation
Encourages open communication and cooperative problem-solving	Results in defensiveness and hidden agendas
Resolves disagreements quickly and increases productivity and learning	Wastes time and human resources
Deals with real issues and concentrates on win-win resolution	Focuses on fault-finding and blaming
Makes allies and diffuses anger	Creates enemies and hard feelings
Airs all sides of an issue in a positive, supportive environment	Is frustrating, stress producing and energy draining
Calms and focuses toward results	Is often loud, hostile and chaotic

There can be many sources of conflict (see diagram on the next page) but in a very simple sense conflict arises because we keep our thoughts and ideas private – but we act or behave according to what we think and believe. Others make assumptions about what we believe or think, which may be incorrect, and then act on those assumptions. By being clear about our beliefs, thoughts, and expectations we can usually avoid or more appropriately deal with conflict as it arises.



Source: C. Moore, *The Mediation Process*, 2nd edition (San Francisco: Jossey-Bass, 1996)

Understanding the style in which people approach conflict and the consequences of their behaviors can help move towards a solution. These styles are closely related to the leadership styles discussed later.

- **Competing** is a style in which one's own needs are advocated over the needs of others. It relies on an aggressive style of communication, low regard for future relationships, and the exercise of coercive power. Those using a competitive style tend to seek control over a discussion, in both substance and ground rules. They fear that loss of such control will result in solutions that fail to meet their needs. Competing tends to result in responses that increase the level of threat.
- **Accommodating**, also known as smoothing, is the opposite of competing. Persons using this style yield their needs to those of others, trying to be diplomatic. They tend to allow the needs of the group to overwhelm their own, which may not ever be stated, as preserving the relationship is seen as most important.
- **Avoiding** is a common response to the negative perception of conflict. "Perhaps if we don't bring it up, it will blow over," we say to ourselves. But, generally, all that happens is that feelings get pent up, views go unexpressed, and the conflict festers until it becomes too big to ignore. Like a cancer that may well have been cured if treated early, the conflict grows and spreads until it kills the relationship. Because needs and concerns go unexpressed, people are often confused, wondering what went wrong in a relationship.
- **Compromising** is an approach to conflict in which people gain and give in a series of tradeoffs. While satisfactory, compromise is generally not satisfying. We each remain shaped by our individual perceptions of our needs and don't necessarily understand the other side very well. We often retain a lack of trust and avoid risk-taking involved in more collaborative behaviors.

- **Collaborating** is the pooling of individual needs and goals toward a common goal. Often called "win-win problem-solving," collaboration requires assertive communication and cooperation in order to achieve a better solution than either individual could have achieved alone. It offers the chance for consensus, the integration of needs, and the potential to exceed the "budget of possibilities" that previously limited our views of the conflict. It brings new time, energy, and ideas to resolve the dispute meaningfully

By understanding each style and its consequences, we may normalize the results of our behaviors in various situations. This is not to say, "Thou shalt collaborate" in a moralizing way, but to indicate the expected consequences of each approach: If we use a competing style, we might force the others to accept 'our' solution, but this acceptance may be accompanied by fear and resentment. If we accommodate, the relationship may proceed smoothly, but we may build up frustrations that our needs are going unmet. If we compromise, we may feel OK about the outcome, but still harbor resentments in the future. If we collaborate, we may not gain a better solution than a compromise might have yielded, but we are more likely to feel better about our chances for future understanding and goodwill. And if we avoid discussing the conflict at all, both parties may remain clueless about the real underlying issues and concerns, only to be dealing with them in the future.

Approaching and Resolving Conflict

Here are some simple steps to help resolve potential conflict:

- Talk with each of the individuals and work with them to understand that there is a problem. Often people would rather not talk about what is frustrating them, but it is important to point out the elephants that are in the room (or your canoe).
- It may, or may not be necessary (or appropriate) to involve the entire group in the resolution process.
- Identify the problem and brainstorm potential solutions. This will need to be done together but it may be useful to start this process with separate individual discussions.
- Make sure that everyone has an opportunity to share their thoughts. Be careful not to take sides but listen and be constructive.
- Discuss the possible solutions and come to a mutual agreement or solution.
- Sometimes it might be beneficial to take a break to process the situation and the possible solutions before coming to a mutual agreement.
- Share the expectations to all parties involved and expect their cooperation
- Have a systematic follow through plan in place
- Track the progress of the new agreement and debrief the participants when appropriate.

These steps provide a tool to use when dealing with conflict, every situation is different and as a leader you will need to understand the source of conflict and deal with it directly. There is as much potential for conflict as there are combinations of people, and just like

people, each case should be treated in a manner that is respectful to the participants involved as well as the rest of the class.

Five Styles of Handling Children's Conflicts

Style	Uses	Limitations
<p>DIRECTION When you say, in effect, "Do this," you are directing. Direction is a non-negotiating approach. An adult authority decides what needs to be done and gives the direction that it be done. It's important to recognize that directing need not be unkind or authoritarian. Children can be told nicely, but clearly, what they need to do.</p>	<p>When safety is at stake; when children are out of control and need help getting back into control; when there is no time to discuss or negotiate; when the problem is not important enough to spend much time or energy.</p>	<p>Doesn't build children's independence in problem solving; may cause resentment on the part of children; may not really solve problems.</p>
<p>MEDIATION A third party--either a staff person or any trained person--sits with children and helps them work out their conflict by creating an environment where problem solving can take place. This is done by strictly enforcing ground rules: be honest, no interrupting, and no name calling or put downs. The mediator helps the disputants define their problem, develop solutions, and choose a workable solution.</p>	<p>Because the disputants are solving the problem themselves, they are invested in the solution. Also, it helps get to the root of some persistent problems.</p>	<p>Takes time! The conflict may not be worth the time and effort compared to the learning that comes from it.</p>
<p>ARBITRATION Also involves a third party who hears both (or all) sides, then tells the disputants how they should handle the conflict. This may be done with some input from the disputants, or by simply saying, "This is what you're going to do."</p>	<p>Efficient. Gives the disputants a chance to state their point of view, but doesn't spend a lot of time on problem solving.</p>	<p>May not get to the root of the problem. The disputants may not learn anything about solving conflicts.</p>
<p>JUDGMENT Sometimes the emphasis needs to be not on problem solving, but on determining who was right and who was wrong. Children depend on the adult to act as a judge, to listen and weigh the evidence, and then to pass a fair judgment.</p>	<p>When there has been clear wrongdoing and the parties involved want justice; when there is a need for consequences to be decided upon for actions.</p>	<p>Doesn't build independent problem-solving skills; keeps children dependent upon adults; is by nature a win-lose solution rather than a win-win solution.</p>

Discipline

Sometimes an individual student repeatedly challenges and pushes the rules or boundaries. Often this happens for unclear reasons – they may have some fear or anxiety about the course or their peers, it may be that they have not had enough feedback, or have not made a connection with you as an instructor; they may be frustrated in trying to complete or master a skill.

Try to find a way to connect and build a positive relationship, look for the student's strengths and contributions. Make a point of spending some extra time with the student and understand their needs as a person. It can be hard to break a cycle of miss-behavior but it is worth the effort.

A few tips when dealing with difficult people (trouble makers)

- Understand or identify the reason for the behavior
- Be consistent
- Keep consequences short, simple and related to the behavior
- Communicate with the student directly and in private
- Use direct eye contact, but don't intimidate
- Remain calm and use a soft voice
- Affirm what is appropriate and expectations
- Be firm but free of anger
- Listen to the student's side and show understanding
- Don't allow excuses or bargaining.

It is easy to get angry at times – you are human and it is a natural feeling but it can be quite damaging. Try to recognize the your angry feelings when they start to arise and ask yourself why – people get angry when they feel hurt, scared, or threatened. You are a responsible adult leader, role model you cannot lose control and behave in an angry manner. Be calm but deal with the anger in a productive way – when replying or dealing with the source of your anger let the person know that you are angry, or hurt, and why. Do this without yelling or losing control. Once the situation has passed spend some time reflecting on what happened and why, how it was resolved.

Summary of Styles

Whichever style of teaching and learning you are using the primary responsibility is to your students and engaging them in the learning process - try a variety of methods. If at all possible have students practice skills in the environment where the skills are appropriate. For example braces should be practiced in waves or situations where tipping is likely rather than on flatwater.

Teaching methods should be appropriate for age of participants, material/content, learning needs, and environment. Review the material with regard to learning characteristics in the section on learning styles and modify your approach and material appropriately.

Consider how to motivate your students to learn and participate in the process. One good method to make a connection is to spend a little time getting to know your students – ask them their names, expectations and interests in taking the course, and about their

background – use this information and adjust, if necessary, your lesson plan. This works well with older students (adolescents and adults), younger students you may want to engage them in a story about themselves or play some ice breaker games. Be prepared to make some modifications to your teaching style based on what you find out during the initial introductions.

To Trip or Not to Trip

A few years ago I was asked to teach an introductory course for a local wilderness awareness organization. I came to the course prepared to provide instruction on the basics of canoeing. During the initial introductions I found out that everyone attending was employed by a summer camp and had been sent to take the course since they were going to lead canoe trips of one or more days over the summer months. Unfortunately I was not prepared to teach a tripping course (not to mention there was not enough time allocated). I was clear about level of the course and outcomes in the introduction but the knowledge of their requirements gave me a chance to bring in more than just basic canoeing skills. In my feedback at the end of the course I was able to give much more directed information about their skills – at least one person attending met the course requirements but I had concerns about their skills leading a group on a trip of any length.

Self-Assessment

No matter what teaching techniques you use spend some time after every lesson and course to reflect on what worked, what should be scrapped and what was effective. Ask yourself why in each case – keep notes; write your thoughts directly in your lesson plan. Reflect and review as soon as possible; if you wait too long to reflect on the lesson you may miss some important elements that either contributed or detracted from the lesson.

At the end of the course, have the students fill out a course evaluation form. You should provide a list of topics or major subject areas in your evaluation form to remind students what was covered and elicit more specific feedback. This will aid you in future planning and help others who use your lesson plans.

Active Learning and Directed Practice

Keep your students engaged by using various teaching strategies and an understanding of the learning process – try to keep your lessons student centered ask questions, let students explore or try out skills, discover outcomes. One of the most difficult portions of the course is when you spend time with an individual or single canoe working on detection and correction of a specific skill – this could leave the other students with nothing to do but stare at their navels. During this time provide some specific goals for the other canoeists in the course to practice or work on. Have them come back and tell you what they worked on and how things are going.

Theory through Activity

I have a strong belief in active and experiential learning. During your course make sure that you spend lots of time actually in the boat paddling and provide enough time for practicing skills. I like to teach some theory material as part of other skills development, for example students must have a good knowledge of the parts of a canoe but it can be a dry topic alone. I have done away with all but a cursory introduction to canoe parts as a separate lesson. Throughout the whole course I refer to all of the necessary parts of the canoe during more active sessions – getting into the canoe I can refer to the bow/stern, thwarts, gunwales, etc... as parts to use, lean on, touch within the lesson. If this is done repeatedly the knowledge will be passed along throughout the course.

Communication

As an instructor, it can be tempting to think about communication simply as the way you explain and debrief various skills or theory items. However, you should be aware that you are communicating at all times before, during, and after a course, even when you are not even speaking. As an instructor you need to be conscious of the environment where you are speaking and what you are communicating through word, actions, body language and tone.

Environmental Factors

There's nothing worse for a student than trying to focus with the sun blazing directly into their eyes. Be aware of the environmental factors that will affect the quality and effectiveness of your communication. Some of these factors include sun, wind, noise, rain, mosquitoes, etc.

Some Advice

Communicating individually with participants and being empathetic have been identified as important instructor characteristics. A study by Hopkins (1982) found that the "positive effect of the adventure experience on the growth of self-concept" could be negated by the influence of a "competitive, confrontational and unsympathetic" instructor.

Try to anticipate any possible deterring environmental factors and arrange the class in such a way that will minimize the negative effects.

Some tips:

- Always set up your class in such a way that everyone can see you (semi-circle is often a good way to go)
- Make sure that you are the one staring into the sun and that your class is not
- Sound does not carry well outside. When speaking, make sure that all participants are able to hear you by asking "can everyone hear me?" before you begin.
- Factors such as wind noise – even rain falling on rain jacket hoods – will severely hamper the ability for a student to hear you. Be sure to speak loudly in adverse conditions.
- Speak clearly and concisely with good enunciation. Try to limit throw-away words like huh and hummm....

Words

Practice what you are going to say. Sometimes a lesson will sound good in your head but when it escapes your lips you realize that you should have spent a little more time thinking about how to explain the concept (e.g. outside/inside circles). Write down the key words and concepts that the students need to be familiar with and make sure that they are adequately covered. It might be helpful to think of several different ways to explain the same concepts.

Actions

As they say, "actions speak louder than words". As an instructor, everything that you do communicates something. At the same time everything you don't do also communicates

something. The key here is to be self-aware. Know that your students watch you and are there to learn from you. Here are some simple actions (or non-actions) that will effect what you communicate to students:

- How you treat your own PFD and paddle will communicate expectations about equipment care
- Going out of your way to get to know the students, and customize the learning experience for them will influence the way that they instruct in the future
- The way that you show up ahead of time and prepared (or not) will communicate the value that you place on the course and the students paying to attend the course
- Sitting down and relaxing on the dock as you watch students practice maneuvers may communicate a lack of desire or interest in helping them pursue their goal.

Body Language

Similar to your actions, body language is a way of communicating without using words. Again, awareness of self and others is key to using body language to communicate well.

Some things to keep in mind in regards to body language would be:

- Make eye contact when communicating. This is especially important when debriefing students on skills and theory sessions
- Standing square to a student with unfolded arms while speaking with them will communicate that you are interested in what they have to say
- If your body is animated when speaking, you will generate more interest in what you have to say.

Tone

Using an excited or upbeat tone of voice can help maintain focus and energy even at the end of a long day on the water. And let's face it; no one wants to listen to a monotone robot instructor for 48 hours. Also, as a general rule of thumb, when you speak with authority people listen.

Relevance

When teaching skills and theory you should keep your examples and experiences relevant to the students' experience, knowledge and background.

Teaching Methods (encouraged by Paddle Canada)

Paddle Canada encourages the use of the following teaching methods for passing along knowledge in both skills and theory sessions. These methods have been found to effectively convey lessons in an experiential environment and they can be used with most teaching and learning styles.

Teaching Skills – IDEAS Method

The IDEAS (Introduction, Demonstration, Explanation, Activity, Summary) method is used for teaching skills; it is a demonstrator or direct teaching method. It allows the student to practice and explore physically active skills and ask questions. If the students have some prior experience the Activity and Summary portions of the method can follow a more informal discovery route with only assistance and suggestions from you followed by questions from the students.

Introduction

“What is the skill, a story or other related method is effective in introducing the topic”

The introduction leads into the lesson and sparks your student’s interest in learning about the skill. Often talking about something creative or practical will inspire students more than simply detailing what you are about to teach them. For example, most people have found their canoe pointed the opposite direction from all of the other canoes at some point during a canoe course or trip. Learning how to pivot is a really practical way to quickly turn the canoe and get underway. You may think of other more creative ways to introduce various topics.

Demonstration

“Demonstrate or provide an example to convey how (or how not) to correctly perform the task”

It is important to check the location of the demonstration ahead of time to ensure that all participants have a clear view. It may be worth demonstrating the task several times from different angles or using alternative methods. It may be beneficial to demonstrate the task slowly so your students have a clear understanding of the process involved. Although the demonstration portion really is meant to give your students an overall picture of the task you may want to explain the actions as they are performed. Do not spend too much time doing demonstrations – a course is not a forum to show off all of your skills but to provide your students with an idea of the outcome.

Explanation

“Follow up the demonstration with an explanation of the task and its importance; include a comment on any critical pieces.”

Remember that there are a variety of ways that people learn. Utilize various methods to effectively explain the lesson. For example, some students will be satisfied by walking through the mechanics of a box stroke when doing a pivot, other may learn best by watching others, while some need to know what the maneuver “feels” like when it’s done right.

Activity

“Get out and actually paddle.”

Students need to practice the skill that you are teaching. Some may be comfortable with just attempting the maneuver or skill within the expected corridors, however many appreciate putting a newly introduced skill to work in a

game, contest or other participatory activity. For example, forward and reverse straight lines and stops could be practiced by playing “Red light Green Light”. Pivots could be practiced by doing interlocking pivots with another canoe. Whatever the activity is, it needs to be clear that the purpose is to practice and learn the topic of the lesson.

Summarize

“Bring everyone back – ask what worked, if there any problems, ‘ah-ha’ moments, what comes next and the fit with other tasks.”

This may be the most important part of the lesson. The lesson has not fulfilled its purpose unless, at the end of it, the students walk (paddle) away having learned what you wanted to teach them. Try not to do all the summarizing for the students, involve the students; get them to share what they have learned during the lesson. If a student is able to communicate their understanding of the various elements, and more importantly the experience of how they interacted with their canoe then, chances are, it was a successful lesson.

Teaching Theory – IES Introduction, Engagement, Summary

(was Triple D or “Tell Me” method).

The IES method for instructing theory follows three basic steps from the perspective of the student: 1) introduce what you are going to cover, 2) Engage the students in the material, and 3) Summarize, and tie everything together. This may appear to be a very formal teaching style but it can be loosened up substantially by bringing in stories and asking students for their thoughts and opinions – making part of the learning session a discussion following an indirect or discovery method of teaching.

Introduction

Start with a basic introduction to the topic. Include the overall goals or objective of the material and how it fits with the overall program – why are you talking about this material. This section should be short and concise. An example would be learning how to interpret the content of a topographical map. This fits in the whole program as part of navigation, ‘staying found’, and knowing your place when paddling.

Engage

Work through the actual subject starting with some background information – what is a topographic map. Mark out some specific material about the topic such as contour lines, lakes, rivers, roads, interpretation, measuring distances/direction, aligning the map. Bring your students into the session by getting them involved; have them draw a contour map of the immediate area. Bring maps (of the local area) for students to share and have them find places and measure distances. Encourage your students to participate in the discussion by asking leading questions about their experience, how you would interpret some concepts, etc.... Get everyone involved through discussion or activity.

Summarize

Once you have completed the topic go back to the original goal and re-iterate what the students should have gotten out of the lesson. In this case an understanding of topographic maps.

Leadership

As an instructor you are also considered a leader in the paddling community. Related to your instructor role you have a responsibility to recognize, teach, and demonstrate leadership skills within your courses. By being aware of the kind of leaders along with the various leadership styles you can then point out and explain the skills that are necessary for someone leading or taking a group out on a trip.

A leader needs to be aware of themselves and the others around them –watch for any concerning behaviors or risks in individuals, activities, or the environment. The leader needs to understand the limits of each individual in the group and the group as a whole. They must be willing to take responsibility or delegate responsibility within the group. They need to be aware of interpersonal dynamics within the group and be able to deal with those relationships. Communication with the group is important at all times during a trip including before and after – this includes relating any expectations, requirements and risk management plans.

Know when to stop

Many years ago I was leading a trip through north eastern Manitoba. We were out on the water, the temperature dropped the wind came up and it started to rain. Although everyone was dressed appropriately several in the group got chilled – it was time to pull off to the shore, have some hot soup and hot chocolate, sit under the tarp out of the elements, and warm up a bit and make some hot chocolate and soup. Although some in the group wanted to push on it was my call to take a break and raise the morale of the group.

Like learning styles leadership styles are fluid and dependent on the individual and context. A leader may employ different styles at different points during an outing or when dealing with various situations. There is a strong relationship between teaching styles/skills and leadership because leaders are often in a role or position to pass along knowledge even if it is only through behavior, actions, and mentorship.

Leadership Styles

Daniel Goleman suggested the following Six Leadership Styles. The following is an overview of the styles along with strength and weakness of each.

Coercive Leader

The coercive leader, which is one of the most aggressive of the six Leadership Styles, expects and demands immediate compliance to his/her orders. He/She has a style that accomplishes tasks by ordering and dictating, even demeaning his/her followers at times.

This style is best used in situations where the group requires a complete turnaround which is urgent and there is no real time for active group discussions – for example during emergencies or when health and safety is at stake.

This style should only be used for short time frames, just to get the job done, as the long term impact can be negative.

Authoritative Leader

The second of the Six Leadership Styles, the Authoritative Leader establishes him/herself as being the expert in the group. One who is a visionary and sees the way forward, leading the group to success.

Although the Authoritative leader leads the team to the vision, he/she will utilize the team to establish how they reach the leaders goals and objectives. This style is particularly effective in times when a new direction is needed: someone comes up with the vision and the way forward and the group follows along.

Affiliative Leader

The Affiliate Leader is renowned for building teams; for putting individuals and trippers first. Participants can expect praise and feedback; there is normally a good sense of interconnection with the team.

This style is effective in many situations including when there are situations of low morale and poor teamwork. Utilizing this method will, in the longer term, create good team bonding and heightened team performance.

The negative aspect can be that poor performance will go by without feedback as the Leader may feel that conflict will upset the balance. In this instance, one must be mindful to adjust their style to suit positive feedback when necessary.

Democratic Leader

The Democratic Leader will use the team as decision makers – having the team vote to make decisions and improvements. Communication is key in this model, whereby all opinions are listened to as a group. The Democratic Leader is merely the chair for effective team decision making.

When the group is ready for Democratic Leaders, this style produces an environment where participants can feel good about themselves and their shared goals. Everyone feels that their opinion counts, and because of that feeling they are more committed to achieving the identified goals and objectives.

This leadership style can be time consuming. If decisions have to be made in a timely manner a leader may still facilitate discussions to minimize wasted time.

Pacesetting Leader

When the group is self-motivated and highly skilled, the Pacesetting Leadership method comes into its own and is extremely effective. These Leaders set very high performance standards for themselves and the group and epitomize the behaviours they are seeking from other members of the group.

Like the Coercive model, this is another of the Six Leadership Styles that cannot be sustained for long periods as the leader will "burn out" due to the demanding pace. A good example of when to use this method is when a group has been functioning together as an effective team for a while and are now performing in a good team culture. At this point, the Leader may wish to step things up and move to a new level of performance for a short term goal.

Coaching Leader

In the Coaching Leadership Style the leader focuses purely on helping others in their personal development, and moving the group toward a goal. Within this style, the Leader helps team members become successful in their development by coaching, developing, and mentoring to ensure they have the knowledge and skills to be successful.

This style works best when each of the group members already understands their weaknesses, and is receptive to improvement suggestions or ideas. Be careful with over use, as this can come across as micromanaging the team. If used well this is an effective style to use in a learning environment.

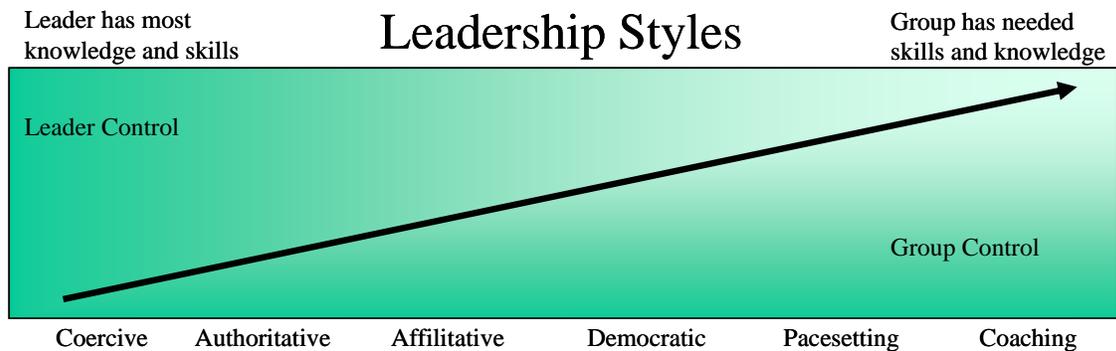
<i>Style</i>	<i>Description</i>	<i>When to use</i>	<i>Weakness</i>
<i>Commanding /Coercive</i>	Dictatorship – “Do what I say”	In urgency or emergency – when time is scare and there is a crisis	Members of the group can feel stifled as they are not asked for an opinion and ordered around
<i>Visionary/ Authoritative</i>	Mobilizes people towards a vision	When a new vision and direction is needed	Lacks the ability to help team members understand how they get to a vision or goal
<i>Affiliative</i>	Focuses on emotional needs over trip needs	Best used for healing rifts and getting through stressful situations	Confrontation and emotionally distressing positions can be avoided or not dealt with properly
<i>Democratic</i>	Uses participation & listening to both the bad and the good. Allows involvement and choice from everyone.	To gain valuable input from the group and gain ‘buy-in’ when there is sufficient time.	Can take a lot of time with very little end product if time is limited.
<i>Pacesetting</i>	Builds challenging and exciting goals	When the team is already highly motivated and competent	Can lack emotional intelligence
<i>Coaching</i>	Mentoring and helping people find their own strengths and weaknesses and linking to the overall goals/vision	When building longer term personal goals, self-directed learning. Learning or educational environments	Can come across as micromanaging/ directing.

While coercion and pacesetting do indeed have their uses, research suggests that these styles can damage the group atmosphere in the longer term. This will ultimately reduce group flexibility and commitment; the key is to use these styles only when needed and in a short time frame such as an emergency.

In comparison, the other four leadership styles have a proven positive impact on the work/tripping environment and also improve performance.

The most effective leader is one who can master at least four of the styles, and who can use the appropriate style to suit the situation. Remember, even the Coercion and Pacesetting roles have a place, you just have to use each style appropriately when the situation dictates. Just like learning and teaching styles this list has been provided to give

you some ideas about the kinds of leaders there are rather than provide a method to pigeon hole yourself or others. Every leader will bring a blend of styles based on their interest, personality, learning, and experience.



Skills a Leader Must Have

A leader must have a clear set of technical and organizational skills to ensure that a course or trip is successful, safe and enjoyable for everyone. A weakness in any one of these skills may mean a potentially dangerous situation. You should review the skills of a good leader with your class and talk about why each of these skills is important and how they related to the course that you are teaching.

- *Paddling and technical skills* – a leader must have good skills and technical abilities. These need to be at or above the level of the group.
- *Safety, risk management, and first aid skills.* A leader is responsible for the group in good times and bad and needs to consider and manage the associated risks.
- *Organizational* – the ability to organize a group, keep track of timelines, tasks and requirements.
- *Instructional* - allows the leader to effectively communicate and demonstrate safety and ethical practices and knowledge, attitude, and skills to the participants.
- *Group management* - maintain a positive group dynamic while striving towards the group’s goals and to ‘read’ the group in order to evaluate its progress in achieving their goals

Leadership Attributes

A leader should have a set of goals or attributes that they work towards achieving. The following six attributes described by John di Frances should help with the context and goals of a leader. These attributes must be worked on; time, practice, and self-discipline are required but the work towards attaining leadership skills will pay significant dividends.

- *Set High Standards* for both yourself and your group.
- *Live your Standards* and mentor those who follow. In essence practice what you preach – this is an extremely important tool for instructors and leaders.

- *Create and Share a Vision.* Think of where you want you and your team to go, what you want to achieve. Share this goal.
- *Make Hard Choices.* As a leader you may find this one of the most difficult things to do – sometimes you need to make a choice. This is the responsibility of leading, make a choice, be firm, and accept the consequences.
- *Be Visible and Out Front.* Be willing to participate with your group in the same activities. Show them that you are willing to ‘walk-the-walk’.
- *Instill Hope in those that Follow.* As a leader encourage your participants with positive reinforcement. Let them know what is possible and that they can attain the goals that you have set.

Assessment/Evaluation

Next to a well-developed lesson plan understanding how to measure meeting objectives and outcomes is a critical task that that you have to do during all of your lessons. Keep in mind that your ability to assess and evaluate how someone is doing means that you have the actual physical skill and knowledge of the theory, and a thought-out teaching plan.

You should clarify you expectations and the requirements to pass the level at the beginning of the course and within each lesson. Students should know how they will be assessed and that they will be given feedback throughout the length of the course.

Expectations

Skills parameters

Ensure that your course participants know the parameters in which they are to perform specific skills. This includes the corridor width and length, yaw, pitch and roll that are permitted when performing each maneuver. At lower levels (basic canoe) it may be enough to tell your participants that they will be able to paddle in a relatively straight line across a lake. In more advanced courses it may be helpful to provide a handout that contains a list of the expected skills and criteria that will be used in assessing competence.

Students should be taught how to use reference points to help determine whether they are within the parameters or not. You, as the instructor, should also utilize reference points to determine the accuracy of the maneuvers. These references could include landmarks, dock edges, buoys, colored stakes on shore, or other improvised objects.

There is no prescribed ‘right’ stroke or technique for performing any specific skill: the paddler is free to use whatever method works for him or her. The specified performance criteria assume good paddling conditions: little or no wind, few waves. If conditions are unsuitable, testing should ideally be postponed. If

Testing & Assessing

In most canoeing courses I have found that the process for assessing physical motor skills is straight forward and usually completed. Softer or more intellectual skills are rarely assessed beyond a very basic level (e.g. “do you understand?”). Take the time to develop an assessment tool for the depth of knowledge in theoretical areas. You might use an actual test with written or multiple choice answers. In a discussion use a list of leading and directed questions about the topic. Using informal evaluation (discussion and participation) is more in line with the nature of canoeing but it is much more difficult to get a clear indication of knowledge uptake.

this is not possible, the instructor/examiner may take conditions into account. This allowance must never be used to pass weak paddlers whatever the conditions.

Criteria Explained

CORRIDOR

Corridor defines the allowable deviation from the prescribed path of the canoe. The placement of the corridor is somewhat flexible: if an advanced solo paddler is paddling forward (corridor: 1 meter) and drifts just under a meter to the left from a straight line, this is within bounds unless they also drift some distance to the right of the original line.

YAW

Yaw is unwanted pivot. Thus, if an advanced solo paddler is paddling forward (yaw: $<20^\circ$) their boat may not pivot more than 10° from the direction of travel. Yaw is difficult to detect in some maneuvers, in particular in circles or offset lines, and most instructors now look primarily at maintaining a line within the specified corridor.

ROLL

Roll is undesired side-to-side rocking of the boat. Controlled changes in the side-to-side heel of the boat are acceptable where the routine or maneuver warrants: as in some techniques for performing a stop turn.

STROKES

Strokes should, ideally, be splashless without unnecessary spraying of water. Water dripping from the paddle blade is not splash nor is a small amount of gurgling when the paddle is used forcefully (where such forcefulness is appropriate).

SPEED

Once underway, speed should be relatively constant. This means that there should be no long-term speeding up or slowing down and that in routines the 'easy' direction should not be faster than the 'hard' direction. The paddler should apply forces smoothly so that the canoe does not surge with each paddle stroke.

Depth of knowledge

By the end of the course students should be familiar with all of the theory and knowledge items covered in the course. They should be able to communicate them back to you (as the instructor) when asked.

Requirements to pass the level

The following method has been used with Paddle Canada courses for the evaluation of each teaching and demonstration item:

- P – Pass. This means that the material was demonstrated in a form that meets the expectations of the instructor consistently within any guidelines or criteria. Your

students must be able to repeat the demonstrated skills at the necessary level. For instructor candidates this means: they have covered the material in theory lessons adequately, there were no significant errors in fact or information, and there was suitable background knowledge to answer more in depth questions. Presentation of material was clear and followed a rational and meaningful progression.

- W – Weak (if there are 2 or more “W’s”, the student will receive a conditional pass until the items are brought back up to a “P”). This means that the skill has been completed but there are some problems either with consistency or understanding. In theory lessons there may be minor inconsistencies in background or factual material or there was an inadequate amount of background knowledge.
- F – Fail. The skill is very weak and needs major improvement to pass. This means that the skill cannot be completed consistently within the identified guidelines. Significant errors in fact or incomplete information were given in theory lessons, or the presentation was not organized and did not progress in a logical direction.

Critical Feedback

Once course expectations are clearly communicated to your class, it will be important to provide critical feedback to each participant as they progress through the course. At the halfway point of the course you should meet with each participant to communicate how they are doing up to that point (big picture). Highlight what they are doing well and areas that they could improve. At the end of the course you should meet again with each student to provide a final assessment of their performance. In shorter courses it may not be practical to have more formal mid-course meetings but you should be providing formative feedback throughout your course. When you are providing feedback, try to be as specific as possible so that your students have concrete suggestions to refer to in the future.

SMART Feedback

The S.M.A.R.T model may be a useful way to help provide feedback. This model is modified from an original suggested by George Doran back in the 1980s; it is usually used in project management, employee performance management and personal development but the ideas can be appropriately applied to feedback to students.

The letters broadly conform to the words Specific, Measurable, Attainable, Relevant and Time-limited.

Specific: Provide clear specific feedback to the students regarding the topic or issue that you are dealing with. This means the feedback is clear and unambiguous; without vagaries and platitudes. Do not provide too many details; keep the feedback simple and straightforward.

Measurable: The second term stresses the need for concrete criteria for measuring progress toward the attainment of the skill. This could be ensuring that the

students are aware of the specific criteria that they are attempting to meet – including distance, yaw, and corridor.

Attainable: The third term stresses the importance of being realistic and attainable. An attainable goal may stretch a paddler in order to achieve it; the goal should not be extreme. Consider the level of the course that is being taught and the expected achievement goals of the individual or group. That is, the criteria are neither out of reach nor below the expected standard of performance, as these may be considered meaningless.

Relevant: Any feedback that is provided needs to be relevant to the objective or outcome of the lesson.

Timely: The feedback needs to be provided within the context of the lesson. It does not always need to be immediate. If students are exploring a concept or trying to work out a problem/skill on their own – give them a chance.

Incomplete Course

If a student does not complete a skill, lesson, or course it is both a reflection on their abilities as well as your own. Take time to reflect on what happened during the course and if there were any alternative methods that you could have tried.

One of the most difficult tasks that you will have as an instructor is telling a student that they did not meet the requirements to complete a course. There are a few things that you can do to help:

- Be clear at the start of the course about expectations, skills (both at the start and at the end of the course), time needed to practice, and assessment.
- Provide mid-course feedback or ongoing feedback – if it looks like your student is having problems it is better to be up front early. In shorter courses provide feedback throughout the course and within every lesson.
- Keep good notes during the course about where there were deficiencies. Include in these notes constructive comments about meeting the course or lesson objectives.
- Consider the expectations of the student at the start of the course – in some cases your student may have not expected to complete the certification but considered it as a step along the road.
- In the final discussion be positive about the skills they have completed. When covering the skills that they have not completed be prepared to discuss what can be done to meet the requirements. Be as specific as you can.
- If they are close to passing (e.g. two weak skills) Paddle Canada does allow for re-assessment within a year. When providing constructive and realistic goals let them know about options for re-assessment. Recently Paddle Canada has supported re-assessment of skills through alternative routes such as video recording or tele-video.

When there are only a small number of requirements that still need to be met you as an instructor may give a conditional pass. When reporting on the course the reasons and

deficiencies must be documented for both a conditional pass or incomplete/fail. This will allow you, or another instructor, to revisit the skills at a future time with clear knowledge of the requirements left to be completed.

Course Evaluation

Students should always be asked to complete an overall course evaluation. This evaluation should give the students a chance to reflect on the course, how/if it met their expectations (if not why), and a chance to evaluate specific components (lessons) in the course. Along with the course material include questions on the course site, built environment, equipment, and facilities. Provide some form of ranking (1-5, N/A) for each of the criteria that you want to evaluate and give the student a chance to express themselves through comments. Make sure your students have adequate time to complete the evaluation, this may include letting them take the forms away and return them later. If you allow evaluations to be taken away you may want to provide an easy way to return the forms – e.g. via email or self-addressed stamped envelope. Sometimes your students may feel uncomfortable providing feedback directly to you – especially if it is not positive. You should give students an option to provide comments to a third party (e.g. to the PC office).

Review the comments that are provided in the evaluation and include the students' comments as part of your personal evaluation and reflection on the course. Not all positive and negative comments are valuable but they should all be read and considered.

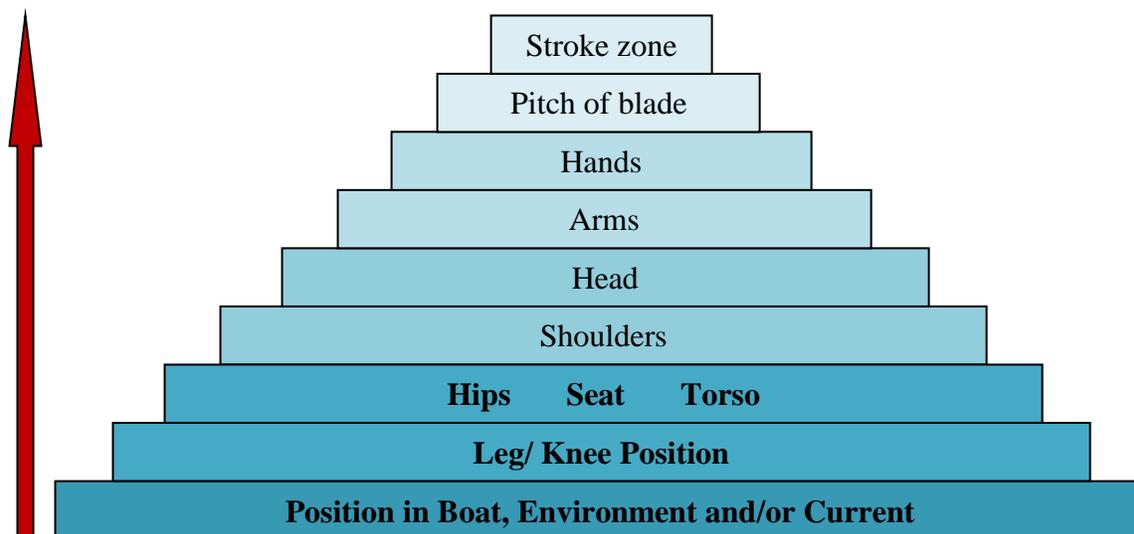
When completing your own self-evaluation ask the same questions about how expectations were met and outcomes tested. Edit your course notes and lesson plans so any changes or enhancements are clear with some rationale.

Detection and Correction

A key role for the instructor is to provide tangible suggestions and feedback to students as they perform strokes and maneuvers. The following steps should be taken when detecting and correcting skills.

1. Ensure that you are very familiar with the physical principals associated with any active skill before trying to detect problems with others.
 - a. The better your understanding of the physical principles or mechanics of the strokes, leans and maneuvers, the better you will be at adapting your feedback to varying scenarios.
 - b. Keep in mind that different people can display the same efficiency and results using different methods. If you see something that is different it may not necessarily be wrong, evaluate what you are seeing for safety and efficiency, and completing the skill (be open).
2. Use the following pyramid to assist in detection and correction. The pyramid is meant to identify focus areas when trying to detect and correct a student's paddling. The bottom elements are the base on which all skills are built. A weak base means a weak skill. Do not skip to the top before analyzing the entire

pyramid. Many instructors tend to skip to the pitch of the blade, at the top of the pyramid, instead of starting at the base of the pyramid, which is often the root of a problem – the student’s position in the canoe. A simple case in point: getting a canoe to go in a forward straight line is tricky enough but in a canoe that is trimmed (weighted) toward the front it is next to impossible. Adjusting the trim by moving the student’s position in the boat is often enough to make straight lines a breeze.



Relate to the feedback pyramid and focus on the movement of the canoe (outcome) rather than the mechanics of making the canoe move.

3. Minimize your comments
 - a. Whenever possible, try to prompt the student with questions that help them do the detection and correction themselves
 - b. Once you have determined the likely problem, correct it as simply as possible. In many cases, especially with children and older adults correct or point out one concept at a time rather than a series.
 - c. If you are not sure of the cause, do not provide the student with all of the possible solutions. If you want, you could switch spots and have the student watch you and try to detect the differences.

Ensure that the solution that you are suggesting is relevant to the problem. Do not ramble on and confuse the issue. Give your students a chance to practice before giving [too much] feedback. On the other hand don't let your students practice an incorrect method without some comment.

Consider the forces, body mechanics, and hydraulics that are required to move the boat through a particular motion. One very important consideration when evaluating a maneuver/stroke combination is to think about pulling the canoe to the paddle – the paddle should be static, the boat moves. Any transfer of force through the paddle should be at right angles to the blade. Changing this perspective will often help students visualize what should be happening.

Part of your job as an instructor is to give your students the tools and knowledge to evaluate their own skills. This will allow them to take their skills into new situations and continue to learn in an informal way. Self-evaluation usually works best with older students (starting with young adults and older adolescents). Continue to use a demonstration, discussion and discovery method to understanding how to correct and understand any problems. This format of learning alone will give students the skills to question and try on their own. Discuss the above pyramid and how you detect and look at skills.

In some cases you will need to decide when to call it quits – when someone just doesn't seem to get it. Moving on does not mean abandoning learning the skill, in many situations your student just needs to refocus their attention because the learning process has become frustrating and destructive.

There are two primary reasons to move on: 1) Your student is frustrated and at a point where learning may not be possible, continuing to focus on a frustrating task will be counterproductive. 2) The rest of the group is being held back within a class. When on a trip you should only go as fast as the last person (canoe); in a class situation look at alternatives – end the lesson but encourage the individual(s) that need more help to approach you during one of the practice times available. You do not want to abandon skills and you should not intentionally leave anyone behind. If you are cutting a lesson short for one of these reasons be clear where work needs to be done and some realistic goals to work toward to complete the skill or lesson.

The Forward Stroke

We can probably take a few lessons from the flat water racing crowd when paddling the forward stroke – this is something that they do (and pretty much only do) and have raised the skill to a high level of perfection.

Use the large muscles of the back and core. Wind up - rotate your torso starting at the legs and hips, lean forward from the hips (not arched back) but keep looking up (chin up). Pull through by pushing hips forward, un-wind your body around your spine. Your arm position remains relatively static. Complete the stroke as the paddle reaches your hips. Think of planting the paddle and pulling the boat up to it and you'll be more likely to use your torso muscles. Keep your lower body and boat still (isolated); transferring power into the forward motion of the boat – ensure there is no rocking or bobbing of the boat.

Kelvin Horner (specialist white water canoeist) notes this stroke remains "the first to learn and the last to master"

Take a look at Dave Hearn's web description of the forward stroke "Toward Paddling Perfection: How to get the most out of the Forward Stroke" for more information.

Practice Suggestions

As an instructor you will be teaching canoeing skills and theory. Much of this document provides information at a very theoretical level – it is all useful information but you might just want a few hints on actually teaching a canoeing skill or how to transfer information. Sometimes it can just be frustrating trying to figure out why something is not working as expected.

The following items are little things that you can do that will help practice specific skills. There are many ‘tricks’ that paddlers can use to help practice technique, smooth out transitions, and learn about their paddling skills. Learning about how far you, and the boat, can go or how the boat will move under various conditions is important when out paddling for the fun and during courses; the knowledge and skill will come in handy when conditions get bad. Practicing is an important part of any skilled activity.

Encourage your students to explore different techniques and not to be worried about getting things wrong, or getting wet. We all fall out or tip over it is part of the learning process. “*Someone who never tips doesn’t know the tipping point until it is too late.*” – Anonymous

Thoughts on an Actual Instructor Course

1. I like just heading out for a paddle on the first day/evening. Spending time getting to know my students and casually looking at their skills – I do not attempt to teach anything at this point just get to know each other.
2. A good suggestion that I have started to practice is starting the formal session by demonstrating, and trying, all of the basic paddling skills that are required. This provides a level of expectation and an understanding of the skills involved and a consistent language. I do not do any correction/detection just demonstrate/try and move on at this point.
3. Get some technology involved with the course. Use video and replay to help with correction and detection, access course material online and samples online, etc... This has been a difficult transition for me since I paddle to escape from technology.
4. Instructor courses should be about how to instruct. Have the students spend all of their non-demonstration time on the dock or in the canoe with you doing correction/detection. Spend less time teaching actual skills and more working on teaching instruction skills – all of your instructor candidates should already have the skills.

Not every one of these suggestions will be helpful or useful for all paddlers or every maneuver but take a look, try some out – see what works.

- *Blindfolded* – When paddling or practicing put on a blindfold or just close your eyes during a maneuver. Try to feel the movement of the canoe around you and over the water – see if you can maintain a course (or point) without looking.
- *Buoys and Markers* – When getting started find a marker that you can use to keep you focused. A marker can be anything – a water weed, a bridge pile, dock, a stick on the shore. Don’t get too focused on markers – go out in the open water and just fool around as well.
- *Expand your horizons* – Paddle in all kinds of boats and in a variety of conditions. White water teaches us one set of skills, Lake travel another, Style focuses our mind, Marathon paddling when we need to go places. Every paddling technique has its strengths just as every boat, paddle, and person. Learn the strengths to maximize your paddling.
- *Just Stop it* – sometimes there is too much of a good thing. If you are getting frustrated and completing a skill is just not working (this is the 100th time trying

to do a stop turn) then stop trying, go do something else. Trying a different skill or getting out of the boat and going home; come back another day. It might mean taking a thirty second break to 'shake it out'.

- *Non-dominant paddling* – We often get stuck in a rut or a bad habit and breaking out is difficult. Some experienced paddlers have a really difficult time with new strokes, or even old ones like the J, until you have them paddle on their non-dominant side. There are typically no ingrained habits to break on the off side so it becomes an easier task to learn. By the intermediate level in most courses paddlers will need to be able to complete skills on both paddling sides anyway – why not start early?
- *Paddle in adversity* – When first learning to paddle we like to have a nice quiet bay or protected space and then when we have problems we blame the weather, current, the ripples from Joey's gunwale bobbing, etc...
- *Practice* – Funny this should have to be said but it surprising the number of people that expect to be able to hop in a canoe and paddle without any practice. I often get asked how long it took to paddle 'that way' – I am now 45 and I started paddling when I was about 12 so that means thirty three years and I still have a more to go.
- *Just do it* – OK I know I said 'just stop it' elsewhere but sometimes, for the same reason, we get too focused on a particular task and inside (mentally) we get jammed up. It can be helpful to let it all go and not worry about the little stuff – feel the motion, become one with it, let it flow over and around you.
- *Sink slowly* – Getting a good heel, especially tandem, on the canoe is difficult for many people since it feels unnatural and tippy but it is very important for canoeing and completing maneuvers. To get a feel for where the canoe will actually tip heel the canoe and slowly dip the gunwale under the water until it sinks (or at least fills – I hope your canoe doesn't sink).
- *Sit-up* – Remember your grandma placing a book on your head and having you walk around? Although not quite the same it might be something to try – posture is important for demonstration and looking good but this little trick will also keep you still in the boat. You don't have to use a book but think about your posture while you paddle – unless done on purpose being hunched over is not a strong paddling position. The other important thing to remember about posture and body position in the canoe is keeping your bottom and top independent – allowing the canoe to move underneath you and keeping your head over the boat.
- *Something else* – Take some time to do an activity that supports your paddling but seems to be completely different – weight training (strength), yoga (flexibility, motions), cycling (balance), palates (core strength), play music, sing, whistle...
- *Teach* – Try to explain how to do a particular maneuver to someone else or write up instructions that someone can follow. Having to teach or tell someone else clearly will often force us to focus on what is important and how a skill is actually accomplished. Be prepared to answer the why and how questions. Take a skill

Adversity

I have found that paddling in more exposed places – a little wind, rain, or current actually makes me think harder about what needs to happen. I remember being tested on solo pivots in the wind and having no end of problems. My instructor asked me to take a break (from frustration) and do a line pivot into the wind. I came back and could hold a nice pivot in place after that.

- and boil it down to the bare essentials – a paragraph. Watch someone else and see if you can detect problems and suggest, nicely, alternatives or corrections.
- *The Can* – Place a moderately weighted cylinder (soup can, water bottle, etc...) in the chine of the canoe. When paddling a smooth maneuver try to keep the container from rolling around. Alternatively add a second container perpendicular to the direction of travel. This little trick will show you when the canoe is rolling side to side and often by watching the can, without thinking about the strokes or body position, your paddling will become smoother.
 - *Video (movie star)* – With the advent of inexpensive digital cameras that can record quick time, mpeg, or avi movies this is easy to do. A few years ago I thought I would make some short videos to post on my web page to help explain some skills. I mounted the camera on a tripod, started it recording, and then hopped in my canoe and paddled a few routines. I was surprised how much it helped me to watch, detect, and correct myself.
 - *Vision* – Look outside of the boat and your paddle. The further you look away from the boat and yourself the greater control you will have with improved balance and posture. Your maneuvers will improve dramatically if you are watching the world around you and not the bottom of the boat. This seems to be counter to the ‘blind folded’ advice above but both give you feeling of place – staring at the bottom of the boat or your hands gives you neither.
 - *Watch* – I remember the first time I saw someone doing American Freestyle. It was on a little river near where I live, I sat on the bank and watched quietly and un-noticed. When they were done I went out and tried until I could do some of the same things. It was only much later that I took a course and discovered this discipline had a name.
 - *Weight turns* – Weight turns are an incredibly powerful tool for understanding the behavior of a boat. This is one of the first things I do when getting into a new boat since it allows me to get a feel for how it will behave.
 - *Why and How?* – Ask yourself ‘Why?’ when paddling. Why does a static draw turn the canoe, but also move the canoe sideways? Consider power, torque, and force – the flow of actions and what comes into play for a particular maneuver, how can they be adjusted. Consider how everything comes into play – body position/movement, weighting, paddle placement. What does each add? Can the skill be done using only one of these?

Instructional Aids (on water)

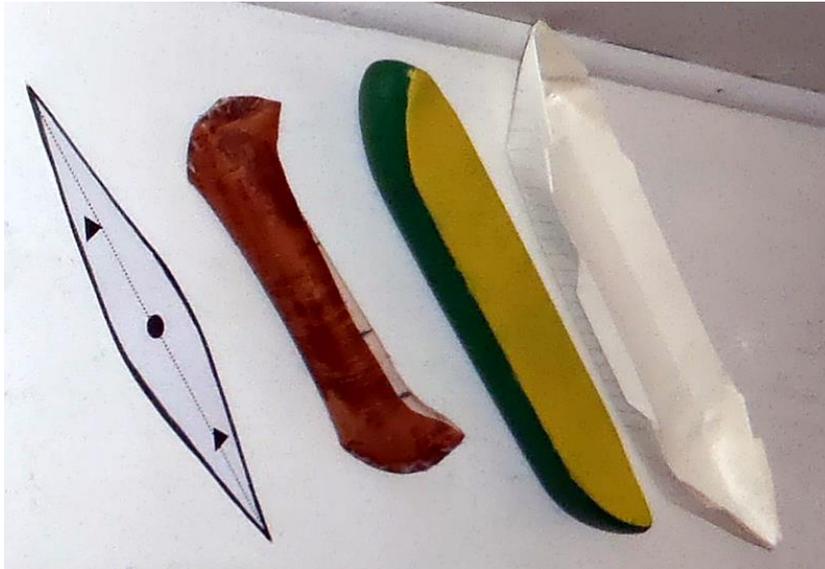
The following provide some suggestions for instructional aids.

White Board

A white board is a wonderful tool for drawing out pictures on the dock and trying to explain concepts or ideas. A great alternative that can go in the boat is a laminated white sheet (poster size) that can be rolled and stored in bottom of the boat. This can be pulled out whenever necessary on the water.

Model Boats

You don't need to have anything too special but having a model boat helps to explain many concepts. If you are really stuck a quick and easy origami canoe can be made (see appendix).



Games

Games are an incredible teaching tool – they are fun, get everyone involved, and focus on an outcome rather than a particular skill or maneuver. See canoe games document referenced in the appendix and found on the Paddle Canada website.

Video

With the advent of inexpensive digital cameras this tool is now available to virtually everyone. Record students and then having them watch themselves and do self-assessment – immediately in some cases – this is a powerful teaching tool.

You are not limited to just recording your students, rent or bring videos done by experts to help students visualize what they need to attempt. The paddling videos by Becky Mason and her father (Path of the Paddle) are an excellent start.

Handouts

Although handouts should be minimized during courses a few well-placed handouts and diagrams will provide memorable material for students to take home. As a minimum a list of skills and knowledge items required by the course should be provided to students. Include in your handouts more sources of information and paddling opportunities.

Small Paddle

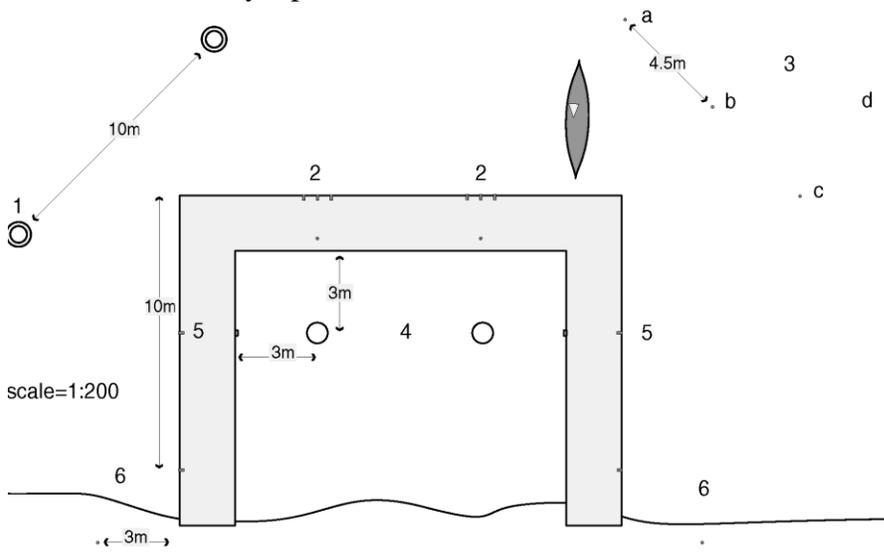
A small paddle (e.g. 2-3 feet) can be used as a demonstration aid. It is often easier to see the whole paddle and all of the motions when using a paddle sized for children. Bring a set (if you can find a set) for everyone in the class and use them when first doing dry land sessions.

Markers

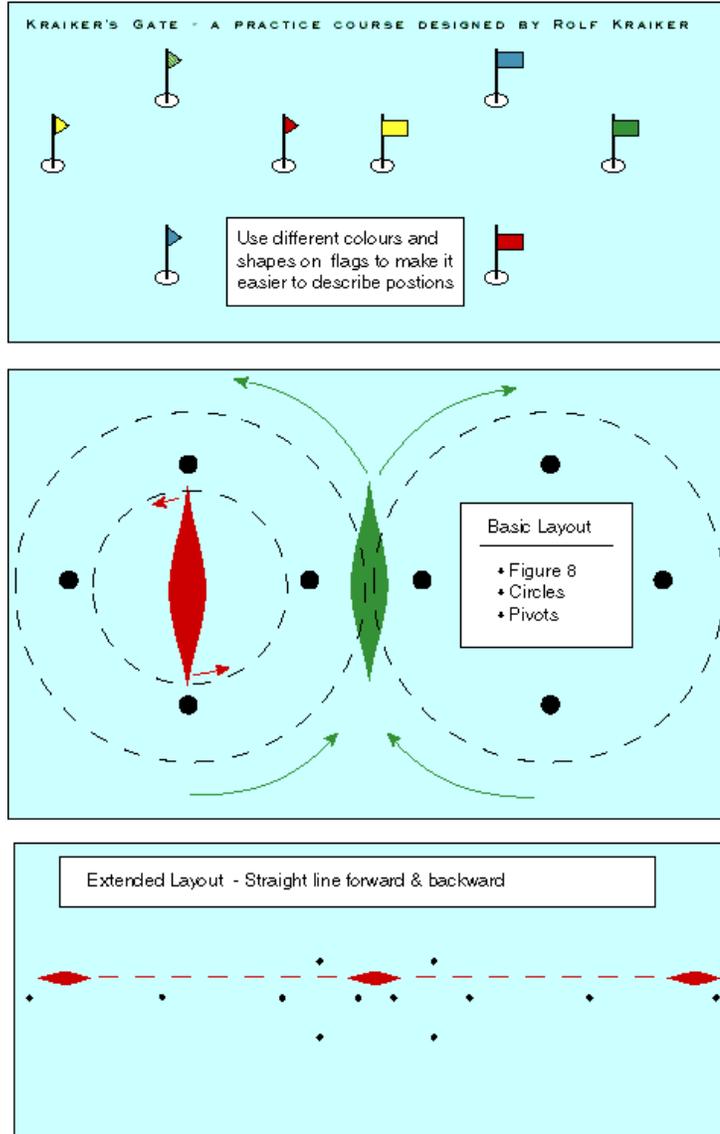
Markers provide an invaluable tool for both students and instructors for identifying corridors. Remember that canoeing actually happens in 'the wild' so don't become reliant on having students paddling around buoys and markers – use them as an instructional aid and then move to open water.

The diagram below shows a variety of marker examples around an enclosed dock (adapted from CRCA resource manual 2004). There are a lot of example markers in the diagram that provide alternative ideas; modify the layout for the local requirements. At MPC we often use a simple set of four marker buoys two canoe lengths apart in the shape of a cross (+) for circle courses, pivots, and displacement.

1. Two circle buoys for figure-eights and the various circle-based advanced maneuvers
2. Tape and pipe insulation sticks or traffic cones for straight lines or stop-turns
3. Stick buoys for two English gates (ab & cd), an alternate (and slightly smaller) figure-eight course (ac), or sighting for sideward or straight line along the end of the dock (bd)
4. Two hanging hoops for pivots
5. Tape and the uprights for the hanging hoops for straight lines
6. On-shore sticks or traffic cones for sideward and line-pivots; the distance is indicated by tape on the dock and the end of the dock



Rolf Kraiker has suggested a fairly simple setup for buoys that provide a variety of opportunities for different maneuvers.



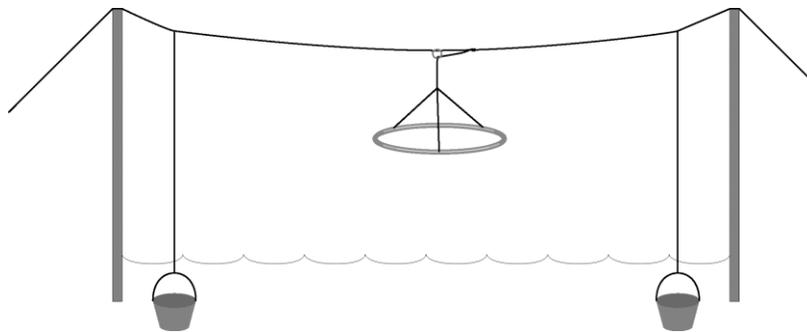
Simplest buoy is just a water bottle/jug, a rock and a piece of string. Use an easy to adjust knot at the water bottle end and the rock as an anchor. You can make much more complex buoys (see <http://home.cogeco.ca/~canoedance/downloads/marker.pdf>). A used milk jug filled with sand or cement makes a great anchor and a PVC pipe with a pool noodle glued around it provide a good stick marker. Eric Gyselman made a set of these kinds of buoys for MPC and they have lasted for years. When making buoys make sure you have something to do with the 'loose' end so it does not float in the water and get caught up in paddles.



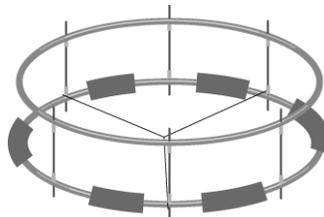
Marking docks with duck or water proof tape at 5 meter intervals provides an easy mark to follow when doing side displacement or circles. Additional makers two meters apart provide landing points. Ask permission before marking docks.

Land based alignment ‘sticks’ – these are two vertical standing sticks or cones placed on the dock or shore. Align both of the sticks (one in front of the other) and keep the two sticks aligned as you paddle, your line will be almost perfect. Although making standing sticks or pushing markers into the sand on the shore works using two trees, a paddle or any other two markers works just as well.

Some instructors use hanging hula-hoops for assessing pivots. Hang a hula-hoop of an appropriate size from a tree limb or other static object over the water. The hoop needs to be stabilized from several points so it does not swing in the wind. The paddler keeps their head inside the hoop while pivoting – personally I find this technique very problematic. The students tend to focus on the hoop rather than the action they are attempting. Although it is easy for the instructor to assess there are better methods such as using remote markers that make the student a better paddler – unfortunately for the instructor remote markers are harder to assess.

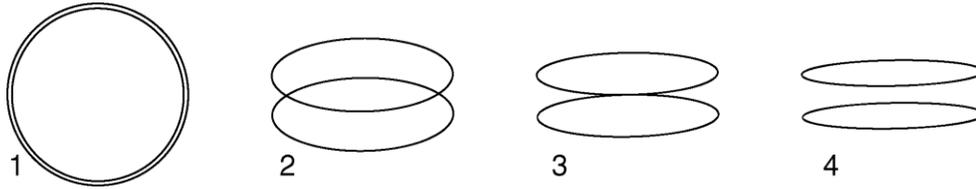


Hoop buoys have been used successfully for paddlers working on keeping circles a constant size and arc. The theory is by aligning the two hoops and keeping the alignment of both the same the transcribed circle will be the same – like the hanging hula hoop this technique for most students is too complex for the gains.



1. If you are directly over the two hoops, they will appear as two circles, one just inside the other.
2. As you move away on the water-plane, visual perspective makes the circles appear as two interlocking ovals.
3. Eventually, the two ovals will narrow to the point where they appear as two ovals just touching each other—a very flat figure eight.

4. As you get further away yet, the two ovals will separate, one above the other.



As a final note with regard to the use of markers and buoys: Don't Over Use Markers. I have met a number of paddlers that have a very high level of paddling finesse when working around markers (buoys/docks) but they are un-remarkable paddlers when the markers are removed or not available. Markers should only be used as a tool to help understand a skill or assess the ability to paddle within known criteria. Students should be encouraged to paddle without the restraint markers.

Instructor Responsibilities

As an instructor you are responsible to yourself, your students, and the organization you are teaching for – these may include both moral (things that you should do because it is right) or legal responsibilities. Paddle Canada and any other organization that you teach for will have a set of policies that guide how you should interact with students, register courses, follow-up, and provide notifications. Many responsibilities are closely related to risk management; some are just good practice (like showing up on time with a complete lesson plan).

Paddle Canada has several policies that you should review and understand.

The Short List

- Code of Conduct
- Waivers/Consent
- Insurance
- Communication – re course
- Equipment
- Safety briefing
- Site review
- Knowledge of Students
- Knowledge of Material
- Course registration
- Cover course material
- Follow-up
- Organization – Start to Finish

Code of Conduct

Paddle Canada has a Standards of Conduct Policy. These should be reviewed at least once every year (in the spring) to ensure you are aware of your responsibilities. The standard covers the following broad areas:

- Responsibilities to Students
 - Respect the rights and dignity of every individual as a human being
 - Ensure the safety of participants within the limits of your control
 - Maintain the privacy of individuals following the Paddle Canada Privacy Policy.
- Environmental Stewardship
 - Responsibility to ensure activities confirm to “Leave No Trace” principles.
- Responsibilities to Paddle Canada
 - Follow and abide by Paddle Canada Policies, standards and regulations
 - Remain up to date on skills and techniques and instruct current and uniform techniques.

The complete set of Standards is available on the Paddle Canada Website:
<http://www.paddlingcanada.com/resources-and-policies/972-standards-of-conduct-for-paddle-canada-instructors.html>

If you are teaching with another organization or group you have a responsibility to review the appropriate policies and procedures for those organizations as well. Within the context of any Paddle Canada authorized course the Paddle Canada policies represent the minimum that should be met – individual organizations may set more stringent requirements. If there is a conflict between the Paddle Canada policies and another set of policies contact both organizations for a clarification of the requirements.

Associated with the Standards of Conduct Paddle Canada has specific policies with regard to use of intoxicants and privacy of individuals.

- Intoxication policy - Use of intoxicants may increase the risk of accident or other miss-adventure. The basic policy is: No intoxicants shall be consumed by any participant or instructor eight hours prior of any instructional activities. The policy includes further responsibilities and clarifications that should be reviewed.
<http://www.paddlingcanada.com/resources-and-policies/973-paddle-canada-intoxicant-policy.html>
- Privacy policy – Under federal legislation all individuals have the right to privacy, access to their own information, and the expectation to have their information maintained as confidential. Paddle Canada collects personal information for running its programs, subscriptions, tracking instructors and course participants, and notifications to members. As an instructor you may collect or have access to an individual's private information you have an obligation to maintain the confidentiality of this information as required under the federal legislation. Review the model code for the protection of personal information attached to the Personal Information Protection and Electronic Documents Act (PIPEDA).
The Paddle Canada privacy policy should be reviewed:
<http://www.paddlingcanada.com/about-us/804-privacy-policy.html>
Office of Privacy Commissioner of Canada Fact Sheets, Complying with the Personal Information Protection and Electronic Documents Act
https://www.priv.gc.ca/resource/fs-fi/02_05_d_16_e.asp

Waivers and Insurance

Waivers against liability and insurance coverage are an important part of your responsibility, to yourself. The risks of participating in your course should be outlined to your students as part of a liability waiver. Your students should read, understand, and sign the Paddle Canada waiver prior to starting your course. Part of your responsibility is ensuring, if there is an incident, that you can provide adequate care during and after the course – this includes making sure that your participants are appropriately covered in the case of miss-adventure. Under the Risk Management and Incident response section you should review the waiver and insurance section.

Communication

Communication is a critical component of being an instructor – this starts before and continues after a course is completed. You need to make sure all of your communication is clear, concise, and gets the message across. The following are areas that communication and messages are important:

Notification – You have a responsibility to your students to provide advanced notification with regard to the course, location of the course, requirements for equipment, pre-course preparation, etc... This should be done as far in advanced of the course as possible, then follow-up immediately before the course. You will be surprised at the number of people that do not come prepared even when reminded.

Time/Place – Make sure that there is a clear message about the time and location for the course. If the course is starting at 9:00am you, as the instructor, should be there at least 15 minutes ahead of time. If you are using equipment that is not your own, or well known, give yourself more time. You may arrive at the local outdoor organization to find the equipment had not been stored correctly, or worse was broken or missing. In most cases the extra time will allow you to make alternative arrangements or untangle the 15m of line bunched on the floor.

Personal equipment – Included with the course registration there should be a personal equipment list for each participant to bring. Items that you might want to include on your list: lunch, water, snacks, dry clothes, towel, rain gear, etc...

Expectations – It is your responsibility as an instructor and leader to clearly identify the course content, level of skill, assessment criteria, and hazards.

Personal responsibility assignment – Each individual in the group should know who is responsible and the fall back roles.

Safety Briefing – Prior to any course or outing the leader or instructor is responsible for conducting a safety briefing. This requirement is outlined in the Canadian Shipping Act regulations.

See the Paddle Canada website for a safety briefing summary:

<http://www.paddlingcanada.com/resources-and-policies/971-paddle-canada-safety-briefing-for-all-disciplines-courses.html>

Course Cancellation

As the instructor for a course it is your responsibility to decide if a course will run or not based on the current conditions and the safety of individuals. Take this responsibility

seriously and don't let any of the students argue with you – it is your decision! When initially setting up the course ensure that there is a course cancellation policy and that it is communicated to the students. The best practice is to include the common situations where a course may be cancelled or delayed on the registration form directly.

If a course is going to be cancelled due to environmental conditions – flood, wind, storms, etc... Contact each of the students directly – if you are unable to contact each student you should be at the course location at the designated time in case some of the students arrive.

Student Background

You have a responsibility for your student's safety and well-being. This means that you should have some knowledge of medical conditions and any physical/intellectual barriers they might have that are relevant to the course. These should be reported on the registration or medical forms with the registration.

Risk Management

You are responsible for doing due diligence to ensure the safety of your course participants and, if there is a miss-adventure or incident, that there are plans in place. It is your responsibility as the instructor to ensure that there are risk management and incident response plans in place. Along with making sure your students are safe you also have a responsibility to teach basic risk management strategies.

There is a whole section in this manual about the development and content of risk management and incident response plans.

Equipment

Prior to the start of every course you are responsible for checking equipment and ensuring that it is in appropriate working condition. You must make sure that the minimum safety equipment (as required by law) for paddling is available and appropriately distributed or used.

During your course you will be responsible for checking to see if your students have and are using the equipment appropriately.

Site Review

Before the start of a course visit the site to ensure that you are aware of the facilities available and any environmental risks.

Course Requirements

As the course instructor you have a number of responsibilities with regard to the course.

- *Course registration* – Ensure that the course is properly registered with Paddle Canada prior to the start of the course. If it is not properly registered you will not have insurance coverage and your students will not get credit for the course.
- *Organization* – You are responsible for starting on time, finishing on time, and having a course/lesson plan that follows a logical progression through the material.
- *Teach the approved curriculum* – Every course has a curriculum identified by Paddle Canada. Students are expecting a level of consistency wherever they take the course across Canada.
- *Follow a normal instruction progression* – By following a logical progression that builds on material through the course you are ensuring that your students are prepared for all of the material that is being covered.
- *Course follow-up* – When the course is completed provide an opportunity for student feedback and evaluation. If you have provided a conditional pass you are responsible for following up with that student – even if it is to arrange or suggest ways to fulfill the conditions. Finally complete a course report and close the course in a timely fashion.

Leadership

You are a leader - lead by example

Risk Management & Incident Response

Understanding Risk

Risk is part of the adventure and experience; it is the thrill of outdoor activities. Although it is expected, and in some regards necessary, that there will be some risk present in any outdoor activity you must have plans in place to mitigate the risk and deal with an incident should it occur. The choice is of acceptable and un-acceptable risks, and acknowledging and accepting the known risks. As an instructor or participant, you are not trying to eliminate all risks but rather managing the risk to an acceptable level.

"A life without adventure is likely to be unsatisfying, but a life in which adventure is allowed to take whatever form it will, is likely to be short" - Bertrand Russell.

Both as a leader and instructor you will need to identify risks, source of risk, and the corresponding level of risk. For most of your students the actual drive to the course or paddling location is probably of greater risk than anything that you will do on the water but that does not mean that you can ignore or disregard your duty to the safety and well-being of your students once they are in your course.

One of your roles as an instructor will be to differentiate between “perceived risks” and “actual risks”. Often, “perceived risks” are welcome as catalysts for growth and learning, while “actual risks” have the potential to do harm or injure the participant. Even though you may consider someone’s fears as just a perception don’t dismiss their fears but work with them to understand what safety precautions are in place.

Perceived risk is what an individual thinks or believes about the risk of an activity. It may be based on past experience, education, logic – all of these may provide an accurate assessment or there may be faults. Actual risk is the real risk that is present based on the skill and knowledge of the individual. By matching actual and perceived risks each individual can make a realistic assessment and informed decision about participating in any activity. If there is a difference between the two perceptions then the person may not participate in an activity miss and out on an activity that would be fun, motivating, and challenging – or they may present themselves to a greater (unexpected/unknown) risk and be injured or die.

Variable Risk – Skill

A whitewater paddler who is skilled at running the most challenging rapids and waterfalls has spent countless hours in practice, recognizes hazards, has prepared for possible mishaps, and is in an environment he or she knows and understands. An inexperienced and unskilled person who takes a canoe out on a placid lake or a gentle river is arguably at higher risk than the experienced and skilled adventurer. The absence of skill, experience and sound judgment creates a greater likelihood of errors, while at the same time leaving absolutely no margin for errors.

Activity	Perceived Risk	Opportunity for growth
Paddling in the rain	Getting wet and cold, hypothermia	Realizing that rain is not dangerous, preparing for adverse conditions
Tipping the Canoe	Drowning, losing gear	Familiarized with falling out of a canoe and learning how to get back in
Paddling in mild wind and waves	Drowning, getting swept away	Paddling endurance, control of the canoe

Sometimes the line between “perceived and “actual” risk can be blurred. It should go without saying that you should always error on the side of caution. Also, given the right circumstances and conditions, a “perceived risk” can quickly turn into an “actual risk”. Your role as instructor is to harness the power to teach using perceived risks and to mitigate the potential of injury from actual risks. Often, actual risks arise with varying environmental conditions.

Activity	Environmental Factor	Actual Risk	Steps Taken to Mitigate Risk
Paddling in the rain	Cold temperatures	Hypothermia	Ensure participants have good rain gear and insulating layers. Carry a dry bag with extra clothes
Tipping the Canoe	Cold water temperatures	Hypothermia	Safe canoeing techniques are taught by instructor Students should be familiar with the effects of cold water immersion
Paddling in mild wind and waves	The wind picks up	Separation from the group, capsizing the canoe.	Lead and sweep canoes are utilized. The group does not paddle in conditions that may be beyond the ability of the paddlers to negotiate

There are many risks both in the water and on land that you should be aware of as the instructor. Be sure to anticipate them and plan accordingly. It is a good idea to list the risks and how you plan to address them in your lesson plan.

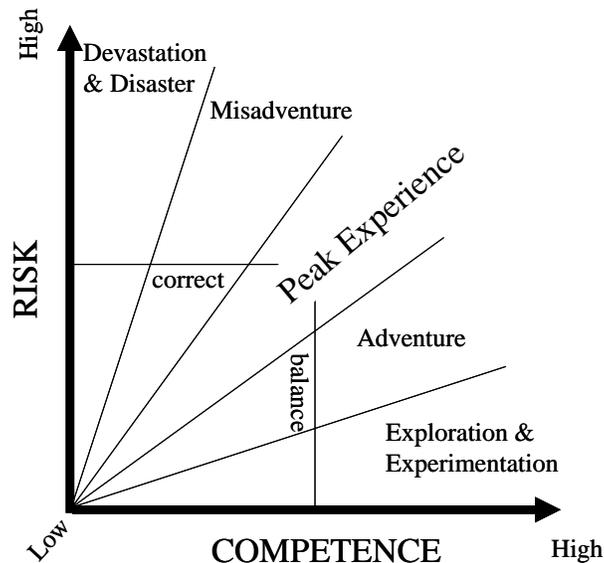
As a new instructor you need to understand and have a good knowledge of the activities you are teaching along with the associated risks for both beginners and experienced individuals. You can do this by keeping up to date on the latest information, practices, skills, and where you can find that information. It is important to remember that risks are not always physical; they may be psychological as well. There may be sociological, psychological and physiological factors that affect judgment and the assessment of risk. As an instructor and leader you need to be aware of these and adjust accordingly.

It is also important to remember that people that are experienced in a ‘risky’ activity such as paddling in white water or on big lakes are much less likely to be injured or killed than beginners in an activity – even when beginners take apparently less risky routes. You have learned the limit of your abilities and have a clearer understanding of the environment, help your students along this road.

Key points to remember as an instructor to understanding perceived and actual risk.

- You are experienced and understand the level of risk; your students are not and need to learn. Even when instructing introductory level canoeing courses there are levels of risk that your students might perceive where you do not.
- Many beginners participate in canoeing or other outdoor activities for the benefits of fitness, enjoyment of nature, escape, rest, learning, and exploration. Beginners often cannot distinguish between high risk and low risk activities compared with their level of skill – you need to make that choice initially for them or help them to identify the level of risk. If a beginner is trying out an activity to see if they like it and you put them in a situation of high (unexpected) risk they may be turned off.

If you are looking for an optimum level of learning or self-discovery a balance between risk and skill/knowledge (competence) needs to be sought. You want to combine the learning experience with some risk and adventure thus providing a powerful environment for personal growth and development.



Adventure Experience Paradigm

Martin, P. and Priest, S. (1986). 'Understanding the Adventure Experience', Journal of Adventure Education and Outdoor Leadership, Vol. 3, No. 2, pp18-21.

Risk assessment and management are not new concepts but for new instructors there may be factors that are left out or not considered. When developing a course or a program, or even just arriving at a site to teach a program go through the following criteria first:

1. Ensure that your lesson or course has clear aims and objectives. These should be reachable goals for the students that you have participating.
2. Ask yourself if the site that you are using is appropriate to the participant's level of skill and the aims and goals of the course.
3. Is the course based on sound education and risk management strategies?

Death – immersion and hypothermia

When talking about canoeing and risks you should spend a little time talking about the most serious injury of an accident – death. You don't want to scare your students but consider using some of the following information to provide perspective on factors associated with death and what can be done to minimize the risks.

Paddling is a very safe sport; in 2008 the American Canoe Association estimated that canoeing associated death happens at a rate of about 0.0008 deaths for every 100,000 boating days; a minuscule number. In the same report almost 30% of accidental deaths were associated with individuals that had very little experience. Considering the number of boating hours crude estimates put inexperienced paddlers at 22 times the risk of death – training and practice are important.

Even though death is a rare event it should not be discounted. In 2011 the Canadian Red Cross released a report on boating deaths between the years 1991-2008, updated in 2014. Although only simple statistics were reported they provide some illuminating information – unfortunately the report provided no information on how each factor interacted. Ninety three percent (93%) of the deaths were males – but if 95% of the people that actually canoe are male then this proportion is not unexpected. Recent reports estimate the proportion of male boaters is close to 60%) so it may be that males do actually participate in more risky behaviour. It may be that all of the individuals that had some association with alcohol could not swim and were not wearing a PFD – hopefully the next report provides some more in depth statistical analysis methods. Thirty five (35%) percent of all of the immersion and hypothermia deaths associated with non-powered boats were connected with canoeing.

Eighty four percent of the individuals that died were not properly wearing a PFD; the majority of those were not wearing a PFD at all. Alcohol may have played a factor in 40% of the deaths. Large waves, suggesting poor judgment, were associated in 23% of the cases. The 10 year report from the Canadian Red Cross

Factors associated with death from immersion or hypothermia when using non-powered boats 1991-2008 (n=933, of these 333 were canoeing)		
Factor	N	%
Males	866	93%
PFD not worn properly	786	84%
Capsized/swamped	619	66%
Weekend (Fri-Sun)	550	59%
Lake Travel	529	57%
Alcohol (any amount)	374	40%
Age 15-24	244	26%
Hypothermia	228	24%
Large waves	213	23%
Age 25-34	204	22%
Weak/non swimmer	184	20%
Strong wind	178	19%
Age 35-44	172	18%
Falling overboard	139	15%
Drugs	119	13%
Standing up (not urinating)	71	8%
Overloaded	65	7%
Collision	33	4%
Urinating	20	2%
Embark/Disembark	12	1%

Derived from: Canadian Red Cross, 2011 Boating Immersion and Trauma Deaths in Canada

Death Rate in Canada

There were 0.062 deaths per 100,000 people associated with canoeing in Canada (CIHI 2010). Compare this with 259 for cardiac disease, 57 for un-intentional injuries overall, 9.2 for road (vehicle) fatalities.

(2010) indicated that cold water played a role in an estimated 54% of deaths associated with canoeing.

Surprisingly standing up, getting in/out of the boat and collisions all were associated with less than 10% of the cases.

Waiver¹/Consent and Insurance

Prior to running a Paddle Canada approved course all individuals, including the instructor, must complete the Paddle Canada “Waiver of Liability and Assumption of Risk” waiver. The waiver must be completed without change. It is good practice to have your students review the waiver prior to the day of the course so there is no feeling of coercion (e.g. by providing the waiver at the start of a course in a remote location a participant may feel there is no option). There are different waivers and instructions for adults (age of majority) and minors, forms are also different for those students that are resident in Quebec.

Waivers are a legal document that may affect an individual’s legal rights. The waiver must be read and understood. As the instructor you should be willing and able to answer questions with regard to the waivers and the importance of completing the waiver.

The waiver/acknowledgement of risk forms must be witnessed by someone other than Paddle Canada course Instructor.

Waivers must be retained in your records:

- Adult Participants: 7 years from the time of the course
- Minor Participants: 7 years from the time the participant would have ceased to be a Minor

Paddle Canada waivers must be completed regardless of whether there is any coverage from another insurance policy unless an agreement has been developed with the insurance company for an exception. As of May 25 2012 the Paddle Canada insurance underwriter will allow negotiations to accept waivers from other organizations. Scouts Canada was the first organization to work through this process. Unless otherwise noted a signed waiver then both must be signed.

Paddle Canada waivers and liability forms can be found the Paddle Canada website:

<https://members.paddlecanada.com/download.php?secid=waiver>

Parental Consent, Disclosure and Acknowledgement of Risk form for youth courses:

https://members.paddlecanada.com/assets/pdf/waiver/pc_parental_consent_disclosure_acknowledgement_risk.pdf

¹ **Waiver** in this document may be interpreted as either a waiver of liability or acknowledgement of risk. Although these two concepts are different it is beyond the scope of this document to detail the differences.

During the spring of 2014 Paddle Canada reviewed the wording of their required waivers. Review the forms found on the Paddle Canada website to ensure you are using the currently accepted forms.

Waiver Explanation to Participants

Periodically you may be asked why a waiver is necessary – it is required for you to have third party liability insurance coverage. It is in your interest as an instructor to ensure that the forms are properly completed. Waivers are very important documents in the outdoor industry and many instructors don't know how to properly present and have waivers signed. You should follow a standard procedure for presenting waivers to your students following a check list such as this:

- a) **Explain:** The waiver is a legal document and by signing it, the participant accepts the hazards and risks of a trip or activity, some of which are listed on the waiver. Be sure to mention the list on the waiver is not complete or limiting but is intended to provide an idea of some of the most common risks and hazards. Remind clients that it is not possible to guarantee 100% safety and that you will do your best to recognize and manage hazards and risks. By signing the waiver, the participant also waives certain rights, including the right to sue in the case of an accident. Ensure that participants do not complete the waiver until after they have read the waiver and have been instructed by you to continue.
- b) **Read:** Provide time before starting any activities and ask participant to read the waiver completely. Preferably students should have access to the text of a waiver prior to the start of the course (e.g. on a prior day).
- c) **Discuss:** hazards and risks personally with people who have a stated or suspected medical, mental, or physical condition (i.e. allergies, addictions, illnesses, injuries, pregnancy, etc.) that could affect the person while they are on the trip. A question about these conditions should be included in your registration form or should be documented during sign-up. Extra effort must be made to explain potential or increased hazards and risks to people who have or may have conditions. It's also important to evaluate whether anyone who has a condition should be allowed to continue with the trip. This can be a delicate issue but it's important the questions be asked and specific and detailed discussions take place if appropriate.
- d) **Date:** Have the participant date the waiver by placing the day, month, and year in the appropriate location on the waiver. They should not sign it yet.
- e) Each section of the waiver once read should be initialized by the individual taking the course.
- f) **Question:** Before the participant signs, ask each person individually the following three questions:
 - i) Have you read the waiver?
 - ii) Do you understand what you are signing?
 - iii) Do you have any questions about the waiver? The answers must be YES, YES, and NO before proceeding. If necessary, clarify any issues and ask the questions again until you get the required answers.

- g) Signature: When the client has answered Yes, Yes, and No to the three questions, have them sign and print their name and address in the appropriate positions while you watch.
- h) Witness: A witness is there to confirm that the material was reviewed and signed by the individual identified. The waiver must not be altered or changed in any way. The instructor for a course should not be the witness on a waiver – this is actually Paddle Canada policy.

Using a checklist that clearly shows you carried out these steps is a good idea. A checklist shows you have a standard procedure that includes appropriate steps which is followed every time you use the waiver.

Insurance Coverage

The intent of Paddle Canada's paddling program liability policy is to provide basic inexpensive third party liability insurance for the operation of Paddle Canada courses run by qualified Paddle Canada Instructors. Paddle Canada carries 3rd Party Commercial General Liability Coverage (Bodily Injury and Property Insurance) and Sports Accident Insurance (see: <http://www.paddlingcanada.com/resources-and-policies/966-insurance-policy-summary.html>)

The following is an overview of the coverage; refer to the official coverage material from Paddle Canada for current and up to date information.

Coverage includes the following items (April 2014):

- \$5,000,000 per occurrence Bodily Injury and Property Damage
- \$5,000,000 Products and Completed operations aggregate limit
- \$5,000,000 Employers Liability
- \$5,000,000 Personal Injury and Advertising Injury Liability
- \$10,000 Medical Payments - any one person I any one accident
- \$1,000,000 Errors & Omissions Liability
- \$50,000 Sport Accident Insurance.

Coverage is only for Paddle Canada sanctioned or approved courses delivered by a Paddle Canada certified instructor following the course requirements (ratio, waivers, course content, and wearing a PFD). Coverage starts at the start of the actual course or clinic (it does not include travel to the course), and ending at the end of the course or clinic (it does not include travel home from the course or clinic). Non-Canadian Instructors and/or Non-Canadian Course Candidates must provide proof of medical insurance coverage while in Canada for the duration of the course or program.

Courses must be registered with Paddle Canada and sanctioned prior to the start of the course to have insurance coverage. Registration should be completed at least two weeks in advance of the course.

If you are instructing a course for another organization they may have their own insurance or require proof of insurance. Courses must still be registered with Paddle Canada and participants must sign a Paddle Canada waiver. If a third party organization requires documentation of Paddle Canada coverage contact the Paddle Canada office for a certificate of cross insurance – this must be requested at least 21 days in advance.

There are some organizations and insurance under-writers that have their own insurance/risk waivers that do not allow multiple waivers to be signed. This may mean you cannot instruct a Paddle Canada course. Recently there has been a special agreement with Scouts Canada; Scouts Canada participants are excluded from signing the Paddle Canada Waiver / AoR. Other groups such as Military Cadets & other government departments have policies forbidding them from signing another organization's waiver / acknowledgement of risk forms. Paddle Canada continues to work on agreements to allow participation by members of these groups. Call or email Paddle Canada for clarification of the current requirements since they are under review

If there is an accident the Paddle Canada Accident Report information should be completed. The information must be emailed or faxed to Paddle Canada (info@paddlecanada.com, fax: 613-547-4880) who will then forward the information to the Insurance Brokers for review. Information on reporting accidents and forms can be found on the Paddle Canada website: <http://www.paddlingcanada.com/resources-and-policies/975-paddle-canada-accident-policy.html>

The information provided here is only a summary of the insurance coverage through Paddle Canada further information on the Paddle Canada insurance coverage can be found at:

<http://www.paddlingcanada.com/resources-and-policies/966-insurance-policy-summary.html>

Risk Management Plans

Management of risk in an outdoor setting really is recognizing the actual risks and then reducing the controllable risks to a reasonable level. There will always be some level of risk that is part of the learning process – safety is a significant issue but it is also something that you cannot guarantee. Things happen that may be out of your control such as sudden weather changes, failure of equipment, human error. Risk management planning helps to identify possible hazards and devise strategies to minimize any injury or negative outcome for participants.

Development of a risk management plan is an important step to understanding, mitigating and responding to risks associated with your courses. There are four primary steps in a risk management plan:

1. **Risk Identification.** This step involves the identification of potential hazards for a particular site, course/lesson, and participant combination. Risks should be identified for the following hazard areas.

Consider the possible risk outcomes to individuals, both physical and emotional.
Think about where the following outcomes might come from:

- Hypothermia, Hyperthermia, Shock
- Strains/Sprains (arm, back, ankle, knee...)
- Fear/apprehension
- Bruises/contusions
- Blisters/rashes
- Sun burn
- Lacerations

Participants	Equipment	Environment
<ul style="list-style-type: none"> - Size of the group - Skills/Qualifications - Knowledge/experience - Health - Age - Emotional attributes - Attitudes 	<ul style="list-style-type: none"> - Clothing - Footwear - Canoes - PFDs - Paddles - Hat/helmet - Rescue equipment 	<ul style="list-style-type: none"> - Water temperature - Wind/Waves - Precipitation - Sun - Air temperature - Access to waterfront - Terrain - Weather forecast - Distance from Help

2. **Risk Assessment** – this is the degree and the probability of an incident happening.

The assessment is based on the knowledge of the information tabulated above, the activity, and the competence of the group and leader. Combined with your background knowledge and personal experience you can come up with a possibility of an incident occurring (high, medium, low). Risk assessment aims to balance competence with appropriate risk in order to achieve desired program learning outcomes. Done correctly, this process will ensure that a participants’ level of emotional and physical safety is maximized while allowing a peak experience to be realized. A peak experience will facilitate maximum learning and enjoyment. Remember the level of risk may change during the course of a day or trip depending on a variety of modifying factors.

- Modifying Risk Factors*
- Age
 - Experience
 - Personality
 - Self-awareness (the ‘cockyness’ factor)
 - Group or social pressures
 - Fashion
 - Folklore
 - Time and exposure
 - Hunger
 - Dehydration
 - Fatigue
 - Personal size, strength

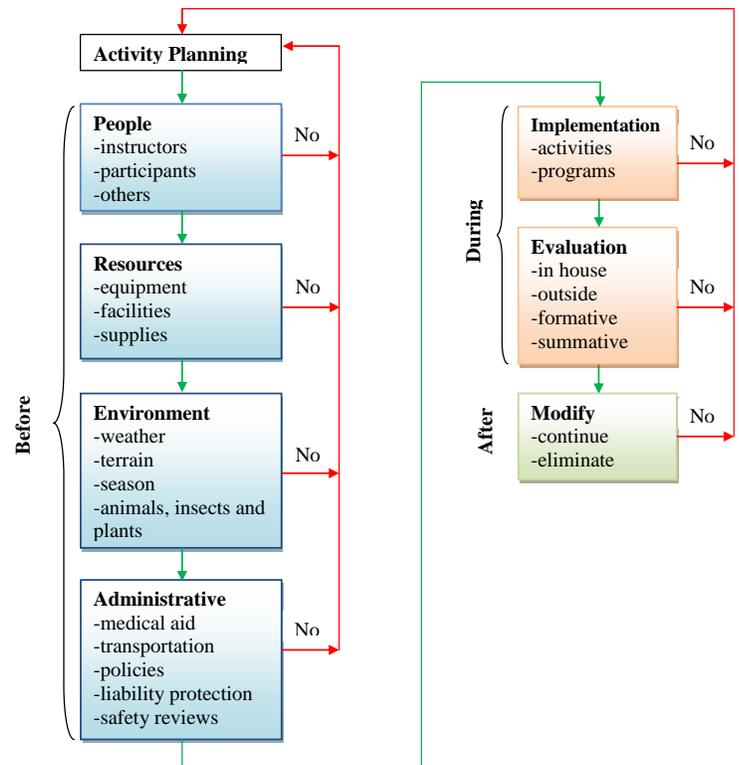
3. **Risk Reduction** – the aim of risk reduction is to put in place strategies, policies and procedures, and equipment that will mitigate or reduce known risks to an acceptable level. There are a number of strategies that can be taken to reduce the risk to an individual, group, organization or program.

- a) *Safety and Policy Guidelines.* These are set by Paddle Canada – Standard practices, course requirements, certification, government guidelines (Transport Canada minimum equipment, Workplace Health and Safety), Insurance requirements, safety briefings, trip plans, and the particular site.

- b) *Risk disclosure.* These are included in any waivers that are signed by individuals and given during pre-course/trip safety briefings. Included in any briefings or information are letting participants know their responsibilities, course expectations, and level of skill / requirements / criteria for the course. Prior to any lesson participants should be given a chance to become familiar with the equipment and appropriate use (how to do up a PFD correctly), identify specific hazards (the dock is slippery when wet), and identifying the limits of the area that will be used (stay within 50m of the dock end and shore – put out a buoy).
- c) *Knowing the Participants.* Prior the course starting review the registration forms for any specific health or behavior issues that may raise a concern. Spend some time at the start of the course or lesson to introduce yourself and the participants to find out about prior experience, concerns. Play some icebreaker games to get people talking and interacting with each other. Programs should be matched to the actual participants – this is why prerequisites exist for courses. Knowing the individuals in the group will allow you to keep track of and control the group as necessary.
- d) *Staff Training and Certification.* Ensure that everyone that is in an instruction/leadership position has the necessary and appropriate certification for the course being taught. Check evacuation routes, medical facilities, and contact information in case there is an incident. Training includes knowledge of statutory requirements, best practice, and suggested practice.

- e) *Course Requirements/Criteria.* Courses have been defined in a set of achievable steps based on experience. Only material that is within the scope of the course should be taught. Keep a written log of any adjustment to course material and incidents (even minor ones) that happened during the course.

- f) *Equipment.* Inspect all of the equipment being used to ensure that it is in reasonable condition. Items that are worn (e.g. PFD, Whistles) should be properly fitted and done up/attached. Other safety equipment must be accessible (e.g. throw bags within reach and lines not tangled). If you are



using or require communication equipment, or if you are potentially out of contact, make sure that you have appropriate equipment to communicate and that it is in proper working order.

Although most of the strategies are specifically directed at individual risk (either physical or emotional), risk reduction and avoidance should be considered for the organization as well. Most of the risk strategies apply equally to individuals as well as the overall organization but the organization should also have protections in place with regard to due diligence – the existence of risk management and incident plans, acknowledgment of risk forms, medical forms, public relation response policy/processes, advertisements for programs (in particular the one you are instructing), and appropriate insurance. In general, outdoor programs are described in terms of student and staff experience, instructional ratios, sources of curriculum, terrain used, emergency response resources, and equipment quality.

4. **Risk Management Plan.** Having an emergency response plan in case there is an incident creates a centre of education and a standardized response that can be followed. The plan should include the following information:

- Potential hazards
- Risk Assessment
- Risk Reduction
- First Aid/Water safety training
- Contacts and communication
- Evacuation and transport needs
- Notification requirements
- Responsibilities to self, Paddle Canada, site.

A practical risk management strategy will allow you to reduce the likelihood of an incident occurring. However, in order to do this, you may need to rethink an activity plan based on your assessment. All factors (participants, equipment, and environment) must be examined when planning a course to guard against undesired events. This is essential for maintaining the physical and emotional safety of your students – remember you are responsible. A risk management plan will provide documented



evidence that likely factors were considered and strategies developed in the event that an accident leads to litigation.

The flow chart outlines a general model of risk management planning. This should be followed for program delivery so that you can feel confident in conducting a particular course and you are prepared for emergency situations that could arise. Consider these four elements as you plan your activity, course, or trip: People, Resources, Environment and Administrative.

Incident Response

If an incident does occur follow the protocol that has been outlined in the risk management plan with regard to appropriate treatment, follow-up and contacts. Respond to incidents calmly and keep an accurate record of what happened.

Priorities

- 1) People,
- 2) Boats,
- 3) Gear.

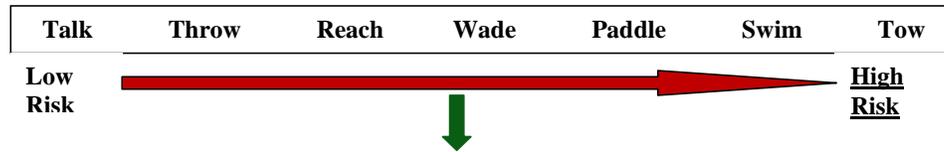
Following an incident complete all of the necessary documentation. Paddle Canada has and an accident and injury protocol along with the necessary reporting forms available on their website (<http://www.paddlingcanada.com/resources-and-policies/975-paddle-canada-accident-policy.html>).

When the pressure is over and the incident is resolved or dealt with step back and reflect on the incident, why it occurred, and what you can learn. Was it a failure of the student to follow rules, or a failure of the system (including yourself) to put in appropriate precautions? Canoeing can be a risky activity and sometimes accidents happen or an incident was within the expected risk but we can still learn from the experience and possibly prevent a future occurrence.

As you plan your course or canoe trip, you should anticipate potential risks to the instructors and participants and proactively address them (see Risk Management). However, even the most careful risk management planning will not guarantee an incident free paddling course or canoe trip. Remember that your priorities are 1) people, 2) boats, 3) gear.

When attempting a rescue, paddlers should follow the basic guidelines established by the Royal Life Saving Society Canada for rescue situations. The figure on the next page represents a “Risk Ladder” or continuum where the rescuer increases personal risk as he or she moves up the ladder.

This continuum should always be considered when executing a rescue to ensure that the rescuer or rescue team is not in jeopardy. If involved in a high risk rescue, make sure the rescue team is prepared and trained to perform an effective and efficient rescue.



Patient Assessment

ABC's
"Are the circulatory, reparatory or nervous systems compromised?"
 -treat the patient as necessary (it is assumed that as a Paddle Canada Instructor, you have a current first aid certification)

Monitoring of Patient/ Seek Medical Aid
"What does the patient need next?"
 -Determine whether the patient needs further medical assistance (it may be helpful to involve them in this decision if they are able)
 -Make the patient as comfortable as possible and address their needs as they arise

Record/report the Incident

Incident Report
"What needs to be recorded, and what information should be communicated to whom?"
 -Record any incident that happens during a course in a bound book or journal. Be sure to include as many details as possible.
 -If necessary, report the incident to appropriate authorities

To minimize the potential for an incident to occur have realistic program objectives and risk keep levels suitable to the students, instructors, and staff. It is important to realize that good judgment is a learned skill – practice and experience are important. People may pick-up or learn to recognize and accept a level of risk compared to skill through formal instruction or on their own. People are not born with good judgment it is something that must be learned through training and practice – whether it is formal or not.

Common Medical Conditions

There are a number of common chronic medical conditions that you should be aware of when running a course or planning a trip. The following is certainly not an exhaustive list but represents the most common pre-existing medical conditions you may encounter. If you come across any conditions in your medical forms or registration packages you should follow-up and collect as much reasonable knowledge as you can about the

associated health conditions and associated risks – the material here is provided only as a guide, it is not a replacement for appropriate training and background follow-up. When on a trip or in a course where there are medical conditions you have a responsibility to be familiar with the conditions and associated symptoms that might affect the course. In particular with children identify who will hold and dispense the medications. Make sure that you have the appropriate first aid training and an action plan in case one of your students has a reaction.

Chronic conditions that you may encounter:

Asthma

Asthma is a temporary condition where the airways swell and spasm resulting in impaired breathing. The condition can be triggered by many things including cold temperatures, allergens, dust/pollen, and exercise. Ensure your students carry and know where their inhaler is at all times. The key to asthma treatment is prevention – know what triggers an attack and be aware of the potential conditions. It is always better to prevent an emergency.

Allergies

An allergy is a hypersensitivity to a specific substance – almost anything can be an allergen but the most common are foods (nuts/seafood), pollen, and insect bites. After exposure the body releases excessive amounts of histamines with reactions ranging from mild and local (rashes/swelling/runny nose) to a life threatening anaphylactic reaction or asthma attack. Known allergies will be identified on the medical forms; be aware of the allergens and ensure that your student carries appropriate treatment.

Cardiac conditions

There are many conditions that affect the heart – vertical septal defects (VSD), heart murmurs, heart attacks, angina, and congestive heart failure. Although the chance of any of these diseases increases with age, younger individuals can, and do, have cardiac conditions. Some conditions such as VSD and murmurs are congenital and are present throughout life. The additional exercise and stress that happens in an outdoor program (e.g. dunking in cold water), may exacerbate an existing condition. Make sure you are aware of any known conditions and that your first aid skills are current, including CPR.

Seizures

Seizures are sudden and uncontrolled electrical activity in the brain, people with regular seizures may have epilepsy. Diagnosed epileptics may take prescription medication to control seizures. A variety of other conditions may bring on a seizure such as high fevers, shock, medication, other medical conditions, unbalanced electrolytes (dehydration) or low blood sugar. If someone has a seizure treat it as a medical emergency.

Diabetes

Diabetes is a condition where the body cannot moderate the amount of sugar in the blood. Too much, or too little, sugar can create a serious medical condition. Diabetics need to moderate the amount of exercise and food intake so the use of sugars is appropriately balanced. Be clear at the start of any course about the physical activity involved; let your students know about snacks, water, and rest. Plan appropriate breaks and ensure that the person tests or tracks their blood sugar as needed.

Brittle Bone or Osteoporosis

This condition or disease will allow bones to break more easily than normal. Older individuals, especially women, are susceptible. Include the possibility for slips and falls especially in courses where you have older participants. Make sure that you launch and land from places where there is good footing (dock/beach), conditions are not slippery, and there is good visibility. People that have already fallen and had wrist or spine fractures are a much greater risk of subsequent breaks.

Raynaud's disease or syndrome

This condition is associated with loss or reduced blood flow to fingers and toes beyond what is normally expected when cold or under [emotional] stress. It is associated with multiple underlying diseases (syndrome) or may be idiopathic (disease). Some people refer to the condition as an allergy to cold since it may result in hives and rashes. Symptomatically fingers or affected areas may be white or chalky due to loss of circulation or dark blue from oxygen deprivation. The condition may cause loss of strength in fingers – this is especially problematic when attempting to complete rescues in cold water.

There are many non-chronic conditions that you will likely encounter when paddling as well. It is important to recognize when these conditions will arise and protect your students. Make sure that you have appropriate protection in place through clothing, activity, and environmental awareness. Common acute conditions include: Sunburn, heat ailments (stroke, exhaustion, cramps), hypothermia, blisters, nausea, and diarrhea. Ensure that your first aid training is up to date to help recognize and treat both acute and chronic conditions.

Musculoskeletal Canoeing Injuries

Canoeing may seem like a fun, benign sport, but many people are injured during both recreational and competitive canoeing events each year. There are a number of both acute and chronic injuries that can occur and as an instructor you should be aware of the possibility of these injuries and be able to recognize and help you students understand and avoid possible injuries.

Although this section focuses on musculoskeletal injuries (muscle, tendon, and skeletal) injuries during outdoor pursuits also include sun burn, cold injuries (frostbite, trench foot), heat stress, infections, drowning and dehydration. Smaller injuries such as blisters, bruises, and abrasions should not be ignored since they can lead to problems just as debilitation as a broken bone.

Encourage students to participate or practice other activities that provide more holistic exercise and provide strength and flexibility balance for the whole body, not just specific points or muscle groups.

Pre-Paddle Warm-up

It is critical when paddling, as it is with any sport, to warm up prior to the activity to avoid injury. You should incorporate exercises and stretches into your paddling and teaching routine. Contrary to what the novice may think, the upper body does not do all the work when paddling – power comes mostly from torso rotation and leg pressure. Make certain your pre-paddle warm-up works out the entire body. This will make paddling skills more efficient and will help lessen the chances of getting sprains, back pain, and injuries. Stretching is a touchy topic but it is generally recognized that stretching before a workout does not necessarily improve or prevent injuries. Warming up first is the key by ensuring that there is good blood flow and oxygen getting to your muscles. Stretch after activity when muscles are warm and pliable or even better stretch as an independent workout.

How to Warm Up before Paddling

- Try light a light run or cycle. Quads are also used in paddling strokes and rotation of the upper body so make sure to work out those muscles. Running and cycling are good, especially for quads; they help in toning muscles, improving strength and endurance.
- Go swimming. This is an excellent form of full-body exercise. Try doing different strokes so you can fully benefit from this activity.
- Try jumping jacks or running in place on the shore. Warm-up by elevating your heart rate and breathing before stepping into the canoe.
- Do push-ups. Push-ups are considered by many seasoned paddlers as the best way of improving shoulder strength and stability.
- Do some yoga – Paddle Your Own Canoe by Gary and Joanie McGuffin has a chapter devoted to using yoga like poses to help the warm-up process.
- Include a basic stretching routine after each paddle outing or as a separate supporting activity.

Pre-Paddle Warm-up Games

Games are an excellent way to get people, especially children, warmed up and ready to go without the mundane step, step, step....

- Rain Maker (rubbing hands, drumming fingers, clapping hands, stamping feet, hands, fingers, rubbing)
- Human Knot (everyone put a hand in and hold on, then put the other hand in, then untie without letting go)
- Group Juggle (call name, each throw – high/middle/low/bounce)
- Human Tunnel Ball

You can find more warm-up games and icebreakers at Wilderdom.com

(<http://wilderdom.com/games/>)

Injuries

Most of the injuries experienced by paddlers are as a result of poor technique and/or over use. Being aware of the source and location of injury will help your students avoid potential problems. Unfortunately there is very little information on injuries associated with recreational paddling – most studies have involved professional or amateur competitive sport. There has been a suggestion by Kyriacos Eleftheriou (Sports Injury Bulletin) that acute injuries are much more common in the general recreational canoeing population, than with competitive athletes, possibly due to higher experience and safety requirements for the competitive athletes.

Type of Injury	Frequency
Sprains	32%
Tendonitis	20%
Chronic muscular pain	14%
Simple bruises	9%
Infections	8%
Dislocations	3%
Lacerations	2%

Kyriacos Eleftheriou, Canoeing injuries & kayaking injuries, Sports Injury Bulletin.

Overuse or repetitive strain injuries are common in paddlers where the forces from the catch are transferred through the wrist, elbow, shoulder and back.

- **Shoulder** – The shoulder is the most mobile of all of the body areas, unfortunately because of this it is also the least ‘stable’. It is important to keep muscle balance across the whole area. The repetitive nature and forces required to pull the canoe through the water can cause both chronic (repetitive strain) as well as acute injuries (dislocation and rotator cuff injuries). In both cases paddling within the “Paddler’s Box” will minimize the potential for injury. The repetitive motion of paddling can cause the tendons to become irritated, weakened, and inflamed. As a result, the shoulder becomes stiff, weak, and sore.

Musculoskeletal Injury	181 (61.8%)
Shoulder	116 (39.6%)
Back	76 (25.9%)
Wrist/Hand	29 (9.9%)
Elbow	27 (9.2%)
Neck	26 (8.9%)
Leg	16 (5.5%)
Arm	15 (5.1%)
Knee	11 (3.8%)
Ankle	8 (2.7%)
Groin	2 (0.7%)

Amanda Haley, and Andrew Nichols, Hawaii Med J. 2009 Aug; 68(7): 162–165 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2769922/>

It may become difficult to raise the arm above head or lay directly on the affected shoulder during sleep. If there is a strong 'jerk' or pull on the shoulder the muscles and tendons may tear causing a mild to severe strain.

Vulnerable positions occur when you have the upper limb straight out sideways or back with the hand above the elbow and the elbow above the height of the shoulder joint. Reaching up and back is even worse. As paddlers we often get into these vulnerable positions when performing high braces and sweep strokes.

Attempting to brace or paddle with the arms out stretched with the shoulder in extreme abduction may cause a dislocation. This is rare in flatwater paddling but may still occur; there is a much greater probability in waves and rapids.

- **Wrist & Elbow** – The repetitive motion of moving the paddle can, over time, lead to overuse injuries of the wrist and forearm (e.g. carpal tunnel, tenosynovitis). A significant association has been found with unstable boats or rough conditions where paddlers have a tendency to have an aggressive grip on the paddle. The injury is typified by numb or tingling in fingers and/or pain in the wrists and forearm. Steering strokes (e.g. J, Pitch, Canadian) are particularly hard on the wrist and forearm.

Elbow and proximal forearm injuries including lateral and medial epicondylitis (tennis elbow) are also caused by the forces through the forearm flexors and extensors usually associated with excessive grip. The symptoms include pain radiating from the outside of the elbow to the forearm and back of the hand when grasping or twisting

The wrist extensor injury (tenosynovitis) in paddlers has been compared with the tendonitis found in weight lifters who do frequent curls. The injury presents with forearm pain, which can be elicited by repeated wrist extension performed with a closed fist.

- **Back (lower)** – Due to shearing force from paddling on one side lower back pain is common in canoe paddlers. In one study 15-25% of competitive canoeists reported lower back pain, the highest incidence being among the Canadian canoe group (Kameyama O, Shibano K, Kawakita H, Ogawa R, Kumamoto M. *Medical check of competitive canoeists*. J Orthop Sci 1999;4- 4:243-9). In the same study more than half of the canoeists complained of some kind of back problem. Mainly this was caused by muscular or ligamentous strain, but spondylolysis (stress fracture in one of the vertebrae) was seen and prolapsed discs were also noted. Moving equipment and portaging also leads to significant stress on the lower back with the same kind of injuries that may be found in weight lifters.
- **Knee** – Most canoeists will kneel when conditions are rough or when paddling with inexperienced paddlers. This position provides greater stability and control over the canoe but it puts pressure on the knee joints. A condition known as Canoeist's Knee (prepatella bursitis or housemaid's knee) is fairly common and

presents as localized pain and swelling at the front of the knee, which is generally more painful when you press on it, or kneel on it. This condition is an inflammation of the prepatella bursa which sits in front of the kneecap (patella) and reduces friction between the patella and the skin. Bursitis simply means inflammation of a bursa.

Primary Causes of Injury

- **Inexperience** – beginners may be more prone to injury because they do not have the skills or technique to meet the demands of the sport.
- **Poor technique** – holding or moving the body incorrectly can put unnecessary strain on joints, muscles and ligaments. Moving outside of the Paddler's Box.
- **Choosing an inappropriate waterway** – accidents and injuries are more likely to happen if you attempt to canoe or kayak in a waterway that is beyond your skill level or for which you are ill-equipped.
- **Failure to wear protective equipment** – life jackets, or personal flotation devices (PFD), and helmets (in rapids) are essential safety equipment.
- **Overtraining** – training too much and too often can lead to a wide range of overuse injuries, particularly those of the wrist and shoulder.

Injury Avoidance

When paddling keeping your arms and hands within the “Paddlers Box” – in line with and below the line of your shoulders. This means when paddling, especially backward, that you should not reach behind you but rotate your torso to the catch position.

Maintain good posture. Sit in a slouched position and try to lift your arms up above your head. Now do the same with your back in an upright position, feel how much freer the arm movement is when the back is in a good position. If you can feel the shoulder getting rammed into its socket when sitting slouched and lifting your arms just imagine paddling for hours sitting in a poor position with the shoulder getting jammed on every stroke ; it becomes easy to see how an injury could become established.

The shoulder is at its most vulnerable if the arm is moved backwards above shoulder level. Avoid this position. The high brace is a high risk stroke for the shoulder if not performed correctly. Even if a dislocation does not happen, the rotator cuff muscles can be strained in this position or a nerve damaged.

One of the most common problems when paddling is keeping an overly tight grip on the paddle, especially on the shaft. This can cause ‘cold fingers’, sore wrists and forearms. When paddling loosen your grip on the paddle and provide more power through torso rotation. Think of opening your fingers through the non-power portion of your stroke.

Keep your wrists, especially on the shaft arm, straight or in a neutral position when pulling on the paddle shaft. If you have numb or tingling sensation in your index finger,

thumb or middle finger be judicious about the amount of paddling you are doing and give your wrist a break.

Repetitive strain injury of the shoulder, wrist and back can be caused by the 'shock' at the catch especially when using a paddle with a large stiff blade. Switching to a smaller or narrower blade will relieve some of the pressure.

Although most canoeists have a dominant side where they prefer to paddle it is important to balance skills and strength – paddle on both sides. In addition to simple stretching exercises and conditioning, attention should be given to balanced shoulder and back development. This does not mean that you should get into the habit of switching sides whenever there are issues but to practice on both sides. The US Canoe and Kayak Federation also suggests backwards paddling as an effective training technique, with warm-up and cool-down regimens including up to 10 minutes of back paddling. If you do paddle backwards make sure you have an appropriate form to stay within the Paddling Box.

When lifting and moving the canoe and other paddling equipment you should concentrate on lifting with your legs. Watch for appropriate footing and to avoid slips and strains. Have a spotter help lift (flip) the canoe. Be aware of the wind conditions before trying to lift or move the canoe.

Work on building and maintaining strong core, abdominal, and back muscles through training activities that augment paddling.

Understanding the forces and torque used to move the canoe through the water is important both for efficiency of paddling but also reducing injury. Understanding bio-mechanical requirements of both your body and the ways to move the canoe will make you a better paddler with a lower likelihood of an injury.

Warm up before paddling.

Water conditions such as waves and moving water force you to change paddling technique as well as work harder. Be aware of the conditions and how you are paddling and the stress that you are experiencing. Weather conditions such as wind, cold, and heat increase stress. Paddling in strong wind, waves, and moving water increases the stress on the muscles and joints. Make sure you are wearing the appropriate clothing and safety equipment for the conditions.

Make sure that the equipment that you are using is appropriately sized for you and the kind of paddling that you are doing. When paddling the grip of the blade should not be raised above your nose when the blade is fully submerged.

Finally keep yourself well rested, hydrated, and nourished.

Course Registration

Registering a course with Paddle Canada is an important part of the process of teaching a course. Properly registering courses will maintain your current level of certification, ensure that students have appropriate credit (prerequisites) for future courses, have the course advertised on the Paddle Canada website, and have insurance benefits in place. If you are a course director the process ensures that your instructors are registered with Paddle Canada and have the necessary certification.

You can find a current copy of the registration process for both your courses and instructor courses on the Paddle Canada website:

- Skills Course:
https://members.paddlecanada.com/assets/pdf/canoe/how_to_register_skill.pdf
- Instructor Course:
https://members.paddlecanada.com/assets/pdf/canoe/how_to_register_instructor.pdf

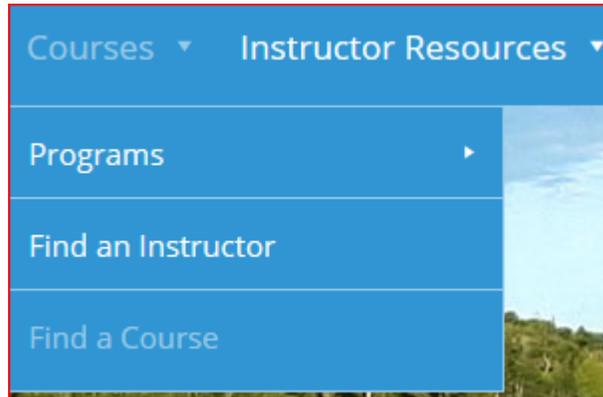
There is a troubleshooting page that includes videos on how to register courses:
<http://www.paddlingcanada.com/resources-and-policies/729-frequently-asked-questions-for-instructors.html>

The process is not complicated but there are few things that you must know.

- Courses must be registered and approved prior to the course starting. Paddle Canada policy is that all courses must be registered at least 10 working days (2 weeks) prior to the start of the course. Although it is possible with the electronic registration system to register within a shorter period of time it is not good practice.
- The person registering the course becomes, by default, the course director. They are the only person that can make changes to the course, remit payment, and submit course reports. Other instructors identified on the course can review the results. If you are working for an organization (e.g. summer camp) where all of the courses are going to be arranged by one of the camp administrators they should contact Paddle Canada to allow them to register courses (as a director). They do not need to have the necessary certification themselves.
- Every student, participant, and instructor must complete the Paddle Canada Acknowledgment of Risk form (Waiver) prior to the start of the course.
- Course lengths are a minimum suggestion – in practice expect courses to take longer than the minimum suggested time period.
- Course ratios are set by Paddle Canada – you can have fewer students than identified ratio but not more. Additional students may be added with additional instructors (to the maximum number).
- Apprentice/mentorship/assistance may increase the number of participants by two.
- Instructor Candidates must register themselves prior to the start of an instructor course. Skills recipients are registered by the instructor after the

course is completed. Participants may be added earlier but courses are only completed and registered when the course report is submitted.

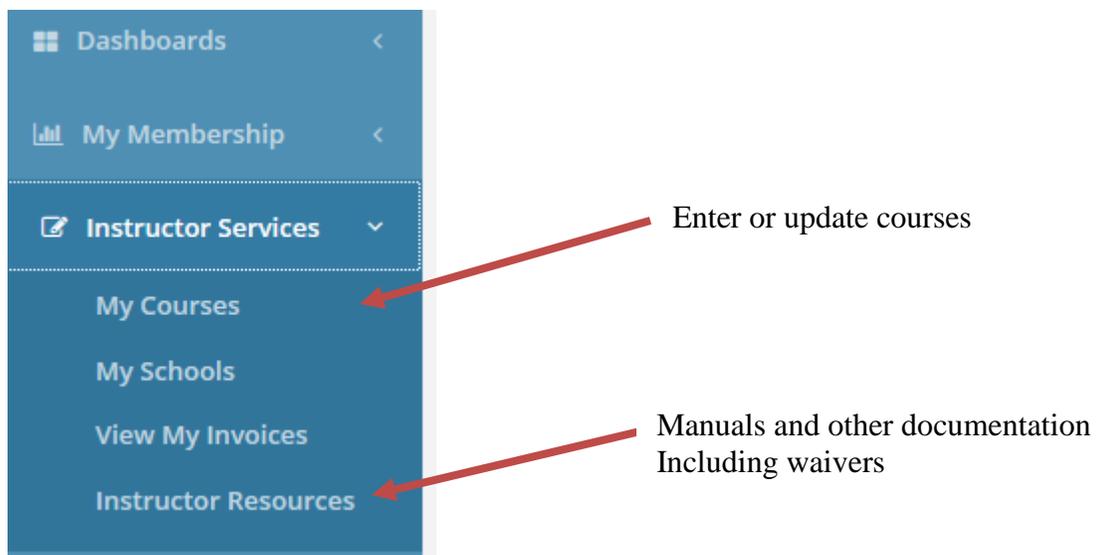
- If you are running a course that does not cover all of the required material it can be registered as a Clinic. The material covered in the clinic must be part of the identified course level criteria.



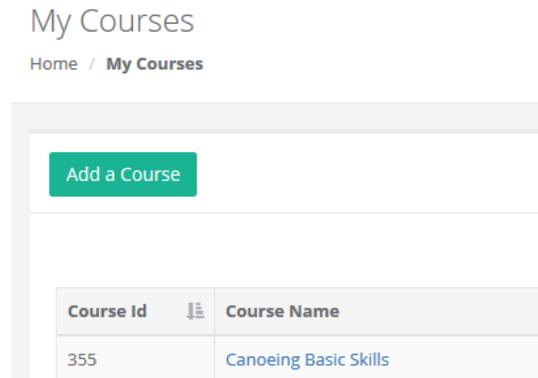
Registering a Skills Course

1. Log into the Paddle Canada Website with your Paddle Canada Instructor membership (userid and password). Log in from the Paddle Canada website home page or by connecting directly to: <https://members.paddlecanada.com/>

As a Paddle Canada Instructor you have access to instructor resources, manuals, waivers, insurance policy information, etc. Clicking on any one of the links will bring up a list of materials available.



- Open your course information by clicking on 'My Courses' to see a current list of the courses that you have taught in the past and access to adding new courses. If you want to modify an existing course find the course number (name/date) in the list and click on the course number.



- Add information for your new course in the subsequent screens. When you select the course stream the possible types of courses and levels will be automatically populated based on the possible combinations within the program. At this point you may select any combination of courses.

COURSE INFORMATION

*Country: Canada

*Province: Manitoba

*Course Stream: Lake Canoe

*Course Type: Skills

*Course Level: -- please select --

- please select --
- Lake Canoe Skills Introduction Tandem
- Lake Canoe Skills Intermediate Tandem
- Lake Canoe Skills Advanced Tandem
- Lake Canoe Skills Introduction Solo
- Lake Canoe Skills Intermediate Solo
- Lake Canoe Skills Advanced Solo
- Lake Canoe Skills Safety & Rescue

An expanded list of options will appear to set the various parameters for the course:

- Instructors:** The instructors and apprentice instructors listed are all of the members in good standing with the appropriate qualifications to teach the identified course.
- Organization:** This is used to identify the organization for which you are teaching the course. If the organization is not listed it can be left blank or you can request an additional organization be added through Paddle Canada.
- Clinic:** The course specific information identifies the course that you are teaching. If you are not teaching a whole course and do not intend to provide a certification check this box. Clinics are subject to the same criteria for administration as a regular course; that is waivers must still be signed, ratios maintained, and course

fees remitted. The material covered in the clinic must fit within the criteria for the course level identified.

- **Start/End Dates:** When attempting to enter information into these fields you are presented with a date selection pop-up. This ensures that the same date format is used across the whole system.
- **On Water Location/Theory Location.** Paddle Canada must know the location of both the on water and theory locations where the course will be taught. Provide enough information to identify the location (pool name/address, lake name/island, etc...). If the theory is being taught at the same location then identify the location.
- If you want paddle Canada to advertise the course for you on their website check the appropriate box. This means that the course information will be publicly available through the Paddle Canada website and will likely appear in various search engines.
- **Additional Comments:** This allows you to provide any further clarifications that may be necessary for the course. I often run my courses over a series of weeks with several sessions lasting only a couple of hours. This allows me to provide that information. I also note specific contact and cost information when appropriate.
- **Declaration check box** – this is an important declaration that confirms that you understand and will follow all Paddle Canada guidelines and policies.

Once your course has been successfully registered the final screen will display the summary information, course ID, and maximum number of participants.

Adding Participants and Completing a Skills Course Report

Once a skills course has been added it will appear on your approved courses list under your profile. You can access the summary course information by clicking on the course number. If you have registered many courses you can search for the specific course by ID number, Course [start] month, or the status (pending, sanctioned, overdue...). The search list will be an entry field or pop-up menu depending on the 'Search by' setting.

By clicking on the course number you will be shown the current course information. To add participants to the course or submit a final report click on the 'Report' link. If you want to cancel the course click on the 'Cancel' link; there is no penalty or cost for canceling a course.

Adding Participants

To add participants to the course complete the participant information. All of the information will be found on the waiver that they completed prior to the course. If they have taken a course in the past search for their name, member number, or email. By selecting existing information already in the system individuals will not be assigned multiple Paddle Canada identifiers.

If they have not taken a course in the past complete the form. Required fields are marked with an asterisk (*). If the system finds a duplicate entry you will be notified.

NOTE: Currently (March 2015) you must search for at least one person even if they are not real to get the 'New Participant' form to appear.

Continue the process of adding students until you are finished. You can close this window at any time and return at a later point. The added students will appear in the course summary listing. Until you submit the final report the course is not completed.

Updating Status

Once a student has been added you can update their status by clicking on 'Report' in the course summary and clicking on the 'Update Status' link. Participants can be given a Failed/Incomplete status if they did not meet the criteria specified for the course. If the student was close to completing and only needed minor improvements to meet the criteria they may be given a conditional pass. In both cases the reasons and remaining conditions must be outlined in the comments box. Individuals that have a full pass cannot have anything in the comments field.

Here are the participants that are currently registered for this course:



Sammy DooGood
Member #: 192208
DooGood Lane
Winnipeg, MB
CA, R3T 1B6
P: 204 557 8897

Email: doogood_email@gmail.com
Course Status: Incomplete 
Certification: No Certification

[✕Remove](#)

Final Report

Once the course is finished a final report can be submitted with payment. After this point information for students given a conditional passes can still be modified. Return the course summary information and click on the 'Report' link (as you would to add new students). Scroll to the bottom of the page and submit the course for final reporting. You will no longer be able to add participant information. Changes will be limited to updating participant status only.

You can ask to be invoiced through the mail or provide a credit card number to pay the outstanding fee immediately.

Skills Course Fees and Ratios

Course fees and student ratios are outlined on the Paddle Canada website. Because they are subject to change they have not been listed here in full – see the website: <http://www.paddlingcanada.com/resources-and-policies/968-paddle-canada-admin-course-fees.html>

Basic fees are currently 25.00/course ratio combination (2014 fee structure). If you add another instructor and increase the number of students the fee increases. Clinics have a flat fee of \$5.00 to a maximum of \$50.00/year. If you have a very small course (one or two participants) a small course allowance has been setup: 8.00\$ for a single student and 16.00\$ for two. Where appropriate administration costs and taxes (HST, GST, PST) are added on top of the base fee amount.

Cancel Course

If you have registered a course but no one has registered by the course date the course can be cancelled (if there are no participants listed). Return to the course summary information and click on the Cancel link. The course will still appear in your course listing but will be identified as 'Cancelled'.

<p>NOTE: Currently (March 19, 2017) there does not appear to be a way to cancel a course and when clicking 'Report' there is no confirmation.</p>

Fall Back or Multi-level Courses

Generally every course being taught must be registered independently as separate courses. There are occasions where an individual participating in a higher level course, without a prerequisite, does not meet the necessary qualifications. You, as the instructor, can certify a lower level award without an additional charge. You may also want to run a single course that represents the combined skills of two levels (e.g. intermediate and

advanced Lake Solo) – in essence a single longer course with more material. There may be individuals in this case that meet the requirements of one level but not the other.

The process to register a multi-level course is as follows.

- Register the primary course at the highest level that you expect participants to achieve (e.g. register an Advanced Lake Solo).
- Register a second course at the lower level when reporting the primary course (when the primary course has finished). With the exception of the start/end dates all the information should be the same as the primary course. Enter the start/end dates as the current date – the date the primary course finished. – since dates cannot be back dated
- Add the participants that did not meet the criteria for the higher level course, but did meet the criteria for the next lower level and submit the course report.
- Leave the course at the invoice stage (do not pay) and contact the Paddle Canada office so they can complete the course and adjust the dates.

In the future Paddle Canada expects to be able to identify multi-level courses within their database.

Instructor Course Registration and Reporting

Follow the same process for registering and setting up and reporting for a skills course with one exception. Under the course information there is a new field indicating who will be paying the fees. With instructor courses the fees may be paid by either the instructor trainer (or organization) or the actual students themselves when they register.

The screenshot shows a form titled "COURSE INFORMATION" with the following fields:

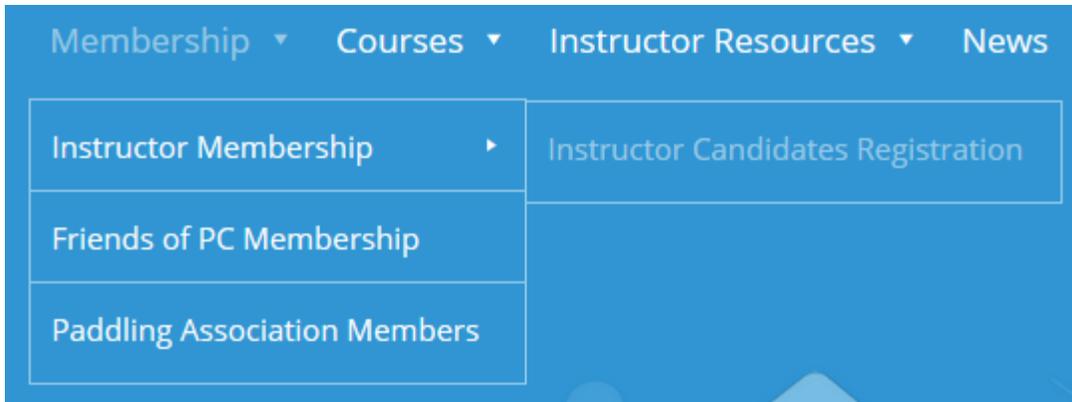
- Course Name:** Style Canoeing Instructor Intermediate
- Certification:** Style Canoeing Instructor Intermediate
- Fees Paid by:** A dropdown menu with the option "Candidate" selected.
- * Start Date:** A date field with a calendar icon next to it.

Once the course has been registered you must send the course registration number (ID) to the potential students along with any other information that you would like them to have prior to the start of the course.

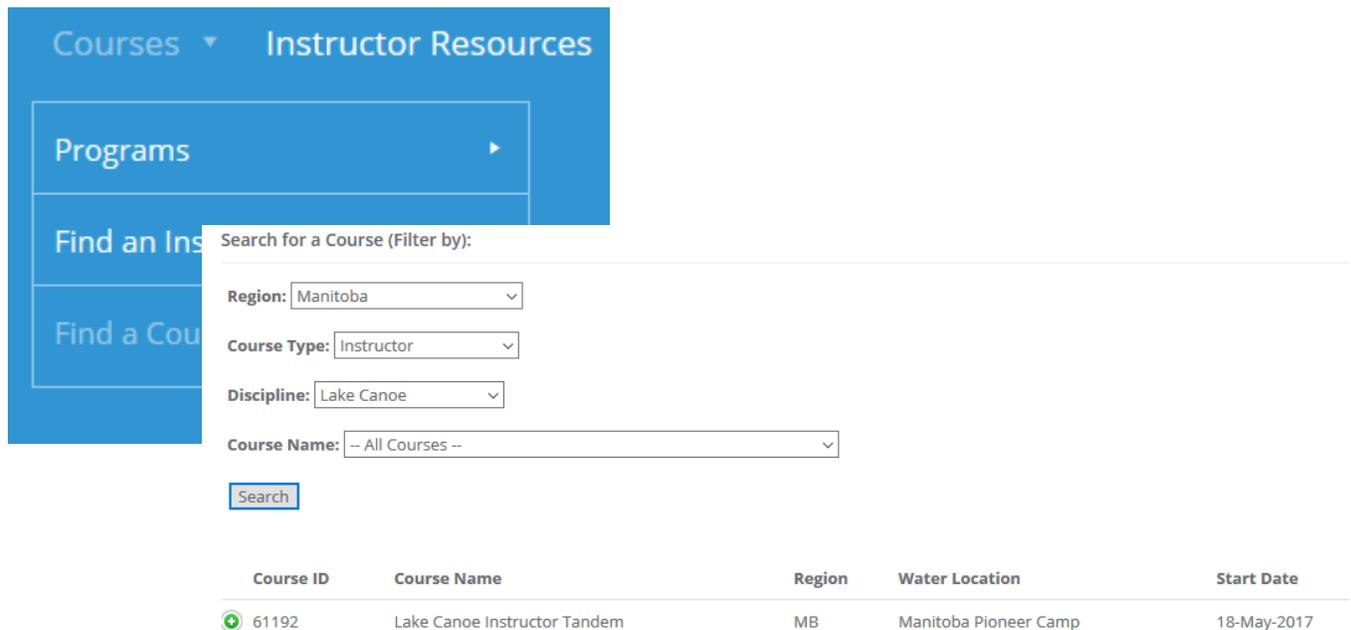
Instructor Candidate Registration

Registration must be completed by the participants prior to the start of the course through the Paddle Canada website.

1. Access the instructor course registration through: <http://www.paddlingcanada.com/>
2. Access the Instructor Candidate section under using the drop down menus.



3. If you are a current Paddle Canada member/instructor log into your account. If you are not a current member fill out the information requested. Items with an asterisk (*) are required. Starting in 2011 instructors are expected to have Basic First Aid (16 hour course minimum) and CPR training.
4. Enter the Instructor Course number (XXXX). If the course is publicly advertised it will be listed under the listed courses



Instructor Course Fee

Instructor fees are outlined on the Paddle Canada website:
<http://www.paddlingcanada.com/resources-and-policies/968-paddle-canada-admin-course-fees.html>

Students may be required to pay the course and instructor fees directly or these may be paid by the hosting organization (instructor trainer) as part of the course fees.

Initial Instructor membership with Paddle Canada is 80.00\$ (Jan 2014); administration fees and taxes are added to this amount. This fee covers the annual membership fee and initial Paddle Canada course fees. This does not include any fees that the instructor trainer, site or host organization may charge for the course. If you are upgrading from one level to another the Paddle Canada fee is 10.00\$

Final Note on Courses

A lot of work goes on behind the scenes at Paddle Canada to keep everything straight. Life is not always simple nor does it always follow the 'rules'. If you have questions problems, need clarification, or if something just doesn't fit call or email the Paddle Canada office.

Paddle Canada- Information and Programs

In 1971, Paddle Canada (formerly the Canadian Recreational Canoeing Association) was formed to help co-ordinate the efforts of non-competitive canoeing and kayaking across Canada. The long term goals of the association included the development of standard skill sets for safe and enjoyable recreational canoeing and kayaking. By examining many avenues including existing programs, current trends and growth trends, Paddle Canada's first success was the creation of a national program for Canoeing. National standards for Sea and River Kayak as well as Stand-Up Paddleboard have also been developed as those activities have grown in popularity among recreational paddlers.

Paddle Canada currently represents nearly 2200 Instructor and Individual Members, 8 Regional Member Associations. Through each of our members and programs we are able to successfully and consistently deliver the message of safe and enjoyable paddling to more than 10,000 paddlers annually.

Further information about Paddle Canada, its programs, and mandate can be found on their website: www.paddlecanada.com

Contact

Paddle Canada | Pagaie Canada
PO Box 126, Station Main
Kingston, Ontario, K7L 4V6
CANADA

Toll Free: 1.888.252.6292 (Toll-free)
Phone: 613.547.3196
Fax: 613.547.4880
Email: info@paddlecanada.com
Skype: paddlecanada

Regular Hours: Monday to Friday 9 am to 5 pm Eastern
Closed weekends and statutory holidays

Paddle Canada's Mission Statement:

To promote recreational paddling instruction, safety and environmental awareness to all Canadians..

The Four Priorities of Paddle Canada are:

1. Public awareness and membership
2. Engaging youth in paddling skills and safety
3. Instruction and skill development
4. Partnerships with similar organizations

Paddle Canada Programs

- PaddleSmart
- Canoeing
 - Waterfront program
 - Canoeing Basics
 - Lake Canoe
 - Moving Water
 - Canoe Tripping
 - Canoe Poling
 - Coastal Canoeing
 - Big Canoe Program
 - Style Canoeing
- Sea Kayaking
- River Kayaking
- Stand Up Paddleboard

Paddle Canada Logo

As a Paddle Canada Instructor the Paddle Canada Logo may be used in promoting your course(s). This provides a common and recognizable link to the national organization and supported standards. The use of the logo is limited to advertisements for accredited Paddle Canada courses only.

The Paddle Canada and Partner Program logos can be downloaded in a variety of electronic formats through the instructor resources on the Paddle Canada website: <http://www.paddlingcanada.com/resources-and-policies/970-paddle-canada-partner-logos.html>



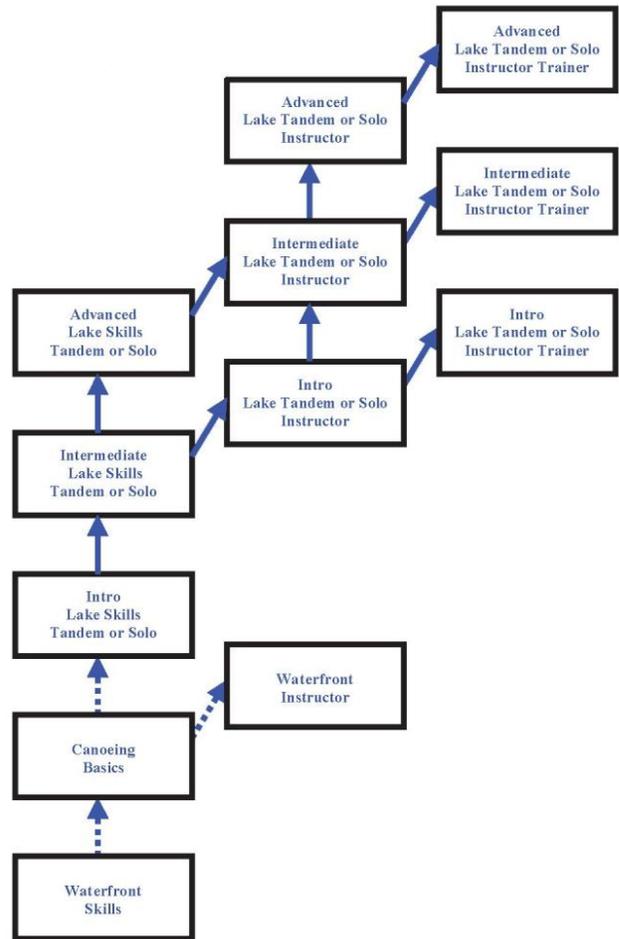
Lake Canoe

Covering Waterfront to Advanced Lake Skills, the Paddle Canada Lake Canoe program is designed to introduce paddlers to the activity of canoeing. Emphasis is placed on boat control and teaching the participants the necessary skills and knowledge to be safe and have fun while on the water.

Moving Water Canoe

The Moving Water Canoe program offers paddlers the opportunity to increase their skill and knowledge of whitewater paddling skills from small currents to progressively more challenging whitewater (Class III rapids) conditions. Emphasis is placed greater boat control, safety, and the thrill of whitewater paddling.

It is recommended that those interested in Moving Water have Intermediate Lake Skills before entering the Moving water discipline.



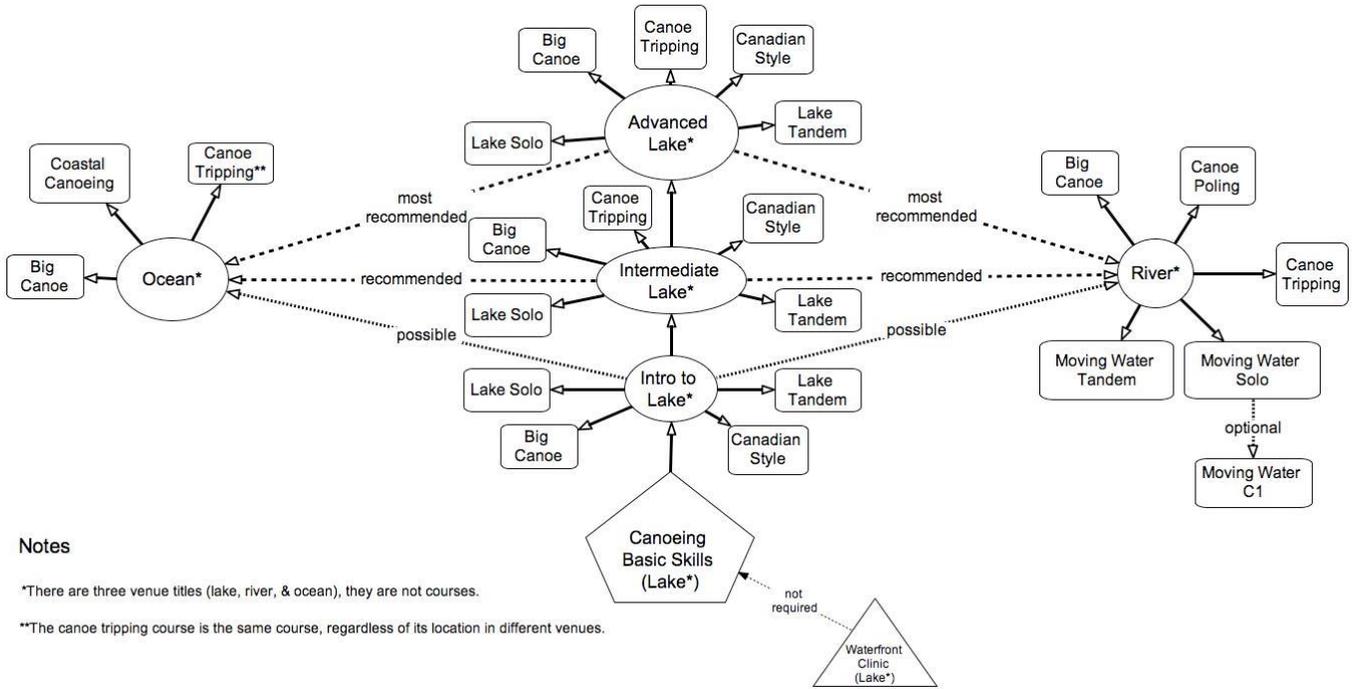
Canoe Tripping

Expanding on the knowledge gained from the Lake and Moving Water programs the Canoe Tripping program offers paddlers the opportunity to increase their skill and knowledge base required for successful trip planning. At the entry level, the program outlines the skills required for 4 day/3 night trips with same day EMS and expands to include extended back country tripping at the advanced level. Unlike other disciplines there is no intermediate level for canoe tripping. There is an expectation that participants will complete Moving Water or Lake skills before the advanced tripping skills.

Style Canoeing

Style canoeing (also called: Omering or Classic Solo Canoeing) is a quite water paddling style that people often associate with dressage for canoes. The canoe is moved across the water in free flowing and graceful motions and routines. Paddlers have a high level of precise control over the canoe and can take the canoe through a series of precisely controlled maneuvers. Canoe dance (ballet) and American Freestyle are subsets or closely associated canoeing forms.

Paddle Canada Hierarchical Canoe Program Venue Chart



Notes

*There are three venue titles (lake, river, & ocean), they are not courses.

**The canoe tripping course is the same course, regardless of its location in different venues.

Paddle Canada Canoe Program Progression Chart

	Big Canoe	Coastal Canoeing	Canadian Style	Lake Solo	Lake Tandem	Canoe Poling	Canoe Tripping	Moving Water C1	Moving Water Solo	Moving Water Tandem
Advanced	Big Canoe Leader	Coastal Canoeing	Canadian Style	Lake Solo	Lake Tandem	Canoe Poling	Canoe Tripping	Moving	Moving Water Solo	Moving Water Tandem
Intermediate	Big Canoe Leader	Coastal Canoeing	Canadian Style	Lake Solo	Lake Tandem	Canoe Poling		Water	Moving Water Solo	Moving Water Tandem
Introduction to	Big Canoe Paddler	Coastal Canoeing	Canadian Style	Lake Solo	Lake Tandem	Canoe Poling	Canoe Tripping	C1 (1 module)	Moving Water Solo	Moving Water Tandem

Waterfront Instructor

Waterfront Clinic

not required

Canoeing Basic Skills

↑

↑

start here

Resources

Books

Skills and Theory Resources

[Burchill, Charles. Intermediate and Advanced Lake Solo, resource manual developed for 2017 Canoe School.](#) Self Published, 2017

[Burchill, Charles. Intermediate and Advanced Lake Tandem, resource manual developed for 2016 Canoe School.](#) Self Published, 2016

Gifford, Douglas (ed). Canoeing Instructor's Resource Manual. Canadian Recreational Canoeing Association. 2004.

Johnston, Brian (ed). Lake Program Manual. Paddle Canada 2012

Johnston, Brian (ed). Canoe Strokes Resource Document. Paddle Canada 2011

Winters, John, The Shape of the Canoe. John Winters (contact Green Valley Boat Works), 2005

Instruction/Teaching resources

Bransford, John D., Ann L. Brown, and Rodney R. Cocking, (editors). How People Learn: Brain, Mind, Experience, and School: Expanded Edition. National Academies Press, 2000

Bell, Philip, Bruce Lewenstein, Andrew W. Shouse, and Michael A. Feder. (Editors). Learning Science in Informal Environments: People, Places, and Pursuits. National Academies Press. 2009

Brymer, Eric & Renshaw, Ian (2010) An introduction to the constraints-led approach to learning in outdoor education. Australian Journal of Outdoor Education, 14 (2), pp. 33-41.

Amrose, Susan A., Michael W. Bridges, Michele DiPietro, Marsha C. Loyett, Marie K. Norman, and Richard E. Mayer. How Learning Works: Seven Research-Based Principles for Smart Teaching. Jossey-Bass, 2010

Gilbertson, Ken, Timothy Bates, Terry McLaughlin, and Alan Ewert. Outdoor Education: Methods and Strategies. Human Kinetics. 2006

Blahnik, Jay. Full-Body Flexibility 2nd Ed. Human Kinetics. 2011

Canadian Wildlife Federation. Wild About Sports: What is My Connection to Water. Canadian Wildlife Federation (<http://cwf-fcf.org/en/explore-our-work/education/wild-about-sports/water.html>) 2015

Canoeing

American National Red Cross [The]. Canoeing. The American National Red Cross, 1977

American Canoe Association, Canoeing: Outdoor Adventures Pamela S. Dillon and Jeremy Oyen Eds. Human Kinetics, Inc. 2008

American Canoe Association, The Beginner's Guide to Canoe & Kayak Paddling, 2006.

Callan, Kevin. The Happy Camper; An Essential Guide to Life Outdoors. Boston Mills Press, 2005

Glaros, Lou, and Charlie Wilson. Freestyle Canoeing Contemporary Paddling Technique. Menasha Ridge Press, 1994 (second printing 1996)

Gray, Daniel A. Canoeing for Everyone. Morris Books Publishing, LLC. 2009

- Jacobson, Cliff. Basic Essentials; Canoeing third edition. A Falcon Guide, Morris Book Pub., 2007
- Kesselheim, Alan S. The Wilderness Paddler's Handbook Ragged Mountain Press., 2001
- Goodwin, Ray. Canoeing. Pesda Press, 2011.
- Mason, Bill. Path of the Paddle; An Illustrated Guide to the Art of Canoeing. Van Nostrand Reinhold Ltd, 1980
- Mason, Bill. Song of the Paddle; An Illustrated Guide to Wilderness Camping. Key Porter Books, 1988
- McGuffin, Gary & Joannie. Paddle your own Canoe; An Illustrated Guide to the Art of Canoeing Boston Mills Press, 1999
- Ray, Slim. The Canoe Handbook. Stackpole Books, 1992
- Roberts, Harry. Basic Essentials; Canoe Paddling third edition rev. by Steve Salins. A Falcon Guide, Morris Book Pub., 2007
- Westwood, Andrew. Canoeing; The Essential Skills and Safety The Heliconia Press, 2007

Navigation

- Seidman, David. The Essential Wilderness Navigator. Ragged Mountain Press.2001
- Featherstone, Steve. Outdoor Guide to Using Your GPS. Creative Publishing. 2004

Rope and Knots

- Pawson, Des. Pocket Guide to Knots & Splices. PRC Publishing Ltd. 2001
- Kavanagh, James. Outdoor Knots: A waterproof Pocket Guide to Essential Outdoor Knots. Waterford Press. 2010

Historical

- Dean, Misao. Inheriting a Canoe Paddle. University of Toronto Press. 2013
- MacGregor, Roy. Canoe Country, The Making of Canada. Vintage Canada. 2016
- Neuzil, Mark and Norman Sims. Canoes: A Natural History in North America. Univ Of Minnesota Press, 2016
- Raffan, James. Bark, Skin and Cedar: Exploring the Canoe in Canadian Experience. Harper Collins Pub. Ltd. 1999
- Roberts, Kenneth G. & Philip Shackleton. The Canoe: A History of the Craft from Panama to the Arctic. Macmillan of Canada. 1983
- Rutstrum, Calvin. North American Canoe Country Macmillan Pub, 1964

Environmental

- Bezener, Andy and Ken De Smet. Manitoba Birds. Lone Pine Pub. 2000
- Blouin, Glen. An Eclectic Guide to Trees East of the Rockies. Boston Mills Press. 2001.
- Gibbons, Euell, Stalking the wild asparagus. Alan C. Hood & Company, Inc. 1962.
- Johnson, Derek, Linda Kershaw, Andy MacKinnon, Jim Pojar, Plants of the Western Boreal Forest & Aspen Parkland. Lone Pine Pub. 1995.
- Kagume, Krista. Saskatchewan and Manitoba Nature Guide. Lone Pine. 2010
- Kavanagh, James, Medicinal Plants An Introduction to Familiar Widespread Species. A Pocket Naturalist® Guide. Waterford Press, Inc 2002.

Kimmerer, Robin Wall, *Gathering Moss: a natural and cultural history of mosses*. Oregon State University Press. 2003

Mollen, Cora, Larry Weber. *Fascinating Fungi of the North Woods*. Kollath+Stensaas Publishing. 2007

Schofield, Janice J. *Discovering Wild Plants Alaska, Western Canada, The Northwest*. Alaska Northwest Books, 1989.

Stensaas, Mark. *Canoe Country Flora: Plants and trees of the North Woods and Boundary Waters*. Pfeifer-Hamilton Publishers. 1996.

Risk and Risk Assessment

Barss, Peter. *Boating Immersion and Trauma Deaths in Canada: 18 Years of Research*, Transport Canada and The Canadian Red Cross Society, 2011

Barss, Peter. *Drownings and Other Water-Related Injuries in Canada, 1991-2000 Module 4: Unpowered Boating*. The Canadian Red Cross Society, 2009

BC Ministry of Advanced Education, The. *Risk Management for Outdoor Programs: A Handbook for Administrators and Instructors*. 2003

Drowning Prevention Research Centre Canada, *Canadian Drowning Report 2013*. Prepared for the Lifesaving Society Canada by the Drowning Prevention Research Centre Canada (<http://www.lifesavingsociety.com/media/157475/2013-cdndrowningreport.pdf>)

Giesbrecht, Gordon G., James A. Wilkerson. *Hypothermia, frostbite, and other cold injuries: prevention, survival, rescue and treatment*. The Mountaineers Books, 2006

Guthrie, Steven P. *Actual Risk and Perceived Risk: Implications for Teaching Judgement and Decision-Making to Leaders*.1997. In: *Adventuras en Mexico: Proceedings of the International Conference on Outdoor Recreation and Education*.1997.

Parkin, Danny, and Genny Blades. *Risk Management and Outdoor Education: a practical approach to ensuring positive outcomes*. *Outdoor Educator's Association of Queensland's journal HORIZONS*, September 1998, n66, p10-15

Snow-Jones, Alison, Gordon Black, Pamela S. Dillon, David Jenkins (ed). *Critical Judgement II: Understanding & Preventing Canoe & Kayak Fatalities 1996-2004*. American Canoe Association 2004.

Videos

Mason, Bill. *Path of Paddle series*. National Film Board. 1976

Mason, Becky. *Advanced Classic Solo Canoeing Video*. 2011

Mason, Becky. *Classic Solo Canoeing*. 2004.

Paddle Canada Videos (<http://www.paddlingcanada.com/resources/videos/canoeing-videos.html>)

YouTube Channels (<http://www.youtube.com/user/burchillcharles>,
<http://www.youtube.com/user/CanoeingTV>)

Development of a Lesson Plan

- On Water (Forward Line) <http://youtu.be/Zc6ou-ZTuEE>
- Theory (Paddles) https://www.youtube.com/watch?v=JQvm2M_HSj4 (note this was based on the Tell Me method but PC has since suggested using IES).

- What one looks like
http://home.cc.umanitoba.ca/~burchil/pm_canoe/lesson_plan.pdf

Websites

Canoeing

Best Practices for Paddlers and Paddlesports Programs, American Canoe Association

(http://www.americancanoe.org/resource/resmgr/sei-educational_resources/brochure_best_practices.pdf)

Charles goes Canoeing – some eclectic information

(http://home.cc.umanitoba.ca/~burchil/pm_canoe/)

Canadian Canoe Routes (<http://www.myccr.com/>)

Canoe Sailing Resources 2010

(http://freepages.genealogy.rootsweb.ancestry.com/~fassitt/canoe_mirror/canoe_sailing.html)

Canoeing.com (<http://www.canoeing.com/>)

John Holtrop's Hull Shape and Canoe Performance

(<http://www.johnsboatstuff.com/Articles/canoe.htm>)

John Winters Page (<http://www.greenval.com/jwinters.html>)

Paddle Canada (<http://www.paddlingcanada.com>)

Paddle Canada Trip Checklist and Float Plan (<http://www.paddlecanada.com/resources-and-policies/1187-paddle-trip-checklist-float-plan.html>)

Paddle Manitoba (<http://www.paddle.mb.ca/>)

Paddler's Safety Checklist, American Canoe Association,

(http://www.americancanoe.org/resource/resmgr/sei-educational_resources/brochure_paddler_s_safety_ch.pdf)

Toward Paddling Perfection: How to get the most out of the Forward Stroke

(<http://www.daveyhearn.com/Coaching/Technique/Towards%20Paddling%20Perfection/c-boater.htm>)

Small Vessel Regulation (<http://laws.justice.gc.ca/eng/SOR-2010-91/index.html>)

Contraventions Regulations (Part II) (<http://laws.justice.gc.ca/eng/SOR-96-313/page-3.html#anchors:3>)

Compliance Guide For Human-Powered Non-Pleasure Vessels - TP 15204. TP 15204. Transport Canada.

(<http://www.tc.gc.ca/media/documents/marinesafety/TP15204E.PDF>)

Rolf Kraiker, CCR Forum Discussion on Canoe Physics.

(<http://www.myccr.com/SectionForums/viewtopic.php?f=20&t=3469>)

Cliff Jacobson, Paddling.net Forum on Flatwater Canoeing Know How!

(<http://www.paddling.net/guidelines/showArticle.html?825>)

Canoeing: Technique, Paddling.net Forum – links to series of articles and videos.

(<http://www.paddling.net/guidelines/showCategory.html?category=11>)

Recreational Canoeing in Canada: Its History and Hazards, Canadian Geographic.

(http://www.canadiangeographic.ca/magazine/ja12/pdf/recreational_canoeing_w_e_b.pdf)

Education:

OutdoorEd.com - The Outdoor Education Professional's Resource:

<http://www.outdoored.com/>

Wilderness: a project in natural living & transformation: <http://www.wilderness.com/>

Seaman, Jayson. Learning styles as a basis for paddlesports instruction: A review of the literature and some alternatives to add to the conversation. (downloaded June 1, 2013, internally dated Nov 28, 2012)

http://c.ymedn.com/sites/www.americancanoe.org/resource/resmgr/sei-focus/learning_styles_as_a_basis_f.pdf

Fell, George. Evidence based paddlesport coaching (flat earth). Internally dated Jan 11, 2011. <http://www.georgefell.co.uk/article/flaearth.pdf>,

<http://www.georgefell.co.uk/article/intro.htm>

Navigation

Atlas of Canada Topographic Maps (<http://atlas.nrcan.gc.ca/site/english/maps/topo>)

QGis (<http://www.qgis.org/>)

GeoGratis (PDF/TIF of Topographic Maps) (<http://www.geogratings.gc.ca>)

GPS Terms and Jargon

(http://home.cc.umanitoba.ca/~burchil/mantario/gps/terms_jargon.pdf)

GPS Information (<http://gpsinformation.net/>)

GPS Utility (<http://www.gpsu.co.uk/>)

Manitoba Land Initiative (<http://web2.gov.mb.ca/mli/>)

Online Declination Calculator, (http://gsc.nrcan.gc.ca/geomag/field/mdcalc_e.php)

Paddle Manitoba Ripple 2007,

(http://www.paddle.mb.ca/images/pdfs/ripple/Ripple_fall_07.pdf)

Paddle Manitoba Ripple 2008,

(http://www.paddle.mb.ca/images/pdfs/ripple/Ripple_winter_08.pdf)

Topographic Maps the Basics. (http://maps.nrcan.gc.ca/topo101/index_e.php)

Knots

Knots by Grog (<http://www.animatedknots.com/index.php>)

NETKNOT (http://www.netknots.com/html/paddling_knots.html)

Weather

Mare's Tails and Mackerel Skies (<http://www.landfallnavigation.com/mares.html>)

Coping with Wind, Canoeing (<http://www.paddling.net/guidelines/showArticle.html?83>)

Risk Exposure

Cold Water Boot Camp (<http://www.coldwaterbootcamp.com/>)

Beyond Cold Water Boot Camp (<http://www.beyondcoldwaterbootcamp.com/>)

Clubs and Associations

Paddling and Outdoor

Paddle Canada (<http://www.paddlecanada.com>)

Paddle Manitoba (<http://www.paddle.mb.ca>)

Nature Manitoba (<http://www.naturemanitoba.ca/>)

Manitoba Pioneer Camp (<http://www.manitobapioneercamp.ca/>)

Leave no Trace Canada (<http://www.leavenotrace.ca/home>)

Environmental Advocacy

The Canadian Parks and Wilderness Society - <http://www.cpaws.org/>

The Sierra Club of Canada - <http://www.sierraclub.ca/>

The David Suzuki Foundation - <http://www.davidsuzuki.org/>

The Manitoba Eco-Network - <http://mbeconetwork.org/>

Greenpeace Canada - <http://www.greenpeace.org/canada/>

Teaching opportunities

- camps, FWA, outfitting companies, stores, self, etc...
- Paddle Canada listing

Appendices

Course Checklist

The following is a checklist of tasks that should be reviewed or completed for any Paddle Canada course. Although not all of the items will be applicable on every course or clinic each section should be reviewed to ensure nothing is missed.

1. Course Offering (if instructing for another organization this section may not be relevant).
 - When will the course be offered (Dates, Times)
 - Where will the course be offered? If permission is required then contact the site owner/manager
 - Is there interest already in the course
 - What level of course will be offered
 - Skills or Instructor course
 - Confirm that there are instructors available for the course
 - Is there a cost for running the course
 - Number of possible participants
 - Prerequisites required
 - What equipment required, who will provide
2. Registration of Course (skip if not the course director, still get course #, confirm registration)
 - Complete Paddle Canada online course registration
 - Director
 - Instructor(s), Apprentice(s)
 - If Instructor course who will be paying fees
 - Site description/location required
 - Will course be private or public on PC website
 - Confirm registration, and add course number to course documentation in communication section.
3. Equipment (even if teaching for an organization still review)
 - Who will be supplying equipment?
 - If participants then include requirements on documentation/communications, include rental or source of equipment information.
 - Boats (number/type)
 - PFDs
 - Paddles/Poles (number/type)
 - Safety (bailer, whistle, throw bag, first aid kit) (number)
4. Course Plan
 - Develop outline (see appropriate section in the manual)

- Develop lesson plans (see appropriate section in the manual)
 - Handouts required
 - Instructor equipment (buoys, tape, white boards, teaching stuff,)
 - Participant equipment
 - Confirm number of people in course, demographics (age, background)
 - Waivers printed
 - Certificates printed (blank, possibly with names, course ID, dates, instructor)
 - Evaluation forms
5. Risk Plan
- Number of people, demographics, swimming, medical
 - Emergency contacts
 - Site review
 - Washroom
 - Water available (potable)
 - Building access (some place to hide from environment)
 - Access to EMS - is phone available/working
 - Site access - dock, stairs, rocks,
 - Confirm insurance coverage (mostly course registration)
 - First aid - Kit
 - First aid - Instructor
 - Waivers
 - Medical forms
 - Water conditions (low/high/rapid/flood/...)
 - Environmental protection and treatment, shelter - hypothermia potential, hyperthermia potential
 - Review incident logging process for both Paddle Canada and site
6. Communication Plan (may be taken care of by organization/director)
- Course notification/advertise - who should be notified
 - Cancellation plan/notification policy
 - Course Information
 - Risk notification - generally
 - Course content/level, prerequisites
 - What to bring - e.g. change clothing, helmet, lunch, water, equipment
 - Where is course, when, expectations
 - Equipment source, equipment provided (or not)
 - How to register, last registration date
 - Contact participants prior to course, confirmation (above information)
7. Site Review (immediately prior to course)

- Assessment for risk, access, etc...
- Equipment review (if supplied by site)
 - Canoes
 - Paddles/poles
 - Safety (whistles, PFD, Bailer, throw bag, first aid)
- Washrooms
- Water (potable)
- Confirm contact for EMS (on site phone working, cell coverage)

8. COURSE

- See course outline
- If instructor course confirm all candidates registered
- Confirm course payment
- Confirm all safety equipment available (esp. if provided by participants)
- Waivers
- Photographic waivers
- Evaluations
- Post course communication - confirm candidates are willing to receive email/phone or other contact.

9. Post Course

- Did course run (completed)
 - If not why, cancel course with Paddle Canada
- Register students (or report to organization/director)
 - Pass
 - Conditional - if fall back available, reason. If possible provide options for completing course material.
 - Fail - reason, short falls
- Review evaluations
- Complete reflection
- Modify course notes, lesson plans (as necessary)
- Pay course fees, or confirm that organization has paid fees.
- Follow-up with students, if further contact was agreed to during course
 - Provide responses unanswered questions
 - Conditional pass - opportunities coming up (if known)
 - Instructor candidates - opportunities coming up (if known)
- Return equipment
 - If organization provided equipment provided equipment report/deficiencies
- Incident report if necessary

10. The END!

Paddle Canada Checklists: <http://www.paddlecanada.com/resources-and-policies/1187-paddle-trip-checklist-float-plan.html>

Sample Course Outline – Waterfront Clinic

WATERFRONT CLINIC

60 Minute Opening Tandem

Pre-requisites: None

Ratio: 1:10

80m from shore, 100m shoreline

SAFETY & RESCUE

Theory

TC Regulations

Cold Water Concerns and Hypothermia

Environmental Hazards

Rescue Procedures

Expanding Ones Skills

Buddy System

PC PFD Policy: Always wear it

Practical

Warm Up

Body Mass Centered in Canoe

How to Sit or Kneel

Basic Whistle Signals

PADDLING SKILLS

General:

Enter and Exit Canoe (shore and/or dock)

Balance 3 Point Contact

Paddling Positions

How to Hold a Paddle

Switching Sides

Strokes:

Forward

Reverse

Check (stop)

Draw

Push Away

Rudder

Maneuvers

Forward Paddling

Spinning the Canoe

Stopping

KNOWLEDGE

Canoe and Paddle (parts and terms)

PFD Selection

Where To Go From Here!

Paddling in a Group

Course Limitations

Additional Courses

Canoeing Resources

Local Paddling Clubs or Groups

The canoe as a national symbol

OVERVIEW

Within a safe environment, and where possible, the clinic should be run as a fun event with games and group activities.

Sample Course Outline - Lake Canoe Course

PC Intro Lake Canoe (outline) - Based roughly on 5th Edition (June May 2012) PC Lake Manual
9:00am - 5:00pm with 1 hour lunch, FWA – canoes/PFDs/Paddles available but arrive early and check.
Four people registered – registration and medical forms reviewed/attached

Take - first aid kit,

- PFD, Paddle, 3xWhistle, 3xBailers
- Sample rope for knots
- This sheet
- Lunch/water
- Hat, sunscreen
- Long sleeve shirt, quick dry pants, bathing suit
- McGuffin (paddle own canoe) and Mason (path of paddle) books for show

Introduction

- Who I am, and my background
- Course - intro to Lake
 - Basic Canoe skills and rescues in a Lake environment
 - Skills covered
- Who are you and why here - modify as needed based on interest/skill
- Warm up
- Transport requirements
 - PFD, Paddle/anchor, bailer, whistle, 15m heavable line
 - Flash light, Mag compass
 - include First Aid, Float plans - if leaders
 - 15C water then hypothermia prepared
 - Whistle signals - 1 attention, 2 come to me (rare), 3 Emergency clear

Getting in (care of equipment)

Launch T, || to shore

Trim

Include basic canoe parts terminology

Basic Strokes – may do dry land session depending on experience

Forward, Push, Reverse, Back

go try, review, correct/check

Paddling position and use of body

Sculling brace

Include stroke terminology

Balance

Kneeling, Sitting, Standing (one at a time)

Lines (50m)

Stroke corrections

J

Stopping

go try, review, correct/check

Switching paddling sides (at same time)

Paddling in cadence (why?)

Switching places - where?

The bow paddler moves backwards to the centre and then the stern paddler move forward to the bow seat. The bow paddler then continues backwards to the stern seat.

Repeat Lines – above – go, play, review, correct/check

Knots

Bowline, half hitch

Pivots (360)

How?????

Sweeps

Draw/Pry

go try – fast/slow, review, correct/check

where would these be useful

Wide turns triangular/circular/round dock

sweep, draw(ish)

go try, review, correct, check

Switch/repeat

Lunch – the following is done over lunch as discussion and food (yum-yum)

Paddle Canada - programs

PC Courses where it goes - lake, moving water, tripping
Exposure - hypothermia/hypothermia
Clothing
Environmental hazards - wind/waves
Throw bags
What to take on day trip - why, why not?
Warm up

Reverse paddling 10m pivot, continue

Turns (MITH) and continue
Bow draw, stern sweep
Bow J/Cross, hard J
switch/repeat

Docking - as above but docking
Turn stop
Side displacement as needed.

Paddling in a group
Lead/Sweep
Distance from shore (as far as weakest swimmer)
Navigation - keep track of where you are!

Safe Canoe (thoughts)
Slowly and carefully moving canoes from storage rack to shoreline, being considerate of other paddlers, always wear a PFD, paddling in a group with a lead & sweep, don't start to paddle away until everyone is in the water, understand whistle signals, understand how a rescue will take place, patience when getting onto & off the water with a group, respect the environment around you, know the environment in which you are paddling, when not to go out paddling, have a paddling plan & who should know it, what safety equipment one should have when on a day paddle

Rescues
talk, reach, throw, row, go
group, individual, rescuer, victim
Canoe tow (basic) - stern paddler with rope
bow paddler with leg/hand
Empty swamped canoe - shore/dock
Participate C-over-C - rescue
Communication, swimmer hang onto canoe

Review
Go home

Sample Lesson Plan Outline

INSTRUCTOR

DATE

COURSE TITLE

LESSON NUMBER

UNIT

SPECIFIC TOPIC

INSTRUCTIONAL GOAL (outcome that students should be able to demonstrate upon completion of the entire unit)

PERFORMANCE OBJECTIVE (use an action verb in a description of a measurable outcome)

RATIONALE (brief justification -- why you feel the students need to learn this topic)

LESSON CONTENT (what is to be taught)

INSTRUCTIONAL PROCEDURES

- a. Focusing event (something to get the students' attention)
- b. Teaching procedures (methods you will use)
- c. Formative check (progress checks throughout the lesson)
- d. Student Participation (how you will get the students to participate)
- e. Closure (how you will end the lesson)

EVALUATION PROCEDURES (how you will measure outcomes to determine if the material has been learned)

MATERIALS AND AIDS (what you will need in order to teach this lesson)

based on: <http://www2.honolulu.hawaii.edu/facdev/guidebk/teachtip/lesspln3.htm>

Sample Lesson Plan Forms

(based on Paddle Canada Lake Canoe Program Manual)

IDEAS Method (for On Water Teaching Topics)

Course Name: _____ Date: _____

Site location: _____ Topic: _____

Teaching Aids:

IDEAS Method

Introduce (1-2 sentences):

Demo (remember do not to speak through the demo)

&

Explain (3-4 key points that must be passed on)

1 -

2 -

3 -

4 -

Action/Activity (they do it, should be the biggest portion):

- Detection and Correction

Summarize (After skill is completed and before you move on):

Error Detection and Correction (Critical Feedback)

IES or IBS Method for Theory Topics

(adapted from resource provided by Dave Wooldridge, Paddle Canada)

Topic: _____ Teaching Aids: _____

Remember that any Theory topic should include an instructional technique. Lecturing is the least effective method for getting material across. Most people need to **see** and **interact** with a topic to learn it. When listening to us talk, 10% is retained... so stay away from lecture!

Instructional Technique Options:

Visual Aid (easiest)

1. **Interact:** Use whatever you are talking about in your presentation and interact with it (canoe, paddle, dry bag...)
2. **Flip Chart or White Board:** This can be as simple as a laminated paper and white board markers. Write up key points of topic

Get Group involved (most effective)

1. **Discover and Share:** Example- give your participants different paddle materials (wood, fiberglass, aluminium) and have them share with the group their findings.
2. **Games / Activities:** Tag, Relays, tug of war or go for a paddle and they follow you.
3. **Stations:** Set up stations with different material in them and ask the group to rotate through each one. They all have a piece of paper and you ask them to write down the contents at each station and what they are use for as a whole. Example: required safety “stuff”, optional safety “stuff”, clothing, navigational aid, food, waterproof containers.....

Intro (what are going to talk about?)

Engage (**Body**) (topic, what IT are you using)

Summary (something to tie it together)

TELL ME Method (Theory Topics) LESSON PLAN
(adapted from resource provided by Dave Wooldridge, Paddle Canada)

Course Name: _____ Date: _____

Site location: _____ Topic: _____

Teaching Aids:

TELL ME Method
TELL ME WHAT YOU'RE GOING TO TELL ME (Introduce: short/quick)

TELL ME (Content/body: involve group, props, interactive)

Have them **TELL YOU WHAT THEY LEARNT**

TELL ME WHAT YOU TOLD ME (Summary/Conclusion: short/quick)

Minimum Required Safety Equipment and Background Handout

March 17, 2017

Canoes, Kayaks, Rowboats and Rowing Shells (not over 6m in length)

Small Vessel Regulation (refer to official regulations for complete and up to date information)



Personal Lifesaving Appliances

One Canadian-approved personal flotation device or lifejacket of appropriate size for each person on board. These must be worn on a guided excursion.



One buoyant heaving line of not less than 15 m in length.



During a guided excursion when on class 3 or above waters, a helmet of an appropriate size must be worn.

Vessel Safety Equipment

Manual propelling device or anchor with at least 15m rope or chain.



One bailer - bailers must hold at least 750 ml, have an opening of at least 65 cm² (10 in²) and be made of plastic or metal, or one manual water pump fitted with or accompanied by sufficient hose to enable a person using the pump to pump water from the bilge of the vessel over the side of the vessel.



Navigation Equipment & Visual Signals

A sound-signaling device such as a pealess whistle.

One magnetic compass - Canoes or Kayaks less than 8m in length and within sight of navigation marks do not require a compass.



Navigation lights that meet the applicable standards set out in the *Collision Regulations* – a waterproof flash light is suitable in a canoe or kayak if operated after sunset and before sunrise or in periods of restricted visibility



One radar reflector. A radar reflector is not required if the boat operates in limited traffic conditions, daylight and favourable environmental conditions, and where having a radar reflector is not essential to the boat's safety



First Aid

Instructors, Guides, and Leaders on excursions or with passengers are required to carry: A First Aid Kit (meeting regulations) packed in a water proof container. If water is less than 15°C then equipment or procedures must be in place to protect participants from hypothermia or cold shock.



Other

Instructors, Guides, and Leaders on excursions or with passengers must provide a float plan and the number of participants to a designated person on shore. A safety briefing must be conducted at the start of a course or outing providing an overview safety and emergency procedures.

Missing something? (fines):

PFDD – \$200, heaving line – \$200, bailer or manual water pump – \$200, sound signaling device – \$200, navigation lights – \$200

Small Vessel Regulation: <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-91/>

Contraventions Regulations (Part II): <http://www.laws-lois.justice.gc.ca/eng/regulations/SOR-96-313/page-4.html>

Related Reading:

Path of the Paddle, Bill Mason & Paul Mason,
Key Porter Books, 1999

Paddle your own Canoe, Gary & Joanie McGuffin,
Boston Mills Press, 1999

Canoeing The Essential Skills and Safety, Andrew
Westwood, Heliconia Press, 2007

WWW:

Paddle Manitoba: <http://www.paddle.mb.ca/>

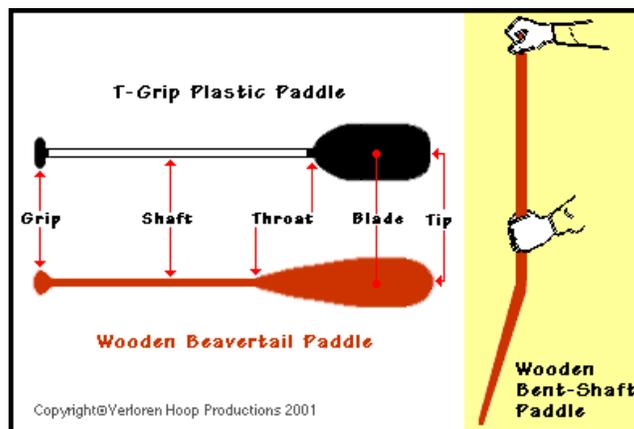
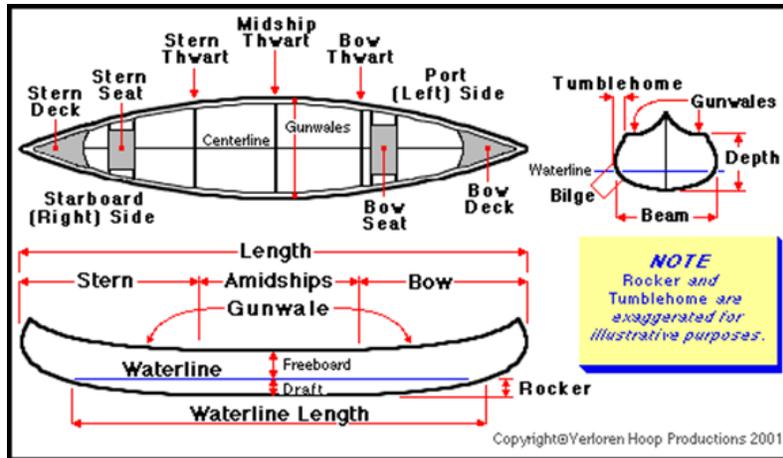
Paddle Canada: <http://www.paddlingcanada.com/>

Transport Canada Safe Boating Guide:

<http://www.tc.gc.ca/eng/marinesafety/debs-obs-equipment-size-unpowered-192.htm>

Eclectic Canoe Info:

http://home.cc.umanitoba.ca/~burchil/pm_canoe/



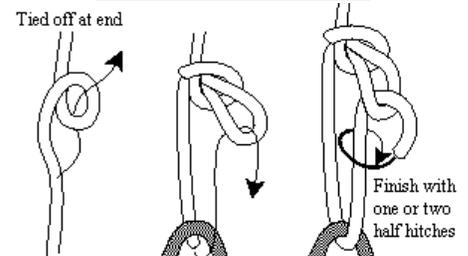
The Bowline Knot.

The bowline is one of the most used loop knots. The Bowline is best for forming a loop or eye, it doesn't jam and it's easy to undo if not under load. Some people find the bowline easier learn by saying "*the rabbit comes out of its hole, round the tree and back down the hole again.*"



Truckers Hitch or Cinch Knot

Use the Truckers Hitch for tying the boat down to your roof rack on the car. The loop gives you a 2 to 1 mechanical advantage in tightening the rope. It also gives you the advantage of pulling down with your weight as you pull.



Remember! Wear a lifejacket or PFD, File a plan, Be honest, Know the water, Go in a group, Carry proper equipment, Carry first aid (and know how to use), Don't overload, Balance your boat (Stay low Stay steady), Stay out of flood waters, Stay out of cold water, Stay warm (Hypothermia), Hot weather stay cool (Hyperthermia), Know the weather, Know your partners, Watch the wind, Watch current, Don't Drink and Boat, Watch for obstacles, Time of day (don't paddle at night), Respect Others, Know the rules/regulations.

Course evaluation form

Canoe Course Evaluation

Please provide your thoughts and feelings to help us improve and develop future programs. Your feedback is greatly appreciated.

Canoeing Course Level: _____ Date: _____

Instructor(s): _____

Did you receive adequate information about the course ahead of time?

If not what was missing?

Did the course meet your expectations?

If not what did you hope to gain?

What did you enjoy the most about the course?

What was the most useful information that you learned?

How can we improve the course?

How can the instructor(s) improve?

What would you tell someone about the course if they asked?

Instructor Assessment Forms

On Water Instructing Assessment Outline

Date _____ Paddler _____

Lesson topic _____

	Unacceptable	Weak	Satisfactory	Excellent	
1. Choose appropriate location	0	1	2	3	4
2. Organize the group	0	1	2	3	4
3. Communicate clearly and effectively	0	1	2	3	4
4. Use lesson aids or teaching techniques	0	1	2	3	4
5. Use of the IDEAS Method (Introduce/Demo/Explain/Action/Summarize)	0	1	2	3	4
6. Use of the "MITH" (where appropriate) (Momentum/Initiation/Tilt/Hold)	0	1	2	3	4
7. Introduce the skill	0	1	2	3	4
8. Demonstrate the skill	0	1	2	3	4
9. Explain the skill	0	1	2	3	4
10. Use of activity to practice the skill	0	1	2	3	4
11. Provides sufficient time for practice	0	1	2	3	4
12. Maintains control and contact with group	0	1	2	3	4
13. Detect and Correct common problems	0	1	2	3	4
14. Summarize the skill	0	1	2	3	4
15. Time allotment achieved	0	1	2	3	4

Comments

Off Water Teaching Assessment Outline

Lesson topic _____

	Unacceptable	Weak	Satisfactory	Excellent	
1. TELL ME Method	0	1	2	3	4
2. Topic clearly stated	0	1	2	3	4
3. Started and ended on time	0	1	2	3	4
4. Voice clear and deliberate	0	1	2	3	4
5. Speaks with authority	0	1	2	3	4
6. Pacing purposeful and appropriate	0	1	2	3	4
7. Use of lesson aids & hand outs	0	1	2	3	4
8. Student participation	0	1	2	3	4
9. Topic coverage is appropriate	0	1	2	3	4
10. Concluding comments clear & concise	0	1	2	3	4
11. Time allotment achieved	0	1	2	3	4
12. Topic material is correct and accurate	0	1	2	3	4

Comments

Teaching Evaluation.

Presenter: _____ Evaluator: _____

Date: _____ Topic/Title: _____

Audience Age Group: _____ Number: _____

1. Lesson Plan Organization: none poor fair good excellent

Requirements Met:

Comments:

2: Presentation (comments on each of the following)

Delivery (voice, repetitive expressions (hum), body language, confidence, language)

Awareness of students (understanding level, discipline, answering questions, reading audience, teachable moments)

Message (clarity, organization, pace, impact)

Techniques used and effectiveness (imaging, games, role playing,)

Content (quality of information, errors, completeness, background, breadth/depth)

Summary (conclusion, how items tied together)

3. Improvements (provide a concise list (3) of areas in which the presenter could improve).

Safety Briefing

Transport Canada states the following: *“Instructors or guides will conduct, at the start of the course, an overview with all participants of all relevant safety and emergency procedures. The safety briefing will be conducted in either or both official languages and according to the group’s needs.”*

More information: <http://laws-lois.justice.gc.ca/eng/regulations/SOR-2010-91/> (Page 32)

This material was developed by Paddle Canada and can be found on their website:

<https://www.paddlecanada.com/paddle-canada-safety-briefing-for-all-disciplines-courses/>

Also see Transport Canada for a checklist for guided excursions: Compliance Guide For Human-Powered Non-Pleasure Vessels - TP 15204 (PDF)

<http://www.tc.gc.ca/media/documents/marinesafety/TP15204E.PDF>

This is a suggested list of what may be discussed in a Safety Briefing prior to setting out on the water and/or at the beginning of a course. This list includes items that may not be relevant to a day’s activity or session. The briefing is something that should be done each time a group goes on the water. It may be a brief statement or it may cover a particularly challenging portion of the waterway or coastline.

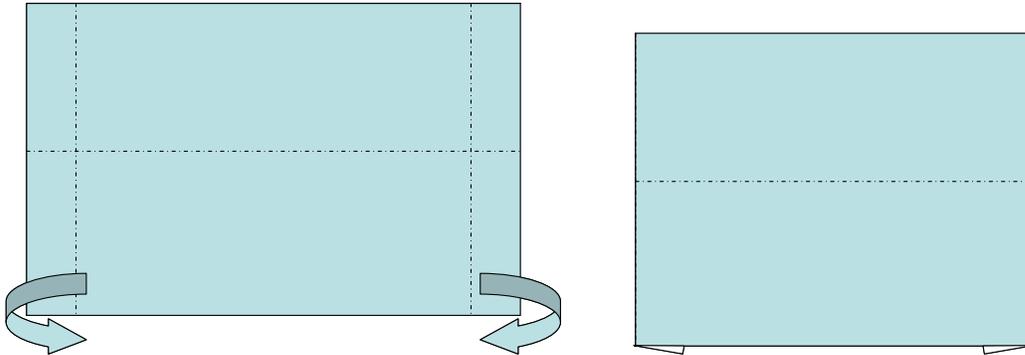
- Ensure everyone is properly dressed for the conditions.
- Ensure everyone meets Transport Canada regulations.
- Confirm the float plan is accurate and filed.
- If relevant confirm the vehicles are locked and keys are a safe place.
- Identify the leader and sweep.
- Know and discuss the weather forecast and its impact on the trip.
- Discuss the paddling plan; what to expect, check the chart, include time frames for paddling, breaks, lunch, and other goals.
- Identify the location of the medical kit and emergency gear.
- Ensure all paddlers have their own gear safely stowed including clothing, food, and medicine etc.
- Review emergency procedures including; hand signals, capsize and rescue.
- Identify the hazards of the launching area.
- Identify waiting area for the group while others are launching.
- If a waiver is required ensure that it has been completed with emergency contact information.
- Allow time for questions or comments.
- Confirm everyone is ‘zipped and clipped’; PFD’s, whistles, spray decks in place, ensure safety gear is accessible, hatches sealed, foot pedals adjusted and ready for launch.

Many of these are general ideas that could serve as a trigger for any specific details a trip leader or instructor may bring forward in safety briefing.

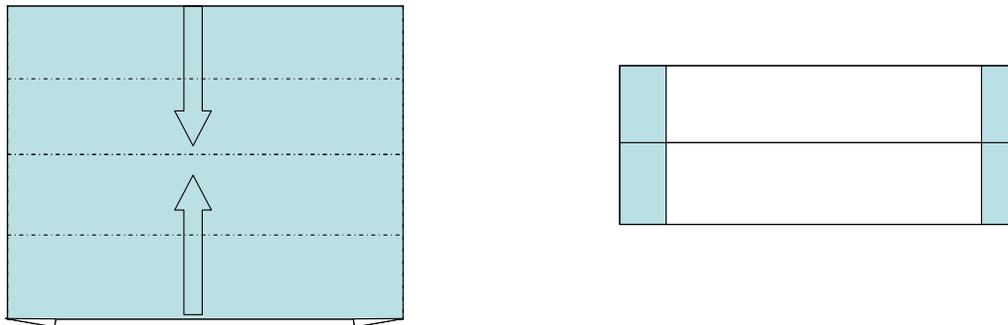
Quick Paper Boat

The following provides quick easy instructions for making a paper canoe that can be used in demonstrations and having races. This example uses 8x11 sheet of paper to make a slightly longer canoe but it can be done with traditional square paper as well. At each step the image on the left indicates the fold lines, the image on the right shows the paper after the fold is completed.

1. Fold paper in half to make a center line marker. Open up and fold ends of paper (1-2cm) back behind the sheet. These will be the decks of the canoe in the final product.



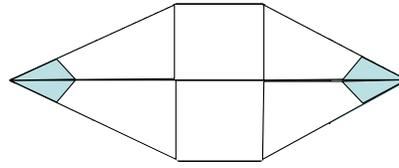
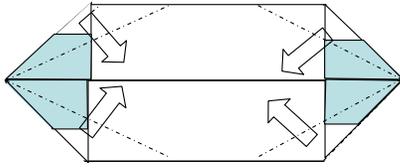
2. Mark and fold the bottom and top of the sheet into the middle.



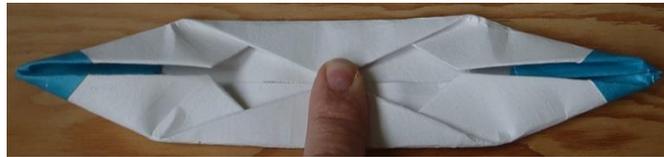
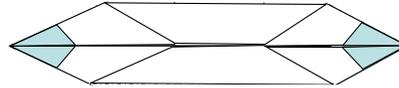
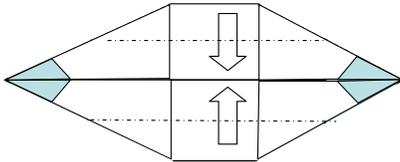
3. Fold the ends into make a point



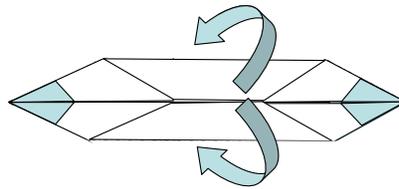
4. Fold ends in again to make a sharper point.



5. Fold the bottom and top to the centre line.



6. Open the boat up through the middle line and carefully invert.



Sample Games

see:

<https://members.paddlecanada.com/assets/pdf/canoe/draft%20canoe%20games%2026may09.pdf>

Paddle Canada Waiver (adult)

see: <https://members.paddlecanada.com/download.php?secid=waiver>

Paddle Canada Incident Report

see: http://www.paddlingcanada.com/pdf/accident_2010.pdf