



Whitewater Kayak Instructor 3



REACH HIGHER

National Resource Manual

Last Updated April 2015





National
Coaching
Certification
Program



coach.ca
REACH HIGHER

PARTNERS IN COACH EDUCATION

The National Coaching Certification Program is a collaborative program of the Government of Canada, provincial/territorial governments, national/provincial/territorial sport organizations, and the Coaching Association of Canada.



























The programs of this organization are funded in part by Sport Canada.



© This document is copyrighted by the Coaching Association of Canada (2014) and its licensors. All rights reserved. Printed in Canada.

coach.ca
REACH HIGHER

 National
Coaching
Certification
Program



Visit coach.ca – Canada's most dynamic coaching community.
Check your certification, complete online evaluations, access
sport nutrition tips, read coach stories and more!

Table of Contents

PURPOSE OF DOCUMENT	9
<i>NCCP Core Competencies</i>	9
<i>Learning Outcomes</i>	9
WHITewater LEADER 3 / INSTRUCTOR 3 PROGRAM	9
<i>Required Skills and/or Prerequisites for a Whitewater Leader 3 / Instructor 3</i>	9
<i>Evaluation</i>	10
<i>Whitewater Kayak Leader 3</i>	10
<i>Whitewater Kayak Instructor 3</i>	10
<i>Learning Facilitator (LF)</i>	10
<i>Master Learning Facilitator (MLF)</i>	10
<i>Recertification</i>	10
THE ROLE OF A KAYAKING INSTRUCTOR - LEADER	11
Whitewater Instructor 3	12
PURPOSE	12
NCCP CORE COMPETENCIES	12
<i>Problem-solving</i>	12
<i>Valuing</i>	12
<i>Critical Thinking</i>	12
<i>Leadership</i>	13
<i>Interaction</i>	13
LEARNING OUTCOMES.....	13
TRAINING OBJECTIVES	13
EVALUATION.....	13
PERFORMANCE OBJECTIVES WHITewater KAYAK INSTRUCTOR 3.....	14
<i>The Whitewater Instructor 3 will be able to:</i>	14
TEACHING IN CLASS III	15
Teaching in Class III.....	16
TRIP PLANNING / EMERGENCY ACTION PLAN	17
Trip Planing	18
.....	19
<i>Canoe Kayak Canada River Trip Plan</i>	19
<i>Sample Trip Planning Sheet</i>	20
Emergency Action Plan (EAP)	21
WHAT IS AN EMERGENCY ACTION PLAN?	21

<i>Emergency Action Plan Checklist</i>	22
<i>Sample Emergency Action Plan</i>	22
<i>Steps to Follow When an Injury Occurs</i>	23
RIVER MAPS FOR EMERGENCY ACTION PLAN	25
.....	26
<i>Canoe Kayak Canada Whitewater Emergency Action Plan Form</i>	26
.....	28
<i>Canoe Kayak Canada - Whitewater Plan a Session Template</i>	28
<i>River Safety Talk</i>	30
LOG BOOK	31
LOG BOOK	32
<i>Log Book Example</i>	33
CANOE KAYAK CANADA WHITEWATER TRIP REPORT.....	36
SAMPLE ACCIDENT REPORT FORM	37
MAKING ETHICAL DECISIONS.....	39
<i>Make Ethical Decisions:</i>	40
PLAN A SESSION.....	41
PLANNING A SESSION	42
SESSION PLAN CONSIDERATIONS.....	42
<i>The Key Components of a Session</i>	43
<i>Key Elements of Each Part of a Session</i>	44
<i>Skill Development</i>	45
.....	46
<i>Canoe Kayak Canada Whitewater Plan a Session Template</i>	46
<i>Session Template</i>	47
<i>Sample Activity Planning Sheet</i>	48
SKILLS AND MANOEUVRES	49
Whitewater Paddling Skills and Manoeuvres.....	50
FUNDAMENTAL SKILLS.....	50
<i>Balance</i>	50
<i>Edge Control</i>	50
<i>Linking Moves</i>	52
<i>Boat, Blade, and Body</i>	52
<i>Paddler Progression</i>	55
<i>Analyze Performance Reference Model – Framework</i>	57
INCLUSION	76

<i>Inclusion</i>	77
References:.....	79
EVALUATION.....	80
RIVER KAYAK	80
INSTRUCTOR 3	80
LEARNING OUTCOMES.....	81
PURPOSE OF THE PROGRAM.....	81
EVALUATION.....	81
FORMS	81
EVALUATION OVERVIEW– CKC RIVER KAYAK INSTRUCTOR 3.....	82
PERFORMANCE CRITERIA	82
METHOD OF EVALUATION.....	82
Ensure that the lesson environment is safe	82
NCCP PLAN A SESSION.....	83
<i>Evidence of Achievement</i>	83
<i>Planning Element</i>	84
INSTRUCTOR 3	86
NCCP PROVIDE SUPPORT TO PADDLERS	86
<i>Rank</i>	87
<i>Standard</i>	87
<i>Makes interventions that promote learning</i>	87
LESSON PLAN FORM	89
.....	90
<i>CanoeKayak Canada Whitewater Emergency Action Plan Form</i>	90



CanoeKayak Canada NCCP *Whitewater Instructor Development Model*



COMMUNITY SPORT COACH

INSTRUCTION COACH

Community Initiation

Trained Pool Kayak Instructor
(PKI Course - 1 Day)

Instruction Beginner

Trained Lake Kayak Instructor
(LKI Course - 1 Day)



Certified Novice Instructor
(LKI Evaluation - 1/2 Day)

Instruction Intermediate

Trained River Leader 2
(RL2 Course - 1.5 Days)



Certified River Leader 2
(RL2 Evaluation - 1 Day)



Trained River Instructor 2
(RI2 Course - 1.5 Days)



Certified River Instructor 2
(RL2 Evaluation - 1 Day)

Instruction Advanced

Trained Whitewater Leader 3
(WL3 Course - 1.5 Days)



Certified Whitewater Leader 3
(WL3 Evaluation - 1 Day)



Trained Whitewater Instructor 3
(WI3 Course - 1.5 Days)



Certified Whitewater Instructor 3
(WI3 Evaluation - 1 Day)

A Canadian Sport for families, communities and champions | Un sport canadien pour les familles, les communautés et les champions



Training and Certification Pathway for Whitewater CanoeKayak Coaches, Instructors & Leaders

Whitewater Kayak Instructor 3

Training Entry

1. 16 years of age
2. River Kayak Leader 2 Trained highly recommended
3. MED Instruction online evaluation highly recommended
4. EAPs for the river
5. Waivers & Acknowledgement of Risk Agreements
6. Grade III river paddler
7. Reliable river rolls

Theory Modules

1. Planning a WW lesson Passport for Paddlesport Transformation 1-2-3
2. Risk management & site selection on Grade III rivers
3. Participant performance assessment

Whitewater Modules

1. Demonstrate quality Grade III river maneuvers
2. Site selection for WW maneuvers
3. Teaching maneuvers on the river
4. Organizational strategies for teaching maneuvers in WW
5. Boat-Blade-Body detection & correction process for WW

CKC / NCCP
WW Kayak
Instructor – 3
TRAINED

Training courses are required for “trained” status and highly recommended preparation. However, training is not mandatory for evaluation.

Evaluation Entry Pre-Requisites:

1. 18 years of age
2. CPR / First-Aid Certified
3. CKC River Kayak Instructor 2 Trained or Substantially similar experience & training
4. Swiftwater Rescue

Evaluation Step 1

1. Emergency Action Plan (EAP) for WW lessons
2. Waivers & Acknowledgement of Risk Agreements
3. Lesson plan Passport for Paddlesport Transformation 1-2-3
4. Participant Performance assessment

Evaluation Step 2 (On-water Evaluation)

1. Demonstrate quality Grade III WW maneuvers
2. Organizational sessions
3. Group management in whitewater
4. River maneuvers lessons w Boat-Blade-Body analysis and feedback

Online Evaluation

MED Instruction Stream
(www.coach.ca)

CKC / NCCP
WW Kayak
Instructor – 3
CERTIFIED

PURPOSE OF DOCUMENT

This reference material is your source of information for the Instructor 3 workshop. It provides the theoretical reference for the training process. Participating in the workshop is part of the certification process in order to become Instructor 3. This workshop will equally provide you with tools to continue improving your teaching and leading skills. We therefore recommend that you save this Guide and consult it regularly to ensure continuous improvement in your teaching and leading skills as well as the courses you deliver.

NCCP Core Competencies

As you progress through the different modules, you will work on developing five core competencies that will help you become a more effective instructor/leader and have a more meaningful impact on paddlers' experience. The competencies are problem solving, valuing, critical thinking, leadership, and interaction. Below are the competencies developed in the Instructor 3 sections of the workshop.

Learning Outcomes

After finishing this workshop, you will be able to take a critical look at your own teaching and leading skills. You will also learn how to use several assessment tools that will enable you to keep working on your own to improve your effectiveness as a teacher or leader. Each section has specific learning outcomes defined.

WHITEWATER LEADER 3 / INSTRUCTOR 3 PROGRAM

The Leader 3 / Instructor 3 program is normally offered as a combined program. However, the Leader 3 program can be offered on its own to certify river leaders. Each program is offered as a 2 day course (including evaluation), but are offered together as a 3-day course (including evaluation).

Required Skills and/or Prerequisites for a Whitewater Leader 3 / Instructor 3

The required skills and/or prerequisites for a Leader 3 - Instructor 3 are as follows:

- Able to perform all technical skills listed under "Teach the Following Skills" at a demonstration quality level on Class III rivers.
- Are knowledgeable, skilled, comfortable and safe paddling Grade III whitewater.
- It is strongly recommended that Leaders/Instructors possess a valid First Aid certification appropriate for the group and location the trip/instruction will take place.
- It is strongly recommended that Leaders/Instructors possess a valid Swift Water Rescue certification (e.g., CKC Swift Water Rescue)
- Effective communication, listening, presenting skills
- Dynamic individual with good interpersonal skills
- Organized and punctual
- Plans, prepares, and follows up
- Must be 18 years of age (participants can be "Trained" at age 16, but can't be fully certified to lead independent trips until age 18)

Evaluation

Upon completion of the L3/I3 course, participants that meet the requirements will be considered “trained”. To be “certified”, participants must attend an evaluation session. These sessions may occur at the end of the course, at an event or festival, or scheduled individually.

Evaluators for the program will be the LFs or MLFs. Ideally, the evaluation will be completed by an independent LF (not the one running the course or affiliated with the candidate’s organization). But in some regions this will not be possible.

Whitewater Kayak Leader 3

Leaders are responsible for leading kayak participants on river trips. They must adhere to the CKC requirements outlined in the Leader 3 guide.

Certification remains valid for three paddling seasons and expire on Dec 31 of the third season.

Whitewater Kayak Instructor 3

Instructors are responsible for teaching and leading kayak participants. They must adhere to the CKC requirements outlined in this guide.

Certifications remain valid for three paddling seasons and expire on Dec 31 of the third season.

Learning Facilitator (LF)

Learning Facilitators are responsible for delivering the certification program to leader/instructor candidates. There is an LF for each level in the CKC Kayak Program.

To become an LF an Instructor must have been certified at that level for a minimum of two years and apply to their provincial body and national body. Additionally, they must attend an LF clinic where they assist on an L2/I2 course and be observed conducting an additional L2/I2 program and receive a recommendation by the LF or MLF running the program.

Master Learning Facilitator (MLF)

Master Learning Facilitators are responsible for the national program and for certifying the LFs. There will be two MLF’s for each region. The MLF is responsible for maintaining an appropriate number of LFs regionally to adequately offer the CKC program. The MLF is also responsible for keeping the LFs current and up to date on the program. MLFs will meet every two years to review and update the program.

To become a MLF, an LF would apply to both the Provincial Body and National Body. LFs are generally invited to become MLFs

Recertification

To maintain an Instructor, LF, or MLF certification, the instructor must remain active in the paddling community. Instructors must attend a recertification clinic once every three years to remain current, or upgrade to a higher level of certification. Recertification cycle is as follows:

- LFs must attend a regional LF symposium every three years
- MLFs and LFs must teach a minimum of two courses in three years
- MLFs must attend the national MLF symposium every two years

THE ROLE OF A KAYAKING INSTRUCTOR - LEADER

A kayaking instructor/leader is a highly-trained individual with a vast wealth of knowledge and experience in the sport of whitewater kayaking. They are able to effectively communicate difficult concepts and make learning in a whitewater environment fun while at the same time minimizing the risk to students.

An instructor/leader teaches and leads under a mantle of professionalism. The use of appropriate language and behavior is imperative at all times. To lose one's cool as an instructor/leader instantly loses the respect of students.

A kayak instructor/leader must accurately assess each students' mental and physical limitations and be able to vary the length of the instructional class/day or river run to avoid situations where the students become frightened, cold, over-heated, bored, embarrassed, tired, frustrated or, at worst, injured.

An instructor/leader needs to be articulate and able to express himself/herself in a clear concise and accurate manner. It is the unique challenge of an instructor/leader to present information in a way that is interesting and fun.

Kayak instructors/leaders are responsible for choosing suitable paddling sites that will enhance the student's learning curve, while at the same time minimizing the inherent risks of whitewater. It is an instructor/leader's duty to protect the safety of each student on the course or river run.

An instructor/leader is considered to be a representative of the affiliation, club, school and/or company where they are instructing or leading. The instructor is, in effect, an ambassador. The instructor/leader's ability to interact with students is a direct reflection upon the organization and is crucial to the success of an instructor/leader.

Ultimately, the job of a kayak instructor/leader is to provide a safe and enjoyable learning experience.

In short, NO FUN = NO LEARNING

Whitewater Instructor 3

PURPOSE

The purpose of the River Instructor 3 is to certify instructors that are able to organize, teach and lead paddlers on rivers up to and including Class III

- Class III - “obstacles that would be suggested to be avoided with potential consequences if encountered”

Ratio: 1:6 Instructor to Participant

With the support from another “trained” L3, the instructor to participant ratio can be increased to 1:10

NCCP CORE COMPETENCIES

As instructors progress through this module, they will work on developing five core competencies that will help them become a more effective instructor and have a more meaningful impact on paddlers’ experience. Here are just some of the ways these competencies come into play:

Problem-solving

- Analyze a teaching situation and identify aspects that need improvement
- Develop an initial session plan and progressively modify it as new knowledge is acquired
- Determine an appropriate structure for a session
- Design activities that develop both technical skills and paddling abilities
- Plan a session

Valuing

- Appreciate how a structured and organized session promotes learning
- Recognize and respect differences in learning styles
- Develop a teaching approach based on the paddler’s needs
- Provide constructive and positive feedback

Critical Thinking

- Reflect on the meaning of effective teaching and the factors that promote learning
- Reflect on preferred learning styles and think about how these may affect one’s approach to teaching
- Compare current knowledge, skills, and attitudes with the information provided in the Reference Material
- Assess whether and how feedback provided promotes learning

Leadership

- Ensure your paddling group is properly equipped for the activity at hand.
- Appreciate the effect that good organization, clear explanations, effective demonstrations, interventions that target specific factors, and quality feedback have on others and on their learning.

Interaction

- Brainstorm and work collaboratively with other instructors to complete specific tasks.
- Work with other instructors to design activities that develop both technical skills and paddling abilities.

LEARNING OUTCOMES

Upon completion of this module, Instructors will be able to organize and implement a whitewater kayaking program. After finishing this course, Instructors will be able to take a critical look at their own teaching and leading skills. They will be able to organize safe, fun sessions that meet their paddlers' needs and reflects the whitewater Long-Term Athlete Development Model.

They will also learn how to use several self-assessment tools that will enable them to keep working on their own to improve their effectiveness as an instructor. In particular, you will be able to:

- Make interventions that promote a positive paddling experience
- Implement an appropriately structured and organized session
- Make interventions that promote learning
- Identify appropriate activities for each part of the session
- Choose an appropriate site
- Detect and correct paddling skills

TRAINING OBJECTIVES

Canoe Kayak Canada uses a Competency based training and education structure to deliver this program. This means that during the program you will be evaluated on your skills and be provided with accurate feedback on your abilities. You will be provided with resources and training in how to effectively teach skills while other modules outline essential background information; safety, liability, leading a paddling group and making ethical decisions.

EVALUATION

Upon completion of this course a Whitewater Instructor 3 will be considered "Trained". To be "Certified" an instructor must be evaluated leading real life participants. This may happen at the end of the course, on a future course, or at a regional event. Each provincial MLF and association will ensure opportunities to complete the certification process exist.

Ideally the evaluation will be completed by an independent LF (not the one running the course or associated with the candidates' organization). But in some regions this will not be possible.

PERFORMANCE OBJECTIVES WHITEWATER KAYAK INSTRUCTOR 3

Participants must meet performance objectives in the following areas:

- Personal paddling skills that instil confidence in teaching on a Class III River. Paddling Class III with ease and proficient demonstration quality techniques.
- Planning a session on Class III Rivers
- Teaching a session on Class III Rivers
- Provide support to paddlers
- Analyze paddler performance

The Whitewater Instructor 3 will be able to:

- Organize and plan a session for intermediate and advanced paddlers and effectively teach on Class III moving water.
- Lead a paddling group down class III rapids in a safe manner.

Teach the following skills / techniques / information

- All skills, safety, information and manoeuvres from the Pool and Lake Instructor Level and River Instructor 2/Leader 2 and Leader 3 programs.
- Roll: c-to-c, sweep, hand, back deck
- Eddy turns
- Jet Ferries
- Back Ferry
- S-turn (midstream)
- Boof
- Running Drops and Ledges
- Surfing 360 spin
- Linking manoeuvres
- River Rescue Techniques and Principles

The instructor will know and be able to apply, essential information relating to:

- Instructor roles and responsibilities
- Organizing and planning a paddling course
- Teaching and learning
- Support to paddler
- Requirements for continued or further levels of certification



TEACHING IN CLASS III



Teaching in Class III

The actual skills a paddler needs to possess to paddle class 3 do not change from what was learned to paddle class II. Paddlers still use eddy turns, ferries, rolls, surfs, etc to safely navigate a class III rapid.

What does change in class III is the speed at which maneuvers must happen, the timing to perform them and the nuances to put it all together.

The challenge for the Whitewater Kayak Instructor 3 then is to be able to present to the participant the concepts of reading the river speed, timing, etc. The key to this road lies in continuing to improve:

- Strokes
- Balance
- Edging
- Manoeuvres (e.g., eddy turns, ferries)
- Timing and co-ordination

Once these keys are mastered on class II rivers, a paddler is ready to challenge themselves on class III. Here a Whitewater Kayak Instructor 3 is invaluable. The instructor 3 will be teaching participants the TACTICAL skills required for Class III – reading the river, planning your approach (line) and making it happen, making efficient adjustments, using quality strokes, body positioning.

One of the biggest differences between class II and III paddlers is that class II paddlers react to the forces the river places on a kayak. Class III paddlers ANTICIPATE the forces the river places on a kayak and attempts to use them to the paddlers advantage.



Trip Planning / Emergency Action Plan



Trip Planing

For any trip, no matter how long or short, a leader must create a Trip Plan. This planning shows that you have carefully considered the stretch of river you wish to take your participants on. Taking into account, their experience and skills as well as the goal of the trip.

A written trip plan can be simple with just an outline, or complex with great detail. The key to any trip plan is to analyze where you will go, where the put in and take out are, identify rapids, identify hazards, identify the emergency exits, how long it will take and what equipment will be required.

Part of the trip planning process is included or duplicated in the Emergency Action Plan. The Trip Plan should include more details on the actual trip.

A blank Trip Plan form is included in the manual for your use.



Canoe Kayak Canada River Trip Plan

Location	Date
_____	_____
Put in	Take out
_____	_____
Trip leader	Assist. Leader
_____	_____

Participant's Name	Age	Skill Level
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

RIVER SAFETY TALK: Before you begin teaching, make sure you cover the following:

Equipment (Gear check): Does everyone have a paddle, skirt, PFD, and kayak? Is gear put on properly (PFDs zipped and helmets clipped). Are float bags inflated?

Signals: Discuss whistle, paddle, and verbal signs, and remind paddlers that they must return signals when they have understood (okay – okay)

Hazards: Wood, rocks, holes, and others specific to your site

Group structure: Remind paddlers that there is a lead and a sweep kayak, and to maintain proper spacing between paddlers for each rapid (to be addressed on the river)

Ropes: Grab the rope with your hands and do not wrap around you

Swim:

- Show them the defensive swim position, feet and bum up, looking downstream, ferry to shore
- Tell them not to stand until they touch the shore
- Tell them to hang onto their gear
- If there's a swimmer, others to stay where they are (in an eddy) or head to the closest eddy

Sample Trip Planning Sheet

Trip date: _____ River / Section _____

Length/Time: _____ Location: _____

Equipment needed: _____

Description of River:

River Rapids / Hazards : _____

Risk factors/safety guidelines to give to paddlers: _____

Debrief / Cool Down: _____

Emergency Action Plan (EAP)

WHAT IS AN EMERGENCY ACTION PLAN?

An Emergency Action Plan (EAP) is a plan leaders design to help them respond to emergency situations. Preparing such a plan in advance will help you respond in a responsible and clear-headed way if an emergency occurs. An EAP is simply a pre-formulated idea of what you need to know if things were to go wrong while on the river.

Transport Canada requires an EAP to be prepared for the river, facility or site where you normally hold practices and for any river, facility or site where you host your instruction or river runs.


An EAP can be simple or elaborate. It should cover the following:

- Designate in advance who is in charge if an emergency occurs (this may be you).
- Have a cellular phone or VHF radio with you and make sure the battery is fully charged. If this is not possible, find out the exact location of a telephone you can use at all times. Have spare change in case you need to use a pay phone.
- Have emergency telephone numbers with you (facility manager, superintendent, fire, police, ambulance), as well as paddlers' contact numbers (parents/guardians, next of kin, family doctor).
- Have on hand a medical profile for each paddler so that this information can be provided to emergency medical personnel. Include in this profile signed consent from the parent/guardian to authorize medical treatment in an emergency.
- Prepare directions for Emergency Medical Services (EMS) to follow to reach the site as quickly as possible. You must include information such as the closest major intersection; trail heads, or major landmarks.
- Have a first-aid kit accessible and properly stocked at all times (all leaders are required to pursue appropriate first-aid training).
- Designate in advance a call person: the person who makes contact with medical authorities and otherwise assists the person in charge. Be sure that your call person can give emergency vehicles precise directions to your location on the river, the facility or practice site.

When an injury occurs, the EAP should be activated immediately if the injured person:

- Is not breathing
- Does not have a pulse
- Is bleeding profusely
- Has impaired consciousness
- Has injured the back, neck, or head
- Has a visible major trauma to a limb

Emergency Action Plan Checklist

<p>Access to telephones</p> 	<ul style="list-style-type: none"> <input type="checkbox"/> Phone, battery well charged <input type="checkbox"/> Practice venues <input type="checkbox"/> Race venues <input type="checkbox"/> River runs <input type="checkbox"/> List of emergency phone numbers <input type="checkbox"/> Change available to make phone calls from a pay phone
<p>Directions to access the site and the river (throughout run)</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Accurate directions to river and site (practice) <input type="checkbox"/> Accurate directions to emergency access points <input type="checkbox"/> Accurate directions to key or major river sites
<p>Paddler information</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Personal profile forms <input type="checkbox"/> Emergency contacts <input type="checkbox"/> Medical profiles
<p>Personnel information</p>	<ul style="list-style-type: none"> <input type="checkbox"/> The person in charge is identified <input type="checkbox"/> The call person is identified <input type="checkbox"/> Assistants (charge and call persons) are identified
<p>Note: The medical profile of each paddler should be up-to-date and be in the first-aid kit. Your first-aid kit must be accessible at all times and must be checked regularly.</p>	

Sample Emergency Action Plan

Included is the suggested EAP you should carry with you while on the river, be it on your local practice site or during river outings. This EAP form is used as a quick visual reminder of the steps needed to follow during an emergency situation. All leaders should have established a detailed EAP for the venues they paddle on. When developing an EAP for your local venues or regular river runs, it is highly recommended to practice emergency situation simulations in order to develop better knowledge of the environment and hazards you will be exposed to as well as to familiarize leaders and paddlers with the steps below.

An emergency action plan is not a substitute for prudent planning or proper risk management while on or off the river.

Steps to Follow When an Injury Occurs

Note:

Not all injuries require activation of EAP. It is important that leaders properly assess the situation to ensure the safety of all paddlers involved.

Step 1: Control the environment so that no further harm occurs

- Ensure you are immobilized in a safe area
- Stop all other paddlers in a safe area (ideally an eddy with access to an evacuation route)
- Extraction of dangerously pinned or entrapped and submerged paddlers automatically activates EAP
- Extraction of injured paddler may be required. If so, do an initial assessment before activating EAP.

Step 2: Do an initial assessment of the situation

- If the paddler:
- Is not breathing
- Does not have a pulse
- Is bleeding profusely
- Has impaired consciousness
- Has injured the back, neck, or head
- Has a visible major trauma to a limb
- Cannot move his or her arms or legs or has lost feeling in them

If the paddler does not show the signs above, proceed to Step 3

Step 3: Do a second assessment of the situation

- Gather the facts by talking to the injured paddler as well as anyone who witnessed the incident
- Stay with the injured paddler and try to calm him or her; your tone of voice and body language are

Step 4: Assess the injury

- Have someone with first-aid training complete an assessment of the injury and decide how to proceed.
- If the person trained in first aid is not sure of the severity of the injury or no one present has first-aid training, activate EAP.
- If the assessor is sure the injury is minor, proceed to Step 5.

Step 5: Control the return to activity

Allow paddler to return to activity after a minor injury only if there is no:

- Swelling
- Deformity
- Continued bleeding
- Reduced range of motion
- Pain when using injured part

Step 6: Record the injury on an accident report form and inform the parents/guardians if the paddler is less than 18.

RIVER MAPS FOR EMERGENCY ACTION PLAN

All river instructor/leaders and leaders must have a basic knowledge of the rivers they are paddling. Here is a list of symbols and details that should be found on the EAP river maps.

River Access Points

◆	Put-in and take out: place this symbol where you can put in and take out on the river
] [Bridge: indicate any road crossings
]d	Dam
—	Paved road: indicate nearby roads including name or number
-	Dirt road: indicate nearby roads including name or number
...	Trail: Indicate trail details including name or number.
-+	Railway tracks: Indicate railway tracks nearby.

Special Hazards:

[w	Waterfall: Indicate height of waterfall (ex. [W→10m)
...p	Portage: Indicate portage trail on the side of the river and include the distance of the portage (ex. P 100m)
<///	Difficult rescue area(s): Indicate difficult rescue area(s) on the river. For example any canyons or cliffs make evacuation difficult if no trails reach the riverside. To indicate these areas, use the < to delineate the zone on the side of the river and place stripes on the inside of the delineation. Others may be indicated by a small caption or footnote. (i.e.glass on trail during portage)

River Classification:

=>R	Rapid: To indicate these areas, use the = across the section of the river that has rapids. Then use the ∟ to delineate the zone on the side of the river and RI to RVI on the outside corner of the delineation to indicate the difficulty.
>S Sil	Then use the ∟ to delineate the zone on the side of the river and SI to SVI on the outside corner of the delineation to indicate the difficulty.
→	Direction of water flow is indicated by the arrow pointing downstream.

Other Important Details:

→H	Direction to hospital: Use the→ and H to indicate the route to follow.
→PH	Pay phone: Place either PH on the site where a phone may be found or →PH if it is found following a certain direction.
♥	Evacuation options: Include a brief description of conditions when not already specified by the map (e.g., steep incline leads to ...)

As mentioned above, an emergency action plan is not a substitute for prudent planning or proper risk management while on or off the river. As an instructor/leader or leader you are responsible for the safety of your group. You also have the responsibility to indicate to your group where they can access your EAP form while on or off the river. This information will be useful in any emergency situation you are dealing with or if you are the victim in an emergency situation.



Canoe Kayak Canada Whitewater Emergency Action Plan Form

Location: _____ Date: _____

Time in: _____ Time out: _____

Trip leader: _____ Assist. leader: _____

First aid leader: 1. _____ 2. _____

Comm. leader: 1. _____ 2. _____

Map of River and Surroundings

River Access Points	Special Hazards	River Classification & Other
◆ Put-in and take out	[w Waterfall	=>R Rapid (e.g., RI to RVI)
] [Bridge	...p Portage	>S Sil Include SI to SVI
]d Dam	</// Difficult rescue area(s)	→ Direction of water flow
— Paved road	Others (e.g., glass on trail)	
- Dirt road		→H Direction to hospital
... Trail		→PH Pay phone
-+ Railway tracks		♥ Evacuation (include description)

Place image of map here.

Participants:

Name	Medical Issues	ECP & Contact Numbers

Vehicles:

Make/Model	License Plate Number	Location of Keys

In case of emergency, follow these steps:

1. Ensure you are safe	
2. Ensure no others are in danger	
4. All paddlers stop and gather	<ul style="list-style-type: none"> • Extract victim
6. Stabilize victim (use soap notes)	<ul style="list-style-type: none"> • Check level of consciousness • Check ABCs • Open airway • Check breathing • Check circulation (pulse) • Stabilize c-spine • DISABILITY (NEUROLOGICAL) • Check for trauma and exposure to extremities
7. Treat victim as required (first aid kits)	
8. Emergency contact - 911 (or other name, number, address)	<ul style="list-style-type: none"> • Hospital • Paddling Organization • Parks • Forestry
9. Location of CELL/SAT phones (number, owner, location)	
10. Evacuation - preparation of	<ul style="list-style-type: none"> • Paddler in need of care • Required gear
11. Group maintenance	



Canoe Kayak Canada - Whitewater Plan a Session Template

Location: _____ Date: _____
Time in: _____ Time out: _____
Trip leader: _____ Assist. leader: _____

Actions to Take While Leading - Checklist

Step 1 - Planning

- Waivers and Medical Forms – Are they filled out? Did you read them?
- Weather – What are the predictions – Temperature, precipitation and wind.
- Paddlers – How many are paddling.
- Ensure that activities are appropriate for paddlers' age, fitness, and ability level.
- Ensure that the session starts with a warm-up and that the activities include a reasonable progression and challenge for the paddlers.
- Common sense – Use it!

Step 2: Emergency action plan

- Is your EAP prepared and accessible. Does your group know where to find it?

Step 3: Inspecting equipment and facilities

- Kayak, paddle, PFD, helmet, first aid kit, rope with river knife, rescue gear, phone (if possible).
- Take an inventory of collective and individual equipment.
- Assess the level and safety of the river. (Refer to river guides and water levels.)
- Identify environmental, equipment and facilities, framework and human risk factors.
- Ensure that paddlers wear their protective equipment and that it is properly adjusted and in good condition.

Step 4: Informing paddlers and parents

- Inform paddlers (and parents when dealing with minors) of the risks inherent in the run.
- River Safety Talk – Did you cover all the points (see River Safety Talk for more information)? .
- When explaining a section during a river run highlight potential risks.
- Example: There is a class 3 ledge around the bend, we shall get out and scout at a specific eddy on river left.

Step 5: Supervising activities

- Ensure that the paddlers/leader ratio is within provincial safety standards.
- Keep in mind that paddlers need constant supervision. Stop all activities when you have to leave your kayak or delegate responsibility for the group to a competent person.
- Look for signs of fatigue and aggression in paddlers; if necessary, stop the river run.

River Safety Talk



A river safety talk is required by Transport Canada and should cover the following main points:

Equipment	<ul style="list-style-type: none"><input type="checkbox"/> Do you have all your gear? (e.g., paddle, skirt, pfd, kayak).<input type="checkbox"/> Is it adjusted (PFD and helmets zipped and clipped)?<input type="checkbox"/> Are the float bags inflated?
Signals	<ul style="list-style-type: none"><input type="checkbox"/> Did you cover whistle, paddle and verbal signals?<input type="checkbox"/> Remind paddlers they must return signals when they have understood. (ok – ok)
Hazards	<ul style="list-style-type: none"><input type="checkbox"/> Wood, rocks, holes, others specific to your site.
Group structure	<ul style="list-style-type: none"><input type="checkbox"/> Remind paddlers there is a lead and sweep kayak and proper kayak spacing for each rapid (to be addressed on the river).
Ropes	<ul style="list-style-type: none"><input type="checkbox"/> Grab them, with your hands, do not wrap around you.
Swim	<ul style="list-style-type: none"><input type="checkbox"/> Defensive swim position.<input type="checkbox"/> Hang on to gear.<input type="checkbox"/> Others to stay in/go to eddy.<input type="checkbox"/> No standing until touching shore.
Are we ready? Any questions?	



Log Book



LOG BOOK

As a leader and as an instructor, it is important to keep a log of all your whitewater activities. This log book will allow you gain knowledge about the rivers you've paddled on, as well as keep a record of your whitewater experiences. To use this tool, fill out each column with the information at hand. To add more details, use the trip report form. Remember, the best way to learn how to paddle, lead and teach is getting out on different rivers and paddling.

Here are a few added details about each column:

- **Number, date, and duration:** Write a number for each trip. This will give you a quick reference # for a subsequent trip report if need be and a quick tally of how many runs you have done. Include the date you paddled as well as the time it took to run the section. Always use the same order when writing date and time, this way you will not question yourself later on as to what exactly was written.
- **Site:** Include the name of the river you paddled on. Include put-in and take-out information. If there are particular shuttle details add them here.
- **Section:** Write the name of the section paddled.
- **Distance:** Write the distance paddled in km.
- **Equipment:** Write down which kayak your were in, and what particular gear you had with you (e.g., cold weather gear).
- **Water conditions:** Include water levels as well as temperature.
- **Weather conditions:** Write what temperature it is outside as well as details on wind chill or humidex.
- **Responsibilities:** Are you a leader, instructor, assistant instructor/leader or even a student or paddler. Include what task you have as either a lead or sweep boat, second (in the middle somewhere) or even scout for a section.

The Log Book and Trip Report tools are merely examples of what you may wish to use in order to track your whitewater experiences. Some clubs, schools and outfitters provide their own forms when you teach or lead for them. The idea here is to track what you have done in a succinct and reader friendly way.

Log Book Example

LOG #, DATE & DURATION	SITE PUT-IN & TAKE-OUT	SECTION	DISTANCE	EQUIPMENT	WATER CONDITIONS	WEATHER CONDITIONS	RESPONSIBILITIES
01 2008/06/18 4 hours	Rouge river Azur & 7 Sisters	7 Sisters	6.5 km	LL Trigger dry top, board shorts	110 cms cold – not spring conditions	Hot, 24C No wind, low humidity	Assistant leader, Sweep boat

LOG #, DATE & DURATION	SITE PUT-IN & TAKE-OUT	SECTION	DISTANCE	EQUIPMENT	WATER CONDITIONS	WEATHER CONDITIONS	RESPONSIBILITIES

LOG #, DATE & DURATION	SITE PUT-IN & TAKE-OUT	SECTION	DISTANCE	EQUIPMENT	WATER CONDITIONS	WEATHER CONDITIONS	RESPONSIBILITIES



CANOE KAYAK CANADA WHITEWATER TRIP REPORT

Location: _____ **Date:** _____
Put-in: _____ **Duration:** _____
Take-out: _____ **Distance:** _____
Site: _____ **Section:** _____

Equipment: _____

Water Conditions: _____

Weather Conditions: _____

Trip Leader: _____ **Assistant Leader:** _____

Responsibilities: _____

Weather Conditions: _____

Participants (names, kayak paddled)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Trip Details (point form)

Timeline	Time/Activity:	Key Points:

Events	Location:	Key Points:

Other Details: _____

SAMPLE ACCIDENT REPORT FORM

Date of Report: ____/____/____

Patient Information

Last Name: _____ First Name: _____

Street Address: _____ City: _____

Postal Code: _____ Phone: () _____

Email: _____ Age: _____

Sex: _____ M _____ F Height: _____

DOB: ____/____/____ Weight: _____

Known medical conditions/allergies: _____

Incident Information

Date and Time of Incident	Time of First Intervention	Time of Medical Support Arrival
____/____/____ dd mm yyyy	____ : ____ AM PM	____ : ____ AM PM
FIRST RESPONDER'S DESCRIPTION OF THE INCIDENT: What and where it took place, what were the signs and symptoms of the patient.		
PATIENT'S DESCRIPTION OF THE INCIDENT: (see above)		
EVENT AND CONDITIONS: What was the event during which the incident took place, location of incident, surface quality, light, weather, etc.		
ACTIONS TAKEN/INTERVENTION:		
After treatment, the patient was:	<input type="checkbox"/> Sent home	<input type="checkbox"/> Sent to hospital/ clinic
		<input type="checkbox"/> Returned to activity

Sample Accident Report Form (con't...)

First Responder Information

Last Name:	First Name:
Street Address:	City:
Postal Code:	Phone:
Email:	Age:
Role (Coach, assistant, parent, official, bystander, therapist):	

Witness Information (someone who observed the incident and the response, but not first responder)

Last Name:	First Name:
Street Address:	City:
Postal Code:	Phone:
Email:	Age:

Other Comments or Remarks: _____

Form Completed By: (please print)

Name: _____ Signature: _____



Making Ethical Decisions



Make Ethical Decisions:

MED is a required element for certification at the L3/I3 level. MED may be delivered within the CKC River Instructor 3 course or may be taken at a multi sport clinic.

MED has an online evaluation that must be completed to be certified.

Candidates that have not completed the MED section must do so prior to receiving certification at the L3/I3 level.

Courses may be found at www.coach.ca



Plan A Session



PLANNING A SESSION

There is a direct link between teaching and planning. With proper planning, the instructor delivers a course that maximizes the time available to the group while providing a safe structure for paddlers to evolve in. There are some key elements to consider when you design and deliver a session. Here are some key questions to ask yourself during the process.

SESSION PLAN CONSIDERATIONS

There are seven main questions you should ask yourself when creating a session plan.

1. What are the logistics of my session?
 - Facilities available
 - Equipment needed/available
 - Length of the session (time available)
 - Time of day of the session
 - Number of sessions per week
 - Availability of assistant instructors and their experience
2. What abilities and skills does my sport require?
 - Physical abilities
 - Motor abilities
 - Technical/tactical skills
 - Mental skills
3. How will I deliver my session?
 - Key points to make
 - Teaching methods I will use
 - Where I will position myself
 - What I will be watching for
 - How and when I will make interventions
4. Who are my paddlers?
 - Number of paddlers in attendance
 - Age/maturity of paddlers
 - Skills and abilities of paddlers
 - Gaps in paddler ability
 - Injuries to account for
 - Reasons why they are involved
5. How am I going to organize my session?
 - Structure of the session
 - Choice of activities
 - Sequence of activities

- Transition between activities to avoid wasting time
6. What are the safety risks and how should I prepare for them?
 - The nature of the activities the paddlers will do and the conditions in which they will take place
 - Weather
 - River difficulty
 - Equipment
 - Human error
 - Emergency procedures to follow in case of an accident
 7. What am I trying to accomplish with my session?
 - What paddlers need to improve
 - Purpose of the session
 - Group goals and short-term objectives
 - Goals of instructors
 - Time of the season
 - Links with previous sessions and river runs
 - Links with future sessions and river runs

The Key Components of a Session

A well-structured session has five parts. The following section gives a brief description of each one.

1. **The introduction:** The instructor prepares the site and equipment, welcomes the paddlers and tells them what will happen during the session. This is also a good time to assess the general status of the paddlers (e.g. have they recovered from the previous session?).
2. **The warm-up:** The instructor plans activities that gradually activate the paddlers and prepare them physically and mentally to effectively perform the main part of the session. The warm-up consists of two parts: (1) general and (2) specific. The general warm-up aims to raise the body temperature until the paddler sweats, to allow for progressive muscle stretching. The specific warm-up, designed for the paddler's particular sport, aims to prepare the warmed muscles for the types of movements the paddler will perform in the main part of the session. The movements in the specific warm-up should mimic those of the main part, gradually building in intensity and range of motion.
3. **The main part:** The instructor ensures a smooth flow of activities that are challenging for the paddlers and help them improve paddling abilities and fitness. The activities chosen must be appropriate for paddling, as well as the paddlers' age, fitness and ability levels.
4. **The cool-down:** To initiate the recovery of the body, the instructor plans low-intensity transition activities between the more intense efforts of the main part and the end of the session. The instructor also plans for some time for paddlers to stretch.
5. **The conclusion:** The paddler provides some comments on the session and gives paddlers an opportunity to provide feedback. The instructor ensures that the session ends on a positive and friendly note. The instructor also provides some information about the next session.

Key Elements of Each Part of a Session

Session	Time	Key Elements
<p>Introduction</p> <p>Purpose is to greet paddlers and let them know what will be taking place</p>	<p>Variable</p> <p>2-3 min</p>	<p>Before session begins:</p> <ul style="list-style-type: none"> • Inspect facilities, site selection and organize equipment • Greet each paddler • Assess each paddler's energy level <p>At the beginning of the session:</p> <ul style="list-style-type: none"> • Review the goals of the session and the activities planned • Give safety instructions specific to the activities planned
<p>Warm-up</p> <p>Purpose is to prepare the body for the efforts of the main part</p>	<p>5-10 min</p> <p>8-15 min</p>	<p>General warm-up:</p> <ul style="list-style-type: none"> • General exercises or games to loosen muscles and raise body temperature • Progressive stretching <p>Specific warm-up:</p> <ul style="list-style-type: none"> • Brief activities that paddlers already know that mimic the movements of the main part (may even be the same activity, but at lower intensity) • A gradual increase in intensity that will not tire the paddler • A quick transition between the end of the warm-up, the explanations/instructions given for the first activities of the main part and the activities themselves
<p>Main part</p> <p>Purpose is to perform activities that will help paddlers improve paddling-specific abilities and fitness</p>	<p>Variable; 30-60 min or more</p>	<p>Three or more activities linked in the proper order:</p> <ul style="list-style-type: none"> • Activities that challenge paddlers so that they can learn and improve while enjoying themselves • Paddlers involved in an activity most of the time (i.e., not standing around or waiting in line) • Paddlers allowed lots of practice for each activity • Activities that are appropriate for the age, fitness and ability levels of the paddlers and are relevant to the sport • Feedback is provided and appropriate
<p>Cool-down</p> <p>Purpose is to begin recovery</p>	<p>5-10 min</p>	<p>General cool-down:</p> <ul style="list-style-type: none"> • A gradual decrease in intensity • Stretching, especially of muscles most used
<p>Conclusion</p> <p>Purpose is to debrief paddlers and tell them about the next session</p>	<p>3-5 min</p>	<p>Provide closure:</p> <ul style="list-style-type: none"> • Provide and ask for feedback on what went well and what can be improved • Tell paddlers about the next session or river run (e.g. logistics, goals and emphasis) / Lead team cheer

Skill Development

When learning a skill, paddlers progress through some predictable stages. The table on the following page outlines some key concepts about the stages of skill development and the needs of paddlers at each stage.

While each paddler can be expected to go through each stage, the time and the amount of practice necessary to progress from one stage to the next can vary greatly from one paddler to another.

The stages of skill development described in the following table (initiation, acquisition, consolidation, refinement and creative variations) apply regardless of the type of skill or the way it is classified.

It is important to recognize the stage of skill development your paddlers are at, as well as the specific needs they have at each stage. It is also important to plan your sessions accordingly (i.e. select the right types of activities and the appropriate way to run them).

Note:

It may take months or even years of practice for a paddler to reach the Refinement stage of skill development defined in the following table. Also, the vast majority of paddlers will never reach the Creative Variations stage. Consequently, at the Instruction Intermediate level, few instructors work with paddlers who reach an advanced stage of skill execution. The focus should therefore be on ensuring the fundamentals are correct and that paddlers can perform them in a variety of situations and conditions.



Canoe Kayak Canada Whitewater Plan a Session Template

Location	_____	Date	_____
Time in	_____	Time out	_____
Trip leader	_____	Assist. Leader	_____

Participant's Name	Age	Skill Level
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

RIVER SAFETY TALK

Before you begin teaching, make sure you cover the following:

Equipment (Gear check): Does everyone have a paddle, skirt, PFD and kayak? Is gear put on properly (PFDs zipped and helmets clipped)? Are float bags inflated?

Signals: Discuss whistle, paddle and verbal signs and remind paddlers that they must return signals when they have understood (okay – okay)

Hazards: Wood, rocks, holes and others specific to your site

Group structure: Remind paddlers that there is a lead and a sweep kayak and to maintain proper spacing between paddlers for each rapid (to be addressed on the river)

Ropes: Grab the rope with your hands and do not wrap around you

Swim:

- Show them the defensive swim position, feet and bum up, looking downstream, ferry to shore
- Tell them not to stand until they touch the shore
- Tell them to hang onto their gear
- If there's a swimmer, others to stay where they are (in an eddy) or head to the closest eddy

Session Template

Goal(s): _____

INTRODUCTION	Equipment	Key messages/safety points:
	Time:	
WARM-UP	Include general and specific warm-up	Key messages/safety points:
	Time:	
MAIN PART	Pay attention to the order of the activities (river run)	Key messages/safety points:
	Time:	
COOL DOWN	Time:	Key messages/safety points:
CONCLUSION	Time:	Key messages/safety points:

Sample Activity Planning Sheet

Session date: _____ Name of the activity: _____
Warm up (), Main part (), Cool down ()

Duration: _____ Objective(s): _____

Equipment needed: _____

Description: (*Paddling abilities to be trained, purpose, movements, types of effort, intensity, duration, etc.*)

Directions/guidelines to give paddlers: _____

Success criteria: _____

Risk factors/safety guidelines to give to paddlers: _____

Notes/comments: _____



Skills and Manoeuvres



Whitewater Paddling Skills and Manoeuvres

In order to become an efficient paddler and enjoy whitewater kayaking, paddlers must learn a broad range of skills and manoeuvres. Many of these skills and manoeuvres must first be controlled in a flatwater environment before being introduced to moving water. An analysis of kayaking technique has determined that there are five major skills, or fundamentals, from which the sport of kayaking has evolved. If the fundamental skills are controlled first, then learning the manoeuvres becomes much easier. Mastering these skills and manoeuvres requires many hours of practice both on and off the water. Therefore, it is important to regularly come back to these fundamentals in order to progress as a paddler.

FUNDAMENTAL SKILLS

Balance

Good balance relies on posture, being centered and remaining relaxed.

Posture

- Balls of feet are firmly planted on the foot braces of the kayak, thighs in thigh braces under the deck on either side of the cockpit.
- Straight back with slight forward lean originating from the hips and pelvis, not from the lower back. This position opens up the torso for an increased range of motion and increases the range of vision. It allows the use of the larger muscle groups, thereby reducing muscle fatigue and increasing endurance. This position also prevents compression of the abdomen, allowing better oxygen exchange.

Being Centered

Keeping the paddlers weight centered over the kayak keeps the center of gravity over the kayaker's base of support.

Being Relaxed

- Independent movement of the upper and lower body is vital for maintaining balance.
- The lower body, from the waist down, maintains contact with the kayak and moves with the boat as it pitches and rolls in the waves and other river features.
- The upper body remains loose and is constantly adjusting to maintain a centered position over its base of support, the kayak.

Edge Control

Edge control is the ability to detect, alter and maintain the side tilt of the kayak's hull. Controlling the edging of a kayak requires the kayaker to be balanced and comfortable. To edge a kayak, the paddler uses weight transfer through knee and foot pressure. This will put the kayak on a tilt. The more the paddler puts the kayak on edge, the more they will need to adjust their body to remain balanced over the kayak.

The degree of edging required depends on where the kayaker is paddling. In flat water, or when the kayak is moving at the same speed as the current, the kayak does not need to be edged. While traveling slower, faster, at an angle to the current or crossing a current differential, the kayak should be on edge. In general, the kayak should be on edge (or tilted) downstream to the current. When crossing opposing

currents, the kayak should be on edge or tilted downstream in respect to the current that the kayak is entering. This can also be described as edging the kayak to the inside of any turn.

Paddling Strokes

Paddling strokes are used for power, altering momentum, turning and bracing. The types of strokes are discussed in further detail under "Technique".

Coordination and Fluidity: Coordination and fluidity refers to the smoothness in technique whereby the body, paddle and kayak function as one unit.

Timing

Timing is the ability to coordinate the individual techniques in the proper sequence in time and place to successfully complete a manoeuvre. This skill develops with practice and good technical feedback.

Paddler progression maintains a logical order and continuously refers back to the five fundamental skills. These skills are integrated within basic paddling manoeuvres. These manoeuvres require learning different strokes, techniques, as well as acquiring knowledge of the river environment.

Manoeuvres

We build on the manoeuvres learned in the level II program and add the following to be performed in Class III

- **Roll:** Able to perform a c-to-c, sweep, hand, back deck roll and understanding when each is preferred.
- **Eddy Turns:** Tighter, hit higher, timing changes.
- **Jet Ferries:** Utilizing a wave or trough to ferry across the river with minimal forward strokes.
- **Linked Maneuvres:** Using a River Feature to make a manoeuvre (S-Turns, carving)
- **360 degree spins:** Flat spin on a wave or in a hole

Once these manoeuvres have been mastered, a paddler can challenge themselves running various class III rivers.

It is useful to preface class III moving water manoeuvres (e.g., jet ferries and eddy turns) with a review of:

- What creates current
- Flow is determined by gradient and volume
- Obstruction to current forms eddies
- Waves, holes and other features
- Hazards
- What to do if they swim!

These concepts of river dynamics can be taught in the classroom or on the river's edge.

Once an understanding of the forces and features of moving water has been established, outlining moving water manoeuvres becomes accessible to paddlers.

Linking Moves

When paddlers have developed sufficient skill and confidence in their moving water manoeuvres, it is useful for them to begin linking manoeuvres to develop fluidity and finesse.

A simple set of manoeuvres such as; c-turns ferries, s-turns and back ferries in Class III water provides paddlers with the opportunity to put their new skills into action. Through repetition of movements, confidence and consistency of skills increase significantly.

It is important to note that whitewater paddlers develop confidence paddling in moderate whitewater. Too much current too quickly usually results in lots of swims and loss of confidence.

Intermediate paddlers still require lots of useful and positive feedback from instructors on the eddy line as they learn. Effective feedback is based on your ability to “diagnose” what needs to be corrected. This feedback generally falls into the following areas: boat position, blade position, body position, and other factors relating to the kinesthetic sequence (e.g., timing, coordination) and fluidity.

In addition to accurate and positive feedback, continual demonstration of the maneuver helps an individual to imitate and ultimately understand and feel a well executed moving water maneuver. Remember, paddlers copy their instructors, yet only mimic their movements at a lesser degree. As an instructor, constant use of proper skills and manoeuvres while teaching becomes an important visual tool and an essential part of a paddlers learning process.

Boat , Blade, and Body

In the following pages, each skill, stroke and manoeuvre are described in relation to the Boat, Blade, and Body. When using this tool, the instructor should focus first on teaching gross motor skills and then progress towards more specific motor skills. This follows the principal that acquiring a gross motor skill is easier and leads to success quicker than attempting to teach specific skills when the student has not yet acquired the basics.

Note:

When teaching, the instructor should refer to the Boat, Blade, and Body.

Boat

When referring to the boat, the instructor refers to the propulsion, angle, tilt, and attitude of the kayak during the execution of different skills, strokes, or manoeuvres.

- **Propulsion:** Refers to the movement the kayak will make when executing a skill, stroke or manoeuvre. For example, in a forward stroke, the kayak moves forward.
- **Angle:** Refers to the varying degree the kayak will have compared to the current. In flat water, the angle usually remains neutral to the trajectory the kayak is heading in. In moving water, the angle becomes important for proper execution of a manoeuvre.
- **Tilt:** Refers to the edging the kayak requires to perform certain skills, strokes or manoeuvres. Again, the tilt becomes increasingly important as the paddler progresses to a moving water environment.
- **Attitude:** Refers to the bow/stern movement the kayak requires to perform certain skills, strokes, or manoeuvres. For beginner paddlers, the attitude of the kayak is invariably flat. When progressing to more advanced technical skills and most freestyle moves, the attitude of the kayak will play an important part in the successful execution of the technique or move.

Blade

When referring to the blade, the instructor refers to the entry/exit, the trajectory, the recovery, the blade, and the shaft of the paddle.

- **Entry:** Refers to the entry and exit point of the paddle blade during each skill, stroke, or manoeuvre. The entry may also refer to the set up position for a brace or roll.
- **Trajectory:** Refers to the path the paddle traces as it moves through, above or in the water during each skill, stroke, or manoeuvre. It is a good indicator of the efficiency of certain strokes.
- **Recovery:** Refers to the method employed at the end of the skill, stroke or manoeuvre to free the paddle and be ready for the following technique required. When acquiring a skill, it is important to isolate different techniques from one another in order to increase paddlers proficiency in executing each individual technique. As the paddler progresses the recovery becomes less a means to separate techniques and more of a means to link them.
- **Blade:** Refers to the actual position, angle and face of the paddle's blade employed during each skill, stroke, or manoeuvre.
- **Shaft:** Refers to the actual position and angle of the paddle shaft during each skill, stroke, or manoeuvre.

Body

The body is the most important part of teaching whitewater kayaking. Even if the kayak and paddle are the means an individual uses to achieve certain skills, strokes or manoeuvres, the body controls both these pieces of equipment. In other words, a kayak doesn't tilt by itself and a paddle doesn't move through the water of its own volition. Therefore, when referring to the body, the instructor refers to the torso, upper limbs and lower limbs of the paddler executing each skill, stroke or maneuver.

Furthermore, each section holds a subsection. The torso will cover the rotation, posture and head position. The upper limbs covers power transfer and protection. The lower limbs covers power transfer, stability and protection. When teaching individual skills, strokes or manoeuvres the kayak and the paddle become easy indicators of the proper, or improper body position the student is demonstrating.

- **Torso:** Refers to the use of the trunk of the body during execution of each skill, stroke, or manoeuvre. The torso, more specifically the strong core of muscles found within the human trunk, is the strength and stability behind most whitewater techniques.
- **Rotation:** Refers to the twist of the torso during set up, execution, and recovery. For example, when executing a forward stroke, the upper body (torso) initiates the forward rotation (open body position) in order to set up the paddle. As the torso pulls on one side, it is pushing on the other, twisting throughout the forward stroke.
- **Posture:** Refers to the lean of the torso during set up, execution and recovery. Most beginner skills, strokes, and manoeuvres require a slight forward lean or a neutral body position during execution. For most freestyle moves, this lean will vary and increases in importance as the paddler progresses.
- **Head position:** Refers to the direction the paddler is facing and the position compared to the torso of the paddler. Generally speaking, the head should be facing the direction the paddler is heading, and the position is balanced above the kayak. When learning how to brace and more importantly roll, the head position becomes a significant factor for success and varies in position.
- **Upper limbs:** Refers to the use of the arms in relation to what the torso and paddle are doing. The upper limbs rarely move independently from the torso, mainly in order to remain within a safe range of motion. This also refers to the position they are generally in during the execution of a skill, stroke or manoeuvre.
- **Power transfer:** Refers to the motion used to transfer the added strength of the arms to the paddle. For example, during the forward stroke, the initial “pull” begins with torso rotation but it is immediately followed by simultaneous pulling/pushing of both arms.
- **Protection:** Refers to the safe paddling practices necessary to maintain the upper limbs within a safe range of motion. When paddling in whitewater, the current can exert a great deal of pressure upon the different articulations, and more particularly the shoulders. Instructors should teach safe paddling techniques from the onset of learning new skills, stroke, and manoeuvres.
- **Lower limbs:** Refers to the use of the legs in relation to what the torso and kayak are doing. The lower legs are an important part of a paddlers edge control both in flat water and more importantly moving water environments.
- **Power transfer:** Refers to the motion used to move the kayak. For example, during a forward stroke, legs pump alternately as arms and torso maintain cyclical forward stroke motion.
- **Stability:** Refers to the motion executed to add stability to the kayak. Generally speaking, this means using both legs to execute a motion or simply maintaining contact with both legs on the kayak.
- **Protection:** Refers to the safe paddling practices to adopt in order to maintain the lower limbs within a safe range of motion. In order to maintain control of the kayak, inherently protecting the lower back and lower limbs, the instructor should teach students to maintain contact with both legs while paddling as well as using both abdominal and pelvic muscles to stabilize their body. This becomes particularly important when the kayak is in a tilted position or when executing a brace or a roll.
- **Kinetic sequence:** Refers to the actual order of execution for a single repetition of a skill, stroke, or manoeuvre. For example, the forward stroke requires pressure on the same foot as the pulling arm, the hips to move forward, the torso to twist initiating an open body position and rotates while opposite arms push and pull. Only then is the paddle recovered out of the water. In short, the order is as follows: foot, hip, torso, arm push/pull, and recovery. The kinetic sequence will help the student to understand the sequence of a skill, stroke, or manoeuvre and correct themselves when paddling on their own.

Note:

in order to teach certain skills, strokes and manoeuvres, the instructor will have to break it up into pieces for the students. This will allow the students to focus on one part at a time before putting the sequence back together again.

Paddler Progression

In order to progress and learn the fundamental skills, strokes and manoeuvres, a basic paddler progression has been established. This paddler progression may differ from one paddling school to another and each province has different paddling programs. It is the instructors responsibility to understand the different programs when teaching in the different provinces or schools.

GAP Tool

With each technique template comes a GAP tool. This GAP tool highlights three main behaviors observed by the instructor while teaching beginner and intermediate paddlers. The three main behaviors observed are:

1. Paddler does not engage in task
2. Paddler engages in the task but the outcome is not achieved
3. Paddler engages in the task and achieves the outcome or demonstrates form (even though the outcome is achieved there may be deficiencies in the performance which can be illustrated on the continuum of effectiveness).

For each behavior there is a cause. The Analyze Performance Referent Model – Framework chart links each cause to the behavior observed. This tool helps the instructor determine why a paddler is not achieving a certain level of efficiency in their skills, strokes or manoeuvres. In order to reduce the size of the tool, each cause is described here, but will only be named in the individual technique GAP tool.

Each stroke is analyzed within the following seven causes:

1. **Equipment:** Examines paddling specific equipment that could be a limiting factor on the performance (e.g., oversized PFD, poor fit of kayak).
2. **Environment:** Examines any environmental factors that could lead to performance deficiencies (e.g., choice of river, weather, lighting).
3. **Affective:** Examines internal factors that could be related to the paddler's perception of the task, performance or activity (e.g., fear, motivation, interest).
4. **Cognitive/mental:** Examines factors that relates to the paddlers thoughts or thought processes that are used to execute a given task or action ((e.g., lack of understanding, confusion, concentration, difficulty reading cues).
5. **Physical/Motor:** Examines the physical abilities that could have limiting affects on the performance, task or activity (e.g., strength, stamina, flexibility).
6. **Tactical:** Examines the intent of the skill execution within the overall strategies that enable successful performance. Asks whether the tactic may be too demanding for the technical skills that are required to achieve the outcome.
7. **Technical:** Examines the execution and or biomechanics of skill, stroke or manoeuver execution and identifies specific performance factors/goals that are required to achieve a given outcome. The use of Boat, Blade, and Body is used as a reference to find the gaps between the paddler and the desired outcome.

Each cause is then rated as either a high, medium or low priority (H/M/L). This indicates which cause is more likely to influence the students while learning. A high priority is usually placed on the technical cause, but as an instructor, it is important to verify all causes if there is failure to demonstrate the desired skill, stroke or manoeuvre. For example, you will notice that equipment remains a low priority for most flatwater strokes. This does not mean that the influence of the fit of the kayak is not important, it simply indicates that it is not usually the cause for your students' failure to acquire certain skills, strokes or manoeuvres.

This being said, we've all paddled kayaks that were not well fitted or paddles that are too long or heavy. While we can perform beginner skills, strokes or manoeuvres, we will feel the difference between "less than ideal" equipment and our own fitted gear. This effect is aggravated when teaching kids, where the use of improper or oversized equipment becomes an important cause for unsuccessful execution of certain skills, strokes or manoeuvres. This will influence the success of your students in the long run, as well as their desire to paddle.

A good instructor must use his or her judgment when teaching and develop the ability to detect and correct students within all seven causes.

Each cause has their own key indicators for intervention (GAP). When the students demonstrate to the instructor any of the indicators, the following column will give the instructors the tools or common corrective measures to remedy the situation. For example, if the equipment is the cause for failure, the instructor should ensure equipment is appropriate for each individual candidate before starting the session or make adjustments (like adding or removing padding, changing paddles) when needed.

This section becomes particularly important for the technical cause. Each skill, stroke or manoeuvre has their own indicators for intervention and the means to correct them. Again the use of Boat, Blade, and Body becomes important for proper detection and correction. When observing the students, the instructor should start with what the Boat indicates simply because it is the biggest and easiest tell tale sign of success in many cases. For example starting with Boat, if you are teaching a forward stroke and the kayak yaws from side to side, check stroke length, stroke rate, duration of stroke recovery or even the size of the blade and ask paddler to correct the specific element you have indicated to them. (Please note that the common corrective measure may be a change in the Blade or Body position in order to correct a Boat GAP or vice versa.) Once this has been covered the instructor should progress through Blade which is the next easiest indicator to detect, then finish with the Body.


The common corrective measures in the technical cause should generally follow these guidelines:

- Provide specific feedback based on a key technical factor that indicates how to correct performance.
- Perform a demonstration or modify the drill or activity.
- Use questions to assist paddlers to identify area for technical correction.

When students are learning a skill or maneuver, correct one key indicator at a time. This allows the students to learn without feeling overwhelmed with too much technical feedback. When reviewing or practicing drills, instructors may then remind students of more than one indicator at a time (e.g., remember to keep your kayak flat and use your torso when paddling forward).

The GAP tool should become an important reference tool for instructors and be used regularly when teaching beginner and intermediate paddlers. All instructors must remember that the key to learning is not excessive corrections, but maintaining a FUN and POSITIVE learning environment.

Analyze Performance Reference Model – Framework

Outcome/Form					
Observe Performance				Apply Corrective Strategy	
Detectable Signs What Is Observed?		Analyze Potential Causes		Select Appropriate Corrective Measure	
		Cause	GAP		
Participant does not engage in task		Equipment	Equipment Issue FIT /	Modify/Adjust Drill or Activity	Makes sport specific
					Adjust task demands
Participant engages in the task but the outcome is not achieved		Environment	Environmental factor (e.g., weather, lighting)		Repeat task/activity
					Adjust progression
Participant engages in the task and achieves the outcome or demonstrates form. <i>Even though the outcome is achieved there may be deficiencies in the performance, which can be illustrated on the continuum of effectiveness.</i>		Affective	Fear or hesitation	Teaching Interventions	Adjust speed or timing
			Not motivated or not interested		Adjust work to rest ratios and / or intensity (workload)
					
Inconsistencies or inefficiency in movement or task. Little precision or low probability of success in the task.	Consistent and efficient movements demonstrated in task. High degree of precision and probability of success in the task.	Cognitive/ Mental	Lack understanding or player confused	Teaching Interventions	Help or reassure
			Too much information or		Explain or ask
			Lack concentration or poor arousal control		Simplify - Use examples or reduce number of variables to process
			Difficulty reading / recognizing cues		Use refocusing or
	Demonstrate correct technique/tactic				
	Provide feedback or results				
IDENTIFY KEY PERFORMANCE FACTORS THAT DESCRIBE IDEAL PERFORMANCE Could use the following: 1. Preliminary movements (e.g., grip, stance) 2. Back swing or recovery movement (e.g., positioning, back swing, recovery) 3. Force producing movement (e.g., use or sequence of muscle group and joint action) 4. Critical instant ((e.g., impact, strike) 5. Follow through.		Physical/ Motor	Lacks physical ability to complete task		
			Task too demanding or too easy		
		Tactical	Unable to select appropriate tactic		
			Choice of decision		
		Technical	Unable to effectively or consistently execute technique		

WHITewater KAYAKING

SKILL (Technical)		OUTCOME Paddler is able to...
1	Roll	c-to-c, sweep, back deck and hand roll.
2	Eddy Turns	enter higher, tighter, carving
3	Jet Ferries	Use a wave or trough to ferry across the river with few forward strokes
4	Surf	360 spin on a wave or hole
5	S turn	Use a midstream obstacle to perform an s-turn
6	Boof	Safely launch over a drop and avoid the backwash below

WHITEWATER KAYAKING		INSTRUCTION INTERMEDIATE	
Skill #	Skill		Outcome
KEY PERFORMANCE INDICATORS/FACTORS			
BOAT	Propulsion		
	Angle		
	Tilt		
	Attitude		
BLADE	Entry/Exit		
	Trajectory		
	Recovery		
	Blade		
	Shaft		
BODY	Torso	Rotation	
		Posture	
		Head Position	
	Upper Limbs	Power Transfer	
		Protection	
	Lower Limbs	Power Transfer	
		Stability	
		Protection	
	KINETIC SEQUENCE		

WHITEWATER KAYAKING

INSTRUCTION INTERMEDIATE

Skill #	Skill	Outcome		
KEY PERFORMANCE INDICATORS/FACTORS				
Analysis of Causes	Description	Priority	Key Indicators for Intervention (GAP)	Common Corrective Measures
		H/M/L		
Equipment	Examines sport specific equipment that could be a limiting factor on the performance (e.g., poor fit, inadequate protection, etc).			
Environment	Examines any environmental factors that could lead to performance deficiencies (e.g., surface, weather, lighting)?			
Affective	Examines internal factors that could be related to the performer's perception of the task, performance or activity (e.g., fear, motivation, interest).			
Cognitive/ Mental	Examines factors that relates to the performers thoughts or thought processes that are used to execute a given task or action (e.g., lack of understanding, confusion, choice of decision, concentration).			
Physical/ Motor	Examines the physical abilities that could have limiting affects on the performance, task or activity (e.g., strength, stamina, flexibility).			
Tactical	Examines the intent of the skill execution within the overall strategies that enable successful performance. Asks whether the tactic may be too demanding for the technical skills that are required to achieve the outcome.			
Technical	Examines the execution and or biomechanics of skill execution and identifies specific performance factors/goals that are required to achieve a given outcome.			

WHITEWATER KAYAKING		INSTRUCTION INTERMEDIATE	
13	Skill: S - Turns	Outcome: <i>Paddler is able to enter and exit midstream eddies.</i>	
KEY PERFORMANCE INDICATORS/FACTORS			
Boat	Propulsion		Kayak moves forward to cross the eddy line. This energy is transferred into the turning momentum and new direction of travel.
	Angle		Entry of angle across the eddy line is 45° normally. The entry angle can be varied with speed of kayak and current and length of turn desired. The boat angle is maintained at 90° across the eddyline until it exits the eddy.
	Tilt		Kayak is placed on its active edge (towards inside of turn) until boat has finished turning and is travelling in new direction. At this point the kayak is returned to a neutral tilt. This is repeated as the kayak exits the eddy.
	Attitude		Kayak is maintained with neutral bow and stern balance throughout turn.
Blade	Entry/Exit		Blade is placed 40-60 cm away from kayak, between the hip and knees on the inside of the turn.
	Trajectory		Blade is maintained away from the kayak until force of current on the blade eases. As force eases off, the blade is brought to bow of kayak. After turn is completed the blade is pulled back as a forward stroke.
	Recovery		Once the kayak is turned into the new direction of travel, the blade is brought to the bow and converted into a forward stroke. This completes the turn and the paddler can start next stroke.
	Blade		Blade is maintained perpendicular to new current throughout the turn. The blade anchors the turn and the angle of the blade in relation to the kayak, will change as the kayak turns around the blade.
	Shaft		Paddle shaft is kept in vertical plane throughout the turn.
Body	Torso	Rotation	Upper body rotates towards inside edge and opens up shoulders to support force being transferred to torso and boat.
		Posture	Straight back with slight forward lean originating from hips and pelvis.
		Head Position	Facing direction paddler is heading toward.
	Upper Limbs	Power Transfer	Arms hang onto paddle shaft and maintains static position for initiation of turn allowing momentum to be transferred from paddle through arms to torso and boat.
		Protection	Bottom arm elbow remains bent to act as shock absorber between paddle and kayak. Top arm remains in front of head to protect top shoulder.
	Lower Limbs	Power Transfer	Tilt boat by lifting outside thigh and hip and pressing down with inside thigh and hip.
Protection		Use both legs to stabilize body, maintain balance and control boat edges.	
KINETIC SEQUENCE			Power - Angle - Tilt

WHITEWATER KAYAKING

INSTRUCTION INTERMEDIATE

13	Skill: S - Turns	Outcome: Paddler is able to enter and exit midstream eddies
----	------------------	---

KEY INDICATORS FOR INTERVENTION (GAP)

Analysis of Causes	Priority	Key Indicators for Intervention (GAP)	Problem	Common Corrective Measures
	H/M/L			
Equip-ment	M	Paddler has difficulty edging the kayak and maintaining a tilt on the boat. Kayak feels unstable and edgy. Kayak cannot be tilted or leaned. Paddle strokes are slow and long. Paddle strokes are awkward and encumbered.	Kayak seat, hip pads, thigh brace and footrests not fitted. Kayak is too narrow or too small for the weight of the paddler. Kayak is too wide or too big for the size of the paddler. Paddle is too long or blade is too big. PFD, clothing or spray skirt limits movements of paddler.	Ensure equipment is appropriate for each individual candidate. Make adjustments when needed.
Environ-ment	H	Paddlers are tentative in their maneuvers, lots of flips, poor technique Kayaks are bumping into each other in the eddies Paddlers are unable to focus on the task at hand and seem distracted High winds, thunderstorm approaching	Current is too strong where practicing. Practice area too small for group size. Practice area too busy (noisy and distracting). Weather - Unsafe weather conditions: high winds, thunder, visible lightning.	Move or change environment if appropriate. Acknowledge poor environmental conditions and adjust activity to ensure greater success (e.g., keep distance short between starting and finishing points). Pull paddlers off water until storm passes. Wait 15 minutes after last lightning strike within 10 kms.
Affective	H	Paddler hangs back in eddy, is tentative when forced to participate and is fearful of river.	Paddler is afraid to flip over in water.	Modify drill or activity (e.g., use a progressive approach and gradually bring paddler into faster moving water). Remain close and provide encouragement and reassurance.
Cognitive/ Mental	M	Paddler turns on eddy line without getting into eddy. Paddler initiates bow draw before crossing eddy line.	Paddler does not see/understand eddylines or current differential and their effects on kayaks when crossing a current differential.	Review eddies and currents and the need for boat tilt to counteract physics of moving water. Point out eddyline and show how to reach across the eddyline into the new current to anchor blade during the turn.
Physical/ Motor	L	Paddler looks lethargic and has low energy.	Paddler lacks stamina or energy.	Establish a rotation within a group allowing for recovery time. Give participants a break between activities.
Tactical	M	A – Paddler comes into eddy low. B – Paddler leaves eddy low. C – Kayak hits rock underneath water. D – Kayak hits rock at top of eddy with their stern when leaving. E – Paddler does not leave room for other kayaks in eddy.	A – Paddler is aiming at lower spot in eddy and current pushes them down below this spot. B – Paddler is avoiding faster current at top of the eddy. C – Paddler does not see rocks. D – Paddler is turning too high in the eddy. E – Paddler stops paddling after securing their space in the eddy, clogging up the entry/exit space.	A – Explain advantages of hitting eddies high, (stronger, current, more stable, clearer eddylines, prevent drifting out bottom of eddy). B – As above. C – Show paddler the rocks and how to spot them. D – Explain paddler needs to leave the eddy a little lower to avoid hitting their stern on the rocks. E – Tell group about the need to create room for everyone to enjoy good eddy turns and reduce risk of hitting others.

Technical	H	BOAT		
		A – Kayak does not cross eddyline.	A – Kayak does not have enough momentum/speed to cross the eddyline.	A – Instruct paddler to use strong forward strokes to build forward momentum before crossing the eddyline.
		B – Kayak turns before eddy line.	B – Paddler is not keeping the boat straight as it moves towards eddyline.	B – Instruct paddler to keep kayak running straight with forward momentum until the kayak hits the eddyline.
		C – Kayak bounces off of eddy line when entering eddy from river.	C – Angle of approach is too acute.	C – Have paddler open angle of kayak to 45° to current.
		D – Kayak does not turn downstream and ferries across current when entering river from eddy.	D – Angle of approach is too acute.	D – Have paddler open angle of kayak to 45° to current and grab current with paddle to swing bow downstream.
		E – Kayak wobbles or flips on eddyline.	E – Paddler is not pre-tilting the boat as they approach the eddyline.	E – Remind paddler to tilt kayak to inside of turn before crossing eddyline.
		F – Kayak wobbles, or flips after eddy turn.	F – Paddler is not maintaining the boat tilt throughout the turn.	F – Remind paddler to maintain kayak tilt until the boat has finished turning.
		G – Kayak bow lifts up and stern sinks.	G – Paddler is leaning back as they leave the eddy. Alternatively the paddler is releasing their boat tilt too early and the boat is performing a stern squirt.	G – Remind paddler to keep boat on its inside edge with a neutral bow and stern attitude.
		H – Boat continues to spin as turn is completed.	H – Paddler is not finishing their turn with a forward stroke to stop the spin.	H – Have paddler finish bow draw with forward stroke to complete turn and drive kayak in new direction.
			BLADE	
	I – Blade is placed next to kayak.	I – Paddler is not rotating enough or reaching away from kayak.	I – Remind paddler to reach out and place blade 40 – 60 cm away from kayak to create a stable platform.	
	J – Non-power face of blade is used.	J – Paddler needs to roll wrist back to open up power face to front of kayak.	J – Have paddler roll lower hand wrist back to open power face to the current.	
	K – Blade slices through water and does not have a strong pull.	K – Blade is not being placed at right angle to current.	K – Have paddler focus on maintaining blade at 90° to new current throughout the turn.	
	L – Blade does not have a strong pull and is used as a support brace. Shaft is more horizontal than vertical.	L – Paddler lacks confidence in bow draw and is not committing to it and relying on a high brace to support inside tilt.	L – Have paddler practice bow draw using vertical stroke to maximize power transfer from current to boat. Explain dynamic turn and balance opportunity with bow draw.	
	M – Paddler uses low brace eddy turn.	M – Paddler lacks confidence in bow draw and is not committing to it and relying on a low brace to support inside tilt.	M – Have paddler practice bow draw turns as a more stable and dynamic alternative to low braces.	
	BODY			
	N – Paddler does not reach out to the side for bow draw.	N – Body remains rigidly square facing forward.	N – Review importance of torso rotation for efficiency in bow draw stroke – have paddler practice on flat water then move to current.	
	O – Duration of time spent on static component of bow draw stroke is minimal.	O – Body remains rigidly square facing forward.	O – Review importance of torso rotation for efficiency in bow draw stroke .	
	P – Kayak feels edgy with bow – stern attitude issues.	P – Loss of control is created by the paddler leaning back.	P – Before starting turn have paddlers assume forward leaning position.	
	Q - Paddler loses sense of direction and position on the water during the turn.	Q – Paddler is watching the front of their boat and not looking where they are going.	Q – Remind paddler to look at direction they are heading and to lead the turn with their eyes, head and torso.	
	R – Boat is not edged but the head is leaned into turn to create boat lean.	R – Head is tilted to inside of turn to create boat lean	R – Remind paddler to use lower body to tilt boat and maintain stable upright torso and head centred over inside edge.	

		<p>S – Boat is not edged but the torso is leaned into turn to create boat lean.</p> <p>T – Paddler brings paddle into bow quickly and has to repeat bow draw stroke to turn the boat.</p> <p>U – Lower arm is locked out at full extension.</p> <p>V – Upper forearm is positioned over top of or behind head.</p> <p>W – Upper forearm is positioned under chin.</p>	<p>S – Torso is leaned to inside of turn to create boat lean.</p> <p>T – Paddler does not hold bow draw long enough to effectively turn boat.</p> <p>U – The lower shoulder is at risk from sudden impacts or pulls if the elbow is fully extended.</p> <p>V – The upper shoulder is at risk from sudden impacts or pulls if the upper arm is fully extended above head.</p> <p>W – The face and chin is at risk from a sudden impact if the blade hits a rock under the water and is forced into chin.</p>	<p>S – Remind paddler to use lower body to tilt boat and maintain stable upright torso and head centred over inside edge.</p> <p>T – Have paddler hold bow draw longer until boat finishes turn and before finishing draw to the bow.</p> <p>U – Have paddler maintain a bent elbow to protect their lower shoulder.</p> <p>V – Remind paddler to keep upper forearm in front of helmet . (Note: This technique is an advanced slalom racing technique but has an inherent risk that should only be used by trained and well-conditioned athletes.)</p> <p>W – Have paddler keep their upper forearm in front of their face, above the chin and below the top of their head.</p>
--	--	---	---	--

WHITEWATER KAYAKING

INSTRUCTION INTERMEDIATE

15	Skill: Boof	Outcome: <i>Paddler is able to launch the boat over an obstacle and land appropriately.</i>
-----------	--------------------	--

KEY PERFORMANCE INDICATORS/FACTORS

BOAT	Propulsion		Kayak moves forward to launch. This energy is maintained to clear the boat over the downstream obstacle
	Angle		Entry of angle over the obstacle is 90° normally. The entry angle can be varied with speed of kayak and current and exit from the obstacle desired.
	Tilt		Kayak is placed on a neutral edge until boat has cleared the obstacle and is travelling in new direction.
	Attitude		Bow is lifted to assist boat to clear obstacle and avoid diving into hole or changing the direction of travel.
BLADE	Entry/Exit		Blade is placed next to the kayak around toes on the side where the last stroke can be placed before it goes over the obstacle.
	Trajectory		Blade is pulled back as a forward stroke.
	Recovery		Normal forward stroke recovery.
	Blade		Blade is maintained perpendicular to current. The blade anchors the boof and gives support to the bow lift and forward momentum.
	Shaft		Paddle shaft is kept in vertical plane throughout the stroke.
BODY	Torso	Rotation	Upper body rotates towards stroke and opens up shoulders to support force being transferred to torso and boat.
		Posture	Straight back with slight forward or back lean originating from hips and pelvis.
		Head Position	Facing direction paddler is heading towards.
	Upper Limbs	Power Transfer	Arms hang onto paddle shaft and maintains static position to pull paddle over obstacle and allowing momentum to be transferred from paddle through arms to torso and boat.
		Protection	Bottom arm elbow remains bent to act as shock absorber between paddle and kayak. Top arm remains in front of head to protect top shoulder.
	Lower Limbs	Power Transfer	Lift bow by lifting both knees.
		Protection	Use both legs to stabilize body, maintain balance and control boat edges.

KINETIC SEQUENCE	Power – Angle – Tilt – Directional Control
-------------------------	---

WHITEWATER KAYAKING

INSTRUCTION INTERMEDIATE

15	Skill: Boofs	Outcome: Paddler is able to launch the boat over an obstacle and land appropriately
----	--------------	---

KEY INDICATORS FOR INTERVENTION (GAP)

Analysis of Causes	Priority	Key Indicators for Intervention (GAP)	Problem	Common Corrective Measures
	H/M/L			
Equipment	M	Paddler has difficulty edging the kayak and maintaining a tilt on the boat. Kayak feels unstable and edgy. Kayak cannot be tilted or leaned. Paddle strokes are slow and long. Paddle strokes are awkward and encumbered.	Kayak seat, hip pads, thigh brace and footrests not fitted. Kayak is too narrow or too small for the weight of the paddler. Kayak is too wide or too big for the size of the paddler. Paddle is too long or blade is too big. PFD, clothing or spray skirt limits movements of paddler.	Ensure equipment is appropriate for each individual candidate. Make adjustments when needed.
Environment	H	Paddlers are tentative in their manoeuvres, lots of flips, poor technique . Kayaks are bumping into each other in the eddies. Paddlers are unable to focus on the task at hand and seem distracted. High winds, thunderstorm approaching.	Wave is too big and current is too strong where practicing. Practice area too small for group size. Practice area too busy (noisy and distracting). Weather - Unsafe weather conditions: high winds, thunder, visible lightning.	Move or change environment if appropriate. Acknowledge poor environment condition and adjust activity to ensure greater success (i.e. find smaller wave with less of a foam pile). Move or change environment if appropriate. Pull paddlers off water until storm passes. Wait 15 minutes after last lightning strike within 10 kms.
Affective	H	Paddler hangs back in eddy, is tentative when forced to participate and is fearful of river.	Paddler is afraid to flip over in water.	Modify drill or activity i.e. use a progressive approach and gradually bring paddler into faster moving water. Remain close and provide encouragement and reassurance.
Cognitive/ Mental	M	Paddler fails to paddle over obstacle and drifts into downstream hazard. Paddler initiates stroke on wrong side to be ready for downstream hazard.	Paddler does not see/understand the upstream obstacle or the downstream hazard.	Review ledges and drops and the need for bow lift and forward propulsion to push the boat through the downstream hazard. Point out downstream hazard and the need to have the right stroke in the downstream hazard.
Physical/ Motor	L	Paddler looks lethargic and has low energy.	Paddler lacks stamina or energy.	Establish a rotation within a group allowing for recovery time. Give participants a break between activities.
Tactical	M	A – Paddler fails to paddle aggressively towards the obstacle. B – Paddler does not have a strong last stroke over the obstacle. C – Paddler uses stroke on wrong side of boat. D – Paddler selects wrong position for the boat over the obstacle. E - Paddler becomes trapped in the recirculation.	A - Paddler does not have sufficient downstream momentum. B – As above. C – Paddler is not positioned for next stroke in the downstream hazard. D – Boat is not well positioned to clear the obstacle or downstream hazard. E – Boat does not clear the downstream hazard and is captured by the recirculation.	A – Explain advantages of hitting the obstacle with speed (more stability, less chance of hitting rocks on the lip, prevent being caught in downstream hazard). B – As above. C – Explain the need to have the right stroke in the downstream hazard. D – Show paddler how to landmark the launch spot they need to be in . E – Explain the need for downstream momentum, strong last forward stroke,

Technical	H	BOAT		
		<p>A - Kayak does not clear downstream hazard and becomes trapped in the recirculation.</p> <p>B - Kayak dives into downstream hazard.</p> <p>C - Kayak stalls at the top of the drop.</p> <p>D – Kayak turns and gets caught in recirculation in downstream hazard.</p>	<p>A – Kayak does not have enough momentum/speed to exit the downstream hazard.</p> <p>B - Paddler is not lifting the bow as it crosses over the obstacle.</p> <p>C – Kayak hits a rock or obstacle at the top of the drop.</p> <p>D – Kayak direction changes as it hits the downstream hazard.</p>	<p>A - Instruct paddler to use strong forward strokes to build forward momentum before going over the obstacle.</p> <p>B - Instruct paddler to lift bow up with knees as it crosses over the obstacle.</p> <p>C - Have paddler avoid that spot or increase momentum.</p> <p>D - Have paddler maintain directional control using boof stroke and landing strokes to keep the boat facing downstream.</p>
		BLADE		
		<p>I – Blade is not placed at last appropriate spot before going over obstacle.</p> <p>J - Blade is placed on wrong side of boat.</p> <p>K – Blade slices through water and does not have a strong pull.</p>	<p>I – Paddler is not getting a strong boof stroke and bow lift.</p> <p>J – Paddler is not ready for appropriate stroke in the downstream hazard.</p> <p>K – Blade is not being placed at right angle to current.</p>	<p>I – Remind paddler to plan out strokes and be ready for last boof stroke.</p> <p>J - Remind paddler to plan out strokes and be ready for stroke in the downstream hazard.</p> <p>K – Have paddler focus on maintaining blade at 90° to current.</p>
		BODY		
<p>N – Paddler does not reach forward to start the boof stroke.</p> <p>O – Paddler does not pull back to finish boof stroke.</p> <p>P – Paddler does not lift bow to start the boof.</p> <p>Q - Paddler leans back as they hit the downstream hazard.</p> <p>R – Boat is edged as it leaves or lands.</p>	<p>N – Body remains rigidly square and does not maximize power thrust and body position.</p> <p>O – Body remains rigidly square and does not maximize power thrust and body position.</p> <p>P - Paddler does not lift bow with the knees.</p> <p>Q – Boat has strong stern weight which negatively affects the boat control and ability to exit the downstream hazard.</p> <p>R – Boat will not be stable on landing.</p>	<p>N - Review importance of torso rotation for efficiency in forward stroke.</p> <p>O - Review importance of torso rotation for efficiency in forward stroke.</p> <p>P - In combination with boof stroke have paddler lift knees to lift the bow.</p> <p>Q - Remind paddler to bring weight forward for next stroke as they hit the downstream hazard.</p> <p>R - Remind paddler to use lower body to maintain stable platform.</p>		

WHITEWATER KAYAKING		INSTRUCTION INTERMEDIATE	
14	Skill: Jet Ferries	Outcome: <i>Paddler is able to cross the river on a diagonal wave.</i>	
KEY PERFORMANCE INDICATORS/FACTORS			
BOAT	Propulsion		Kayak moves forward to cross the eddy line. This energy is transferred into the cross river momentum and maintained in direction of travel.
	Angle		Entry of angle across the eddy line into the is 30° normally. The entry angle can be varied with speed of kayak and current and aggressiveness of ferry. After crossing the eddyline the ferry angle is maintained at 45° as the boat crosses the current.
	Tilt		Kayak is placed on its active downstream edge from the exit of the nearside eddy until boat has finished moving across the current and is resting in the farside eddy. As the kayak crosses the eddyline from the current at the completion of the ferry, the active edge is changed similar to the completion of an eddy turn. Once the kayak is resting in the eddy, the kayak is returned to a neutral tilt.
	Attitude		When initially crossing the eddyline into the current, lifting the bow will assist the paddler to control the bow and prevent the boat from spinning downstream. After the boat is fully in the current, the kayak is maintained with neutral bow and stern balance throughout the ferry.
BLADE	Entry/Exit		Paddler maintains normal forward stroke, paddling evenly on both sides. When initially crossing the eddyline, the paddler will be ready to use a sweep stroke on the downstream side to control the kayak angle if the bow starts to swing downstream.
	Trajectory		Normal forward strokes are maintained. If the bow starts to swing downstream a sweep to the stern of the kayak is the most effective correction tool. Trajectory of a stern sweep is from the hip to the stern of the boat.
	Recovery		Normal forward stroke recovery is maintained.
	Blade		Normal forward stroke blade angles are maintained.
	Shaft		Normal forward stroke shaft angles are maintained.
BODY	Torso	Rotation	Upper body maintains normal forward stroke rotation with significant shoulder roll and strong push-pull sequence.
		Posture	Straight back with slight forward lean originating from hips and pelvis.
		Head Position	Head is facing towards the cross current location that the kayak is going towards, this is not the direction that the bow of the kayak is aimed at.
	Upper Limbs	Power Transfer	Normal forward stroke power transfer from paddle with a push-pull action on shaft, using arms and shoulders to propel the trunk and boat forward.
		Protection	Normal forward stroke protection. Normal forward sweep protection. Do not lock lower arm elbow on forward sweep.
	Lower Limbs	Power Transfer	Tilt boat by lifting upstream thigh and hip and pressing down with downstream thigh and hip.
Protection		Use both legs to stabilize body, maintain balance and control boat edges.	
KINETIC SEQUENCE			Power – Angle – Tilt

WHITEWATER KAYAKING

INSTRUCTION INTERMEDIATE

13	Skill: Jet Ferries	Outcome: Paddler is able to cross the river on a diagonal wave.
----	--------------------	---

KEY INDICATORS FOR INTERVENTION (GAP)

Analysis of Causes	Priority	Key Indicators for Intervention (GAP)	Problem	Common Corrective Measures
	H/M/L			
Equip-ment	M	Paddler has difficulty edging the kayak and maintaining a tilt on the boat. Kayak feels unstable and edgy. Kayak cannot be tilted or leaned. Paddle strokes are slow and long. Paddle strokes are awkward and encumbered.	Kayak seat, hip pads, thigh brace and footrests not fitted. Kayak is too narrow or too small for the weight of the paddler. Kayak is too wide or too big for the size of the paddler. Paddle is too long.or blade is too big. PFD, clothing or spray skirt limits movements of paddler.	Ensure equipment is appropriate for each individual candidate. Make adjustments when needed.
Environ-ment	H	Paddlers are tentative in their manoeuvres, lots of flips, poor technique. Kayaks are bumping into each other in the current. Paddlers are unable to focus on the task at hand and seem distracted. High winds, thunderstorm approaching.	Current is too strong where practicing. Practice area too small for group size. Practice area too busy (noisy and distracting). Weather - Unsafe weather conditions: high winds, thunder, visible lightning.	Move or change environment if appropriate. Acknowledge poor environmental conditions and adjust activity to ensure greater success (e.g., keep distance short between starting and finishing points). Limit the number of boats in the river to manageable number. Move or change environment, if appropriate. Pull paddlers off water until storm passes. Wait 15 minutes after last lightning strike within 10 kms.
Affective	H	Paddler hangs back in eddy, is tentative when forced to participate and is fearful of river.	Paddler is afraid to flip over in water.	Modify drill or activity (e.g., use a progressive approach and gradually bring paddler into faster moving water). Remain close and provide encouragement and reassurance.
Cognitive/ Mental	M	Paddler turns on eddy line before able to start ferry.Boat wobbles or flips as it crosses farside eddy line.	Paddler does not see/understand eddylines or current differential and their effects on kayaks when crossing a current differential.	Review eddies and currents and the need for boat tilt to counteract physics of moving water. Point out eddyline and show how to reach across the eddyline into the new current to anchor blade during the turn.
Physical/ Motor	L	Paddler looks lethargic and has low energy.	Paddler lacks stamina or energy.	Establish a rotation within a group allowing for recovery time. Give participants a break between activities.
Tactical	M	A – Paddler arrives low in farside eddy. B – Paddler gets turned upstream in midstream slower water. C – Kayak hits rock underneath the water. D – Paddler does not leave room for other kayaks in eddy.	A – Paddler does not have the right angle for the ferry or Paddler does not stay on the wave and current pushes them downstream. B – Paddler does not recognize midstream eddy/slow water. C – Paddler does not see rocks. D – Paddler stops paddling after securing their space in the eddy, clogging up the entry/exit space.	A – Explain need ot maintain 450 angle when ferrying and maintaining position on wave across the current. B – Show paddler the midstream eddy/slow water and how to anticipate the change in angles. C – Show paddler the rocks and how to spot them. D – Tell group about the need to create room for everyone to enjoy good ferries and reduce risk of hitting others.

Technical	H	BOAT		
		A – Kayak stalls on eddyline, parallel with the current.	A – Kayak has too little angle (<20°) to cross the eddy line.	A – Instruct paddler to cross eddyline with 30° angle and as the current catches the bow to maintain a 45° angle.
		B – Kayak turns on the eddy line.	B – Kayak has too much angle (>40°) as it leaves the eddy. Kayak does not have enough speed/ momentum as it crosses the eddyline.	B - Instruct paddler to cross eddyline with 300 angle and as the current catches the bow to maintain a 450 angle.
		C – Kayak bounces off eddy line when entering farside eddy from ferry.	C – Angle of approach from ferry into eddy is too acute <30°.	C – Have paddler open angle of ferry to 45° or greater.
		D – Kayak turns downstream in middle of the river.	D – Paddler does not keep bow pointed upstream at a 45° angle.	D – Have paddler use sweeps on downstream side or reverse sweep on upstream side to control angle of kayak at 45°.
		E – Kayak turns upstream in middle of the river.	E – Paddler does not keep bow pointed to the far shore at a 45° angle.	E – Remind paddler to maintain 45° ferry angle.
		F – Kayak wobbles or flips leaving nearside eddy.	F - Paddler is not pre-tilting the boat as they approach the eddy line.	F – Remind paddler to tilt kayak downstream before crossing eddy line.
		G – Kayak wobbles or flips during ferry.	G – Paddler is not maintaining the boat tilt throughout the ferry. Paddler is using upstream correction stroke without a counter balance tilt.	G – Remind paddler to maintain downstream kayak tilt throughout ferry. Remind paddler to use downstream correction strokes.
		H – Kayak wobbles or flips crossing farside eddy line.	H – Paddler is not changing their edge as they enter the eddy after the ferry.	H – Remind paddler to change boat tilt when they cross the eddyline from the current into the eddy.
			BLADE	
	I – No power or speed in the boat.	I – Paddler is not paddling hard enough to build speed and momentum.	I – Have paddler to keep paddling throughout the manoeuvre from the start in the eddy through the ferry. Remind paddler to rotate shoulders in the forward stroke to maximize the power in the stroke.	
	J – Forward speed is killed when the paddler does correction strokes.	J – Paddler is using reverse strokes on the upstream side of the boat to correct angles.	J – Have paddler use forward sweeps on downstream side to keep up boat speed and correct boat angle.	
	K – Forward sweep correction stroke does not turn boat upstream.	K – Blade remains close to the boat and is an ineffective sweep.	K – Have paddler reach out to side to execute full sweep with emphasis on stern portion of the sweep.	
	L – Blade does not have a strong pull and is used as a support brace. Shaft is more horizontal than vertical.	L – Paddler lacks confidence in boat tilt and ferry angles and is not committing to it and relying on a high brace to support inside tilt.	L – Have paddler practice no paddle eddy turns to build confidence in leaving the eddy. Have paddler reduce angle as they leave the eddy, so that the downstream boat tilt is not as critical and the forward stroke can be maintained.	
	M – Paddler drifts into the farside eddy.	M – Blade is not engaged when the boat crosses far side eddy.	M – With boat crossing the eddy line at an obtuse angle >45°, the appropriate stroke is a bow draw on the inside edge, similar to an eddy turn With boat crossing the eddy line at an acute angle <45°, the appropriate stroke is a forward sweep on the inside edge to push the nose across the eddy line and the boat deeper into the eddy.	
		BODY		
	N – Paddler remains rigidly square facing forward.	N – Shoulders do not rotate with forward stroke losing efficiency and strength	N – Review importance of torso rotation for efficiency in forward strokes – have paddler practice on flat water then moveback to current.	
	O – Paddler loses sense of direction and position on the water during the manoeuvre.	O – Paddler is watching the front of their boat and not looking where they are going.	O – Remind paddler to look at direction they are heading and to lead the manoeuvre with their eyes, head and	

		<p>P – Kayak feels edgy with bow – stern attitude issues.</p> <p>Q – Boat is not edged but the head is leaned downstream to create boat lean.</p> <p>R – Boat is not edged but the torso is leaned downstream to create boat lean.</p> <p>S – Boat rocks from side to side while moving through the water.</p> <p>T – Paddler is constantly repeating bow sweep stroke to correct angle of the boat.</p> <p>U – Lower arm is locked out at full extension.</p>	<p>P – Loss of control as the paddler crosses eddy line is created by the paddler leaning forward. Loss of control is created by the paddler leaning back when boat is in the current.</p> <p>Q – Head is tilted downstream to create boat lean.</p> <p>R – Torso is leaned to inside of turn to create boat lean.</p> <p>S – Paddler is not controlling boat edge with legs and leaning into each stroke.</p> <p>T – Sweep at bow of the boat is not effective in maintaining boat angle.</p> <p>U – The lower shoulder is at risk from sudden impacts or pulls if the elbow is fully extended.</p>	<p>torso.</p> <p>P – Before starting manoeuvre, have paddlers assume neutral position and lift bow as it crosses eddyline.</p> <p>P – Have paddler assume neutral forward-back leaning position when the boat is in the current.</p> <p>Q – Remind paddler to use lower body to tilt boat and maintain stable upright torso and head centred over downstream edge.</p> <p>R – Remind paddler to use lower body to tilt boat and maintain stable upright torso and head centred over downstream edge.</p> <p>T – Have paddler emphasize sweep to the stern of the boat to effectively maintain the boat angle.</p>
--	--	--	--	---

WHITEWATER KAYAKING		INSTRUCTION INTERMEDIATE	
15	Skill: Flat Spins	Outcome: Paddler is able to maintain position on wave feature and spin boat in either direction.	
KEY PERFORMANCE INDICATORS/FACTORS			
BOAT	Propulsion		Paddler balances forward downhill gravity and water recirculation and upstream propulsion against downstream current .
	Angle		Angle on the wave will vary depending on size of wave, depth and length of wave, speed of current and speed of boat. The entry angle will normally be 00 to get onto the wave and then the boat is allowed to spin on the wave using natural breaks in the wave dynamics to free an end and spin the boat.
	Tilt		Kayak is placed on its active downstream edge while the boat is positioned on the wave. When boat changes direction on the wave the active downstream edge must be changed. Once the kayak comes off the wave the boat is returned to a neutral tilt.
	Attitude		When initially entering onto the wave a neutral attitude is maintained. If the boat falls back off the wave shifting weight forward will add forward momentum and aid the paddler to regain position on the wave. If the boat accelerates down into the trough, lifting the bow and weighting the stern will slow the boat's upstream (downhill) momentum and prevent the boat from pearling in the trough.
BLADE	Entry/Exit		Paddler will use a variety of forward, reverse, sweeps, low braces, high braces on the downstream side and forward and reverse sweep strokes on the upstream side. Normal strokes will be maintained with emphasis on shoulder protection.
	Trajectory		Normal strokes are maintained. When the bow starts to swing downstream a sweep on the upstream bow of the kayak is the most effective tool to accentuate the spin and be ready for a downstream brace as the boat spins sideways.
	Recovery		Normal stroke recovery is maintained.
	Blade		Normal stroke blade angles are maintained.
	Shaft		Normal stroke shaft angles are maintained
BODY	Torso	Rotation	Upper body maintains normal rotation for each stroke with significant shoulder roll and strong push-pull sequence with reverse sweep on upstream stern edge.
		Posture	Straight back with slight forward or back lean originating from hips and pelvis.
		Head Position	Head and eyes lead the spin and the direction that the kayak is going towards.
	Upper Limbs	Power Transfer	Normal stroke power transfer from paddle with a push-pull action on shaft, using arms and shoulders to propel the trunk and boat.
		Protection	Heightened awareness of need for upper body protection in all strokes. Lower arm should not reach over head to effect a high brace or sweep stroke. Do not lock lower arm elbow on strokes. Do not brace on upstream side of boat if the boat starts to flip.
	Lower Limbs	Power Transfer	Tilt boat by lifting upstream thigh and hip and pressing down with downstream thigh and hip.
Protection		Use both legs to stabilize body, maintain balance and control boat edges.	
KINETIC SEQUENCE			Power – Angle – Tilt – Directional Control

WHITEWATER KAYAKING

INSTRUCTION INTERMEDIATE

14	Skill: Flat Spins	Outcome: Paddler is able to maintain position on wave feature and spin boat in either direction.
----	-------------------	--

KEY INDICATORS FOR INTERVENTION (GAP)

Analysis of Causes	Priority	Key Indicators for Intervention (GAP)	Problem	Common Corrective Measures
	H/M/L			
Equip-ment	M	Paddler has difficulty edging the kayak and maintaining a tilt on the boat. Kayak feels unstable and edgy. Kayak cannot be tilted or leaned. Kayak is constantly pearling on the wave and burying the nose into preceding wave. Kayak is constantly falling off the wave. Paddle strokes are slow and long. Paddle strokes are awkward and encumbered.	Kayak seat, hip pads, thigh brace and footrests not fitted. Kayak is too narrow or too small for the weight of the paddler. Kayak is too wide or too big for the size of the paddler. Kayak is too long and has too much hullspeed to stay in the wave. Kayak is too short and doesn't have enough hullspeed to stay on the wave. Paddle is too long, or blade is too big. PFD, clothing or spray skirt limits movements of paddler.	Ensure equipment is appropriate for each individual candidate. Make adjustments when needed. Find a wave that has a longer trough or less retentive that will accommodate the longer kayak. Find a wave that is more retentive that will hold the shorter kayak.
Environ-ment	H	Paddlers are tentative in their manoeuvres, lots of flips, poor technique. Kayaks are bumping into each other on the wave. Paddlers are unable to focus on the task at hand and seem distracted. High winds, thunderstorm approaching.	Wave is too big and current is too strong where practicing. Wave is too small for multiple boats with higher probability of injury from contact with other boats and paddles. Practice area too busy (noisy and distracting). Weather - Unsafe weather conditions: high winds, thunder, visible lightning.	Move or change environment if appropriate. Acknowledge poor environment condition and adjust activity to ensure greater success - (i.e., find smaller wave with less of a foam pile). Limit one on the wave and marshal paddlers to get next person on wave after first drops off. Move or change environment if appropriate. Pull paddlers off water until storm passes. Wait 15 minutes after last lightning strike within 10 kms.
Affective	H	Paddler hangs back in eddy, is tentative when forced to participate and is fearful of river.	Paddler is afraid to flip over in water.	Modify drill or activity (i.e., use a progressive approach and gradually bring paddler into bigger wave). Remain close and provide encouragement and reassurance.
Cognitive/ Mental	M	Boat falls off shoulder of the wave before it can start surfing. Boat wobbles or flips when it gets onto wave. Boat pearls in preceding wave at bottom of trough. Boat falls off wave.	Paddler does not see/understand wave dynamics and its effect on kayaks when surfing on the wave.	Review ferries and the need for boat momentum upstream to get onto wave shoulder. Emphasize need to maintain downstream boat edge. Review need to position boat on the face of the wave. Review wave dynamics that will free the ends and allow the boat to spin.

Physical/ Motor	L	Paddler looks lethargic and has low energy.	Paddler lacks stamina or energy.	Establish a rotation within a group allowing for recovery time. Give participants a break between activities.
Tactical	M	A – Boat falls off shoulder of the wave before it can start surfing. B – Boat wobbles or flips when it gets onto wave. C – Boat pearls in preceding wave at bottom of trough D – Boat falls off wave E – Boat gets trapped sideways on the wave	A – Paddler does not have the right angle for the ferry to get onto wave or Paddler does not maintain forward strokes and current pushes them downstream or boat is not positioned on the front edge of shoulder. B – Paddler does not understand need for very strong downstream edging to counteract effect of current dynamics. C – Paddler does not understand upstream (downhill) momentum associated with the wave and does not see bow burying into the water. D – Paddler does not understand downstream momentum associated with the wave and does not see bow rising out of the water. E – Boat turns sideways and the recirculating action of the wave holds the kayak from exiting the wave trough.	A – Explain need of maintain 45° angle or less when ferrying and maintaining consistent momentum upstream against the current and to get onto front of wave shoulder. B – Show paddler the effect of strong current on the boat and how to anticipate the change when positioned on the wave. C – Explain the need to brake forward momentum with reverse strokes, leaning back or angling boat to keep the bow from pearling. D – Explain the need to maintain forward momentum with forward strokes, leaning forward or angling boat to keep the boat from falling off the wave. E – Tell paddler to move the kayak forward and back using forward and reverse strokes to exit from ends of the wave trough.
Technical	H	BOAT A – Boat falls off shoulder of the wave before it can start surfing. B – Boat wobbles or flips when it gets onto wave. C – Boat pearls in preceding wave at bottom of trough and is subsequently blow backwards off the wave D – Boat falls off wave E – Boat gets trapped sideways on the wave F – Kayak surfs across wave and out the other side and is not redirected back across the wave.	 A – Paddler does not have the right angle for the ferry to get onto wave or Paddler does not maintain forward strokes and current pushes them downstream or Boat is not positioned on the front edge of shoulder. B – Paddler does not understand need for very strong downstream edging to counteract effect of current dynamics. C – Paddler does not understand upstream (downhill) momentum associated with the wave and does not see bow burying into the water. D – Paddler does not understand downstream momentum associated with the wave and does not see bow rising out of the water. E – Boat turns sideways and the recirculating action of the wave holds the kayak from exiting the wave trough. F – Paddler is not able to control boat angle on the wave and the momentum carries the boat across the wave.	 A – Explain need of maintain 45° angle or less when ferrying and maintaining consistent momentum upstream against the current and to get onto front of wave shoulder. B – Show paddler the effect of strong current on the boat and how to anticipate the change when positioned on the wave. C – Explain the need to brake forward momentum with reverse strokes, leaning back or angling boat to keep the bow from pearling when the bow starts to bury. D – Explain the maintain forward momentum with forward strokes, leaning forward or angling boat to keep the boat from falling off the wave. E – Tell paddler to move the kayak forward and back using forward and reverse strokes to exit from ends of the wave trough. F – Explain how to use braking reverse sweep on upstream stern side to slow boats momentum and change direction.
		BLADE		
		G – No power or speed in the boat. H – Kayak is unstable on wave. I – Paddler continues forward paddling once the boat is positioned on the wave.	G – Paddler is not paddling hard enough to build speed and momentum. H – Paddler is not keeping paddle blade engaged with water. I – Paddler can relax and enjoy the surf without having to paddle.	G – Have paddler to keep paddling throughout the manoeuvre from the start until they have gained stability of H – Remind paddler to maintain rudder strokes and forward strokes while on the wave to provide upper body stability. I – Tell paddler to stop paddling and to only paddle when the bow lifts out of the water. Have the paddler concentrate on steering the boat using stern rudders and stern draws.

	<p>J – Forward speed is killed when the paddler does correction strokes and the boat falls off the wave.</p> <p>K – Forward sweep correction stroke does not turn boat upstream.</p>	<p>J – Paddler is using a too strong reverse stroke on the upstream side of the boat to correct angles and control speed.</p> <p>K – Bow of kayak is firmly anchored in wave and a forward sweep is an ineffective stroke to control boat angle, except when the boat is lifted out of trough.</p>	<p>J – Have paddler use a lighter touch on reverse strokes to keep up boat speed and correct boat angle.</p> <p>K – Have paddler use stern rudder and stern draw strokes to control boat angle.</p>
	BODY		
	<p>N – Paddler remains rigidly square facing forward.</p> <p>O – Paddler loses sense of direction and position on the water during the manoeuvre.</p> <p>P – Kayak feels edgy with bow – stern attitude issues.</p> <p>Q – Boat is not edged but the head is leaned downstream to create boat lean.</p> <p>R – Boat is not edged but the torso is leaned downstream to create boat lean.</p> <p>S – Boat rocks from side to side while sitting on the wave.</p>	<p>N – Shoulders do not rotate with strokes losing efficiency and strength.</p> <p>O – Paddler is watching the front of their boat and not looking where they are going.</p> <p>P – Loss of control as the paddler ferries is created by the paddler leaning forward. Loss of control is created by the paddler leaning back when boat is in the current.</p> <p>Q – Head is tilted downstream to create boat lean.</p> <p>R – Torso is leaned downstream to create boat lean.</p> <p>S – Paddler is not controlling boat edge with legs and leaning into each stroke.</p>	<p>N – Review importance of torso rotation for efficiency in strokes.</p> <p>O – Remind paddler to look at direction they are heading and to lead the manoeuvre with their eyes, head and torso.</p> <p>P - Before starting manoeuvre, have paddlers assume neutral position and lift bow as it crosses eddyline. Have paddler assume neutral forward-back leaning position when the boat is in the current.</p> <p>Q – Remind paddler to use lower body to tilt boat and maintain stable upright torso and head centred over downstream edge.</p> <p>R – Remind paddler to use lower body to tilt boat and maintain stable upright torso and head centred over downstream edge.</p> <p>S – Remind paddler to use lower body to tilt boat and maintain stable upright torso and head centred over downstream edge.</p>



Inclusion



Inclusion:

“Respecting the diversity of our ages, gender, background, cultures and disabilities”.

Your responsibility as an instructor is to create and maintain a welcoming and safe environment for all participants.

The River Instructor 3 is not easily adapted for people with disabilities. Due to the hazards involving moving water, it is recommended that persons with disabilities take part in a pool or lake program.



References



References:

- Alberta Whitewater Association
- Ontario Whitewater Association
- Canoe Kayak Canada
- Coaching Association of Canada
 - Make Ethical Decisions
 - Teaching and Learning
 - Plan a Practice
 - Community Sport Template
- Original NCCP Kayak Coaching 1 & 2



Evaluation

River Kayak

Instructor 3



LEARNING OUTCOMES

By the end of this training, candidates will be able to take a critical look at their own facilitating skills. They will be able to organize safe, fun lessons that meet their paddlers' needs and reflect the CanoeKayak Canada –Whitewater Long-Term Athlete Development Model. They will also learn how to use several self assessment tools that will enable them to keep working on their own to improve their effectiveness as an instructor. In particular, they will be able to:

- Apply a six step ethical decision making process
- Ensure that the lesson environment is safe
- Produce a safe and organized lesson plan that shows development of one or more paddling skills and athletic abilities
- Design an emergency action plan
- Implement an organized and structured lesson that consolidates and refines paddling skills and athletic abilities
- Detect and correct the performance of intermediate paddlers
- Make interventions that promote learning

PURPOSE OF THE PROGRAM

The purpose of the River Kayak Instructor 2 training is to certify instructors that are able to organize instruct and lead paddlers on rivers up to and including Class II rivers.

Ratio: 1:6 Instructor to Participant

With the support from another “trained” L2, the instructor to participant ratio can be increased to 1:10.

A Class II river is defined as follows:

- Class II – “easy rapids with waves, wide clear channels, that are obvious with scouting. Some maneuvering required”.

EVALUATION

Instructor candidates must demonstrate confidence in their personal paddling skills while instructing on a Class II river. In addition they must demonstrate specific criteria that support the outcomes of *Make Ethical Decisions*, *Provide Support to Athletes in Training*, *Analyze Performance* and *Plan a Practice*.

The evaluation is to be conducted with real life students by an outside Learning Facilitator (i.e., not the one that ran the course and not one affiliated with the group or association who sponsored the course) It is the responsibility of the Evaluator to ensure that candidates meet the established National standard for each of the above outcomes. Before they sign the card, evaluators should ask themselves if they would send a loved one out with this candidate.

FORMS

All required forms for registering, evaluation, post course reports, etc. can be found on the CKC website at <http://canoekayak.ca/become-a-coach/>

EVALUATION OVERVIEW– CKC RIVER KAYAK INSTRUCTOR 3

OUTCOME	PERFORMANCE CRITERIA	METHOD OF EVALUATION
MAKE ETHICAL DECISIONS	Candidates will be asked to apply a 6 step ethical decision making process	Complete the on-line, NCCP evaluation for the Instructor-Intermediate context. <i>(Details of registration for the on-line evaluation are available on the CAC website (www.coach.ca)).</i>
PLAN A PRACTICE	Produce a safe and organized lesson plan that shows development of one or more paddling skills and athletic abilities. Design an Emergency Action Plan (EAP).	Submit a lesson plan that (1) uses the standard lesson plan format and (2) includes a series of activities designed to enhance the learning of the paddlers. Submit an EAP for an appropriate teaching location.
PROVIDE SUPPORT TO ATHLETES IN TRAINING	Ensure that the lesson environment is safe Implement an organized and structured lesson that consolidates and refines paddling skills and athletic abilities Make interventions that promote learning	*Demonstrate safety awareness throughout the on-site evaluation Candidate will be observed instructing an appropriate lesson by an evaluator. Candidate will demonstrate feedback that promote learning.
ANALYZE PERFORMANCE	Detect and correct intermediate paddlers performance	*Candidate will demonstrate their ability to use the "CKC Skill Analysis Model" and "Gap Tools" during the on-site evaluation.

* NOTE: A Video/DVD submission of a candidate working with intermediate paddlers may be substituted for an on-site evaluation.



NCCP PLAN A SESSION

Instructor Candidate			CC number:	C	C						
	Surname	First Name									
Comments Evidence of Achievement Scoring											
Structure & Organisation	Session plan identifies basic information including, date, time, location, number of paddlers, level of paddlers.		0	1	3	5					
	Main segments of the session are identified: intro, warm-up, main part, cool-down and a conclusion/reflection		0	1	3	5					
	A timeline for the session is provided and appropriate for the age group and ability of the paddlers.		0	1	3	5					
	Use of facilities and equipment are outlined and match session goals.		0	1	3	5					
	Session is designed so there is minimal waiting time for paddlers during the session or wasted time during transition.		0	1	3	5					
	The session has a clearly identified goal, consistent with the National Instructional Tool Kit and the actual level of the paddlers.		0	1	3	5					
	TOTAL POINTS										
Nature of Sessions	The session includes a variety of activities.		0	1	3	5					
	Paddlers have sufficient practice time during each activity.		0	1	3	5					
	Activities have well-defined goals.		0	1	3	5					
	Selected activities are appropriate to the time and location in the session and to the paddlers abilities.		0	1	3	5					
	Planned activities are effectively described through illustration, diagram, explanation.		0	1	3	5					
	Activities indicate key factors (instructing points) that will be identified in the session.		0	1	3	5					
	Sessions present reasonable challenges to the paddlers, and are chosen or designed so that paddlers succeed 2/3 times.		0	1	3	5					
	Selected activities reflect awareness of and control for potential risk factors.		0	1	3	5					

		TOTAL POINTS			
Emergency Action Plan	Specific steps or procedures are identified in the plan if an injury occurs.	0	1	3	5
	The locations of telephones and emergency telephone numbers are identified.	0	1	3	5
	Specific directions are given on how to reach the activity site, which should include a map and a list of key instructions.	0	1	3	5
	Evacuation sites identified.	0	1	3	5
	Location of medical profile for each participant under the instructor's care is identified.	0	1	3	5
	Location of, including route to, nearest emergency medical facilities.	0	1	3	5
	Location of, including access to, vehicles and keys.	0	1	3	5
	Location of a fully stocked first-aid kit is identified.	0	1	3	5
	"First aid Instructor" and "communication Instructor" are designated and their roles and responsibilities outlined.	0	1	3	5
	TOTAL POINTS				

Rank <small>(NI, MS, ES)</small>	Planning Element	NI = Needs Improvement	MS = Meets Standard	ES = Exceeds Standard
	<i>Produce a safe and organised session plan that shows: Structure and organisation.</i>	≤ 9	10 - 12 (no 0)	≥ 13 (no 0 or 1)
	<i>Produce a safe and organised session plan that shows: Development of one or more paddling skills and/or abilities</i>	≤ 9	10 – 12 (no 0)	≥ 13 (no 0 or 1)
	<i>Design an emergency action plan</i>	≤ 26 (no 0)	27 (no 0 or 1)	≥ 28
Evaluator				
Signed		Date		

Surame	First Name

SCORING	
0	No evidence present
1	Some evidence. Plan has limited detail and insufficient accuracy to meet overall criteria. A different Instructor
3	Good evidence. Plan has sufficient detail and accuracy to meet overall criteria. A different Instructor could implement the session.
5	Exceptional evidence. Plan has excellent detail and accuracy to meet overall criteria. Plan would assist a different Instructor in enhancing the session.

INSTRUCTOR 3



National
Coaching
Certification
Program

Programme
national de
certification des
entraîneurs

NCCP PROVIDE SUPPORT TO PADDLERS

Date																
Instructor						CC number:		C	C							
		Surname				First Name										
Comments		Evidence of Achievement										Scoring				
Safety		Instructor identifies dangerous factors and makes immediate adjustments so participants are not at risk in all activities.										0	3			
		Instructor presents an emergency action plan (EAP) that contains elements specific to the site being used.										0	3			
		Instructor positions themselves appropriately.										0	3			
		In river, Instructor is able to perform kayak to swimmer rescues, throwbag rescues, equipment recoveries.										0	3			
			TOTAL POINTS													
Structure & Organization		Instructor greets paddlers and informs them of session activities, locations and timelines.										0	1	3	5	
		Instructor is ready to start session.										0	1	3	5	
		Paddlers have adequate room for manoeuvre execution.										0	1	3	5	
		There are clear session segments, which includes an appropriate warm-up, main segments, cool down and wrap-up/next steps.										0	1	3	5	
		Skills/manoeuvres progress according to the National Instructional Tool Kit.										0	1	3	5	
		Instructor modifies skills/manoeuvres to desired level where appropriate.										0	1	3	5	
		Delivery of session matches session plan's goal(s).										0	1	3	5	
			TOTAL POINTS													

Intervention	Instructor positions themselves safely to communicate effectively with paddlers.	0	1	3	5
	Explanations are clear and concise and provide opportunities for participants to ask questions.	0	1	3	5
	Key factors or teaching points are explained and checked for clarification.	0	1	3	5
	Key factors or teaching points are appropriate for the stage of participant development.	0	1	3	5
	Instructor utilizes effective group organization to communicate – rafting up, bankside beaching, etc.	0	1	3	5
	Instructor creates opportunities to interact with all participants.	0	1	3	5
	Instructor provides constructive positive feedback that clearly identifies what and how to improve.	0	1	3	5
	Instructor reinforces correct performance by facilitating appropriate interventions (i.e. feedback, questioning the participant, or using a	0	1	3	5
	Instructor promotes a positive image of the sport and models the image to participants and other stakeholders.	0	1	3	5
	Instructor creates a positive engaging and fun paddling environment.	0	1	3	5
	TOTAL POINTS				

Rank	Standard	<i>NI = Needs Improvement</i>	<i>MS = Meets Standard</i>	<i>ES = Exceeds Standard</i>
	<i>Ensures that the session environment is safe</i>	≤ 11	12 (no 0)	
	<i>Implements an organized and structured session</i>	≤ 15	16 – 24 (no 0)	≥ 25 (no 0 or 1)
	<i>Makes interventions that promote learning</i>	≤ 15	16 – 24 (no 0)	≥ 25 (no 0 or 1)
Evaluator				
Signed		Date		
Surname		First Name		

SCORING

0	No evidence is observed.
1	Evidence is observed; however, there is limited attention or quality in the presentation of the session, or it is not entirely complete.
3	Evidence is observed consistently throughout the session. Attention to detail throughout the whole session.
5	Evidence is observed consistently throughout the session. Exceptional quality and attention to detail throughout the whole session.

LESSON PLAN FORM

Segment	Time	Content
Introduction		
Warm-up		
Main part		
Cool-down		
Conclusion and Celebration		



CanoeKayak Canada Whitewater Emergency Action Plan Form

Location: _____ Date: _____

Time in: _____ Time out: _____

Trip leader: _____ Assist: _____

First aid leader: 1. _____ 2. _____

Comm. leader: 1. _____ 2. _____

Map of River and Surroundings

River Access Points	Special Hazards	River Classification & Other
◆ Put-in and take out	[w Waterfall	=>R Rapid (e.g., RI to RVI)
] [Bridge	...p Portage	>S Sil Include SI to SVI
]d Dam	</// Difficult rescue area(s)	→ Direction of water flow
— Paved road	Others (e.g., glass on trail)	
- Dirt road		→H Direction to hospital
... Trail		→PH Pay phone
-+ Railway tracks		♥ Evacuation (include description)

Place image of map here.

Participants:

Name	Medical Issues	ECP & Contact Numbers

Vehicles:

Make/Model	License Plate Number	Location of Keys

In case of emergency, follow these steps:

2. Ensure no others are in danger	
3.. All paddlers stop and gather	<ul style="list-style-type: none"> • Extract victim
4. Stabilize victim (use soap notes)	<ul style="list-style-type: none"> • Check level of consciousness • Check ABCs • Open airway • Check breathing • Check circulation (pulse) • Stabilize c-spine • DISABILITY (NEUROLOGICAL) • Check for trauma and exposure to extremities
5. Treat victim as required (first aid kits)	
6. Emergency contact - 911 (or other name, number, address)	<ul style="list-style-type: none"> • Hospital • Paddling Organization • Parks • Forestry
7. Location of CELL/SAT phones (number, owner, location)	
8. Evacuation - preparation of	<ul style="list-style-type: none"> • Paddler in need of care • Required gear
9. Group maintenance	

