

ACA | CANOE-KAYAK-SUP-RAFT-RESCUE Instructor's Manual



Canoeing
SUP
Rafting

Kayaking
Safety & Rescue
Adaptive Paddling

AMERICANCANOE.ORG

Acknowledgements

This manual was developed and produced through the combined efforts of both paid and volunteer staff of the ACA| Canoe - Kayak - SUP - Raft - Rescue. Without the generous contributions of a number of individuals, this manual would not exist.

The staff of the ACA is led by Executive Director Wade Blackwood. The ACA Board of Directors is chaired by board President Robin Pope, and the Safety Education and Instruction Council is under the chairmanship of Steve Hutton.

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- Trey Knight, ACA Education and Outreach Coordinator
- Kelsey Bracewell, ACA Safety Education & Instruction Coordinator
- Chris Stec, ACA Chief Operating Officer

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Introduction

The goal of the ACA Instructor Development process is to assist instructor candidates to become knowledgeable, effective paddlesport instructors.

In addition to technical information about the sport, instructor candidates are expected to know information about:

- The ACA| Canoe - Kayak - SUP - Raft - Rescue: Mission, Vision, Values
- Safety Education and Instruction Policies and Procedures
- Environmental Stewardship
- Teaching Principles and the Learning Process
- Program Organization
- Risk Management
- Accessibility Requirements
- Lesson Organization and Planning
- Student Coaching and Evaluation
- Administrative Requirements/ Course Reporting
- Conditioning
- Safety and Rescue: Personal Flotation Devices, Weather, Cold Water, Hazard Recognition and Avoidance
- Boats and Equipment
- Course Specific Information

This instructor's manual was developed to provide the necessary broad-based approach to support all ACA Instructor Development Workshops in all disciplines. It represents the collective knowledge gained by paddlesports instructors and trainers and experts in the paddling field.

This ACA Instructor's Manual is to be used in combination with discipline-specific certification course resources and materials for each paddlesport discipline. (available on-line at www.americancanoe.org)

Note: *Outdoor activities are an assumed-risk sport. This book cannot take the place of appropriate instruction for paddling, swimming, or lifesaving techniques. Every effort has been made to make this guide as accurate as possible, but it is the ultimate responsibility of the paddler to judge his or her ability and act accordingly.*

The Well-Trained ACA Instructor

Congratulations on your interest in certification as an instructor for the ACA!

As a potential ACA instructor, you are a vital part of teaching paddling skills, environmental awareness, safety and the pleasures of outdoor recreation to the public. Research has shown that proper instructor training is a cornerstone of educational programs, and your training will help both you and your future students. As you become a better paddling instructor, your students benefit, and you will be more able to create and participate in effective, successful programs. We applaud your commitment to helping others in their pursuit of safe and enjoyable paddling!

The training you will complete ensures that you know and have met ACA standards. The training will also ensure that you understand how to accurately and consistently apply ACA methods, adhere to policies and procedures, and make proper use of ACA curriculum and materials. By providing you with a standardized approach and widely tested curriculum materials and teaching strategies, this training will help you to increase the success rate of your future students and your courses and to reduce the possibility of mishap.

The ACA | Canoe - Kayak - SUP - Raft - Rescue

ACA Mission Statement

Founded in 1880, The American Canoe Association (ACA) is a national nonprofit organization serving the broader paddling public by providing education related to all aspects of paddling; stewardship support to help protect paddling environments; and sanctioning of programs and events to promote paddlesport competition and recreation.

The ACA believes it is our role to:

- Provide the general public with FUN paddlesport opportunities
- Make paddling education and instruction accessible
- Improve access to all paddling venues
- Expand paddlesport to people of all abilities and to the underserved
- Influence stewardship issues and public policy that effect paddlers and the paddling experience
- Promote paddlesports competition at the local, regional and national levels

- Create strategic alliances with clubs and other organizations that represent the outdoor experience in order to expand awareness and knowledge of paddlesport
- Communicate the benefits of canoeing, kayaking, rafting and stand up paddleboarding as healthy lifetime recreation activities

The heart of the ACA is the people who paddle, cherish and protect the rivers, lakes, streams, bays and oceans of the United States and beyond.

SEIC Mission Statement

The Safety Education and Instruction Council's (SEIC) mission is to develop and implement effective paddlesports safety, education and instructional programs and materials that inform, train and serve the public at all skill levels and in all aspects of paddlesports. The SEIC shall represent the interests of member ACA National Discipline Committees to the ACA National Board of Directors.

History and Traditions

The four strategic tenets of the ACA are: Education, Stewardship, Recreation, and Competition.

The ACA's mission, membership, programming and education efforts successfully reflect the diversity of today's paddlesport community.

No other US paddling organization has kept pace with ACA's success in attracting members or corporate sponsors.

The ACA is the nation's recognized leader in the fields of paddlesport instruction and education.

Currently there are more than 7,000 ACA-certified canoe and

kayak instructors in the U.S. and more than 300 ACA Instructor Trainers / Instructor Trainer Educators.

Collectively, through the reach of the ACA curriculum, over 800,000 students are exposed to safe and enjoyable paddlesport experiences each year.

ACA Stewardship and Public Policy Department is one of only a few national paddlesport public policy advocates and resources.

The department helps ensure clean, accessible recreational waterways, from whitewater to flatwater to coastal resources, for the mutual enjoyment of paddlers and other recreational users. Additional background information on Environmental Stewardship is found in Unit 3.

ACA Outreach department provides support for high-quality paddlesport events of all types to ACA

ACA is the recognized, primary resource to individuals, organizations, agencies, and regulators for information and guidance on all aspects of paddling.

members and the general public, introducing thousands of new paddlers to the sport each year.

In conjunction with the United States Coast Guard and other groups, the ACA develops and distributes safety materials, which reach millions of novice paddlers each year.

The ACA established itself as one of the leading national organizations involved in enforcing the Clean Water Act.

The ACA sanctions over 4,300 events each year, providing event organizers with comprehensive assistance including insurance/risk management, technical assistance, loaned equipment, and event promotion and funding.

With funding from L.L. Bean, the ACA provides stewardship grants to help local clubs preserve their treasured waterways.

The ACA has partnered with Rapid Media to provide unique member benefits.



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The ACA Organization

The ACA was established in 1880 by a group of canoeing enthusiasts, and is a non-profit service organization with a volunteer Board of Directors. The Instruction program was started in 1972. The ACA instruction program is structured as follows:

Safety Education and Instruction Department (SEI)

The Safety Education and Instruction program is responsible for promoting the safety and enjoyment of all paddlers, in any type of boat and on any type of water environment, through improvement of skills and safety awareness. The SEI provides assistance to persons interested in instruction and instructor certification. From the instructor's point of view, the SEI manages the instructor, keeps instructor records, and ensures policy adherence. Any request for exceptions to published policy, reports, misconduct, or challenge of certification should be made in writing to the SEI Department.

Safety Education and Instruction Council (SEIC)

The Safety Education Instructional Council is a voluntary advisory group to the Board of the American Canoe Association. This council is made up of volunteers who possess broad experience in the various disciplines of paddling and who are passionate about the sport. All ACA instructors are defacto members of the council.

The Council is coordinated by a chair, vice chair and secretary.

These persons, along with the immediate past chair form the SEIC Standards Committee. The Standards Committee hears requests for exceptions to policy, approves appointment of trainers, and hears challenges and grievances. The Council and its working committees are responsible for curriculum development and implementation of ACA programs. Each Division sends an appointed representative to serve as the Division Instructional Facilitator (DIF) on the SEIC.

The current SEIC Policy Manual can be downloaded at: www.americancanoe.org

Division Instructional Facilitator (DIF)

The ACA membership is organized by regional divisions. There are 16 Divisions including the following:

Atlantic	Delaware Valley	Dixie	Hawaii
Middle States	Midwest	New England	Northern NY
Northwest	Ohio-Penn	Pacific	Red River
Rocky Mountain			
Canada (Northern)	Europe	South America	

Each Division functions in accordance with the bylaws of the Board of Directors of the American Canoe Association. Divisions are responsible for the delivery of safety and instructional programs, events and conservation. Divisions are represented on the Board of Directors.

The Division Instructional Facilitator is responsible for supporting instructional programs within the Division by actively working with instructors and trainers to provide skills courses, instructor certification courses and instructor updates as needed. The Division also provides networking between ACA clubs and affiliate organizations within the region.

Creating Partnerships to Improve Safety

More than 8,000 boaters have lost their lives in the past 10 years.

Approximately 880 of these deaths involved a canoe, kayak, or raft. Nearly 80 percent of all these boating fatalities occurred on boats where the operator had no formal boating instruction. That equates to 704 paddlers who died with no known paddling or safety education.

Education and enforcement/regulation are the two basic approaches to reducing fatalities, injuries, and property damage related to boating. The ACA has long stated that “education, not regulation” is the key. Education is fundamental and lays the foundation for safe boating, and paddling, behavior.

Recreational boating education in the United States is offered through a long-standing partnership

between the federal government, state and local government agencies, and an extensive collection of non-profits organizations such as the ACA. ACA has entered into formal partnership agreements with several national boating safety organizations. These groups provide training, education programs and expertise to the general public. View these groups as partners in your paddlesport safety efforts. They provide free, public domain information on boating safety.

ACA's Boating Safety Partners

National Association of State Boating Law Administrators
www.nasbla.org

This website lists boating regulations by state and provides information on education requirements. Contact the state boating agency for free materials and access information.

National Safe Boating Council
www.safeboatingcouncil.org

NSBC distributes free and low cost boating safety materials for National Safe Boating Week (3rd week of May) and provides annual boating and water safety training.

United States Coast Guard – Office of Boating Safety
www.uscgboating.org

Website includes information on boating accidents and statistics. Through the “Boat Responsibly” initiative, this website provides access to public domain boating photo library including hundreds of canoe and kayak images for free unrestricted use.

US Coast Guard Auxiliary
www.cgaux.org

These volunteers offer boat inspections, rescue services, and event support for public programs.

United States Power Squadrons
www.usps.org

Primarily a sail and powerboat education organization, this organization offers excellent courses in navigation, chart work, weather, and general boating safety.

Waterway Watch Program

Visit www.americaswaterwaywatch.us for program information.

Education and enforcement/regulation are the two basic approaches to reducing fatalities, injuries, and property damage related to boating. The ACA has long stated that “education, not regulation” is the key.



Some states offer their own courses through a designated boating education agency. Others accept courses offered by various organizations or cooperate with these organizations to deliver state-specific versions of a basic boating course, and some use a combination of approaches. Partnering with other organizations provides more opportunities to get important safe paddling messages to a wider range of individuals. The paddling industry, retailers, and outfitters and their trade associations are important allies in paddlesport safety education.





Unit 2—Paddlesport Education Standards

Paddling, whether in a canoe, a kayak, a raft, on a SUP, or in some other human-powered craft, is one of the most popular sports in the United States.

As much as 25 percent of the U.S. adult population participates in paddlesports each year. Accident statistics demonstrate that paddlesports are some of the safest sports in the U.S. However, preventable paddling-related accidents occur each year. The ACA believes the best way to improve paddling safety is through voluntary educational programs.

To help support paddling education, the ACA has developed a set of minimum standards for educational programs aimed at recreational boaters. These standards may not be appropriate for some groups (e.g., liveries and other rental or commercial programs). The standards address the bare minimum amount of information a paddler might need in order to begin paddling in a calm and protected area. Courses meeting these standards should be tailored to the needs of individual students and could easily be delivered in a classroom environment.

The ACA believes that hands-on, on-water instruction is a critical and essential part of safe paddling.

Courses that meet only these minimum education classroom standards are not a substitute for on-water education from an ACA certified paddling instructor.

Starting Out—Basic Boating Equipment

The Boat

- Match the craft to the paddler and the desired activity
- Follow manufacturer’s guidelines for boat use and care
- Don’t overload the boat
- Take care of the boat – keep it clean, check for hull and hardware integrity, and make sure any damaged parts are repaired before heading out

The lifejacket (PFD or personal flotation device)

- Properly rated (according to weight) USCG approved lifejackets are required for every person in the boat, and should be worn by everyone whenever they paddle
- Lifejackets need to be fitted and adjusted appropriately
- Match the lifejacket to the paddler and the desired activity
- Capsizes and falls overboard are common among pad-

dlers – wearing a lifejacket dramatically reduces the risk of injury or death during such an event

The Paddle

- Match the paddle to the paddler and the desired activity
- Follow manufacturer’s guidelines for paddle care and use

Other equipment

- Wear clothing designed for weather and water conditions
- Bring adequate food, water, and extra clothing
- Use clothing and equipment (e.g., hats, sunblock, extra clothes) to reduce the risks of environmental problems such as hypothermia and sunburn
- Match extra gear (e.g., helmets, EPIRBs, radios, float bags, spare paddles, navigation tools) to the paddler, the group, the environment and the desired activity
- Carry appropriate rescue gear and learn how to use it
- Navigation lights, distress signals and sounds signals may be required. Check with your local state boating officials to find out what you need to carry with you.

The Law and How It Affects Paddlers

Registration and education

Boat registration and education laws vary from state to state. Be sure you know the registration requirements that apply to the area you’re paddling

Local rules

- Be sure to learn any rules or laws that apply to access and use of a waterway.
- Obey all applicable local, state and Federal regulations
- Boats with motors or sails have requirements that can be very different from hand powered craft – be sure you know what your boat requires

Operator responsibilities

- Boaters are responsible for their actions. Be polite and respectful of others on and around the water.
- Avoid large vessels and navigable channels, where large boats may have restricted mobility
- Stay well away from military and law enforcement vessels unless they direct you to approach
- Follow all marine and aquatic environmental laws – don’t ask others to paddle in your trash

Planning Your Trip

Anticipated destination

- Match the paddler’s skill with the planned destination - it’s important for new paddlers to be conservative and choose paddling venues with minimal hazards

- Check weather and water conditions
- Learn about local hazards
- Learn about access points
- Have a back up plan
- Develop and file an appropriate float plan for your



trip, describing access, length of trip, when you would be overdue, and what to do if you are overdue.

Equipment

- Bring all appropriate equipment for your type of boat and the area you plan to paddle
- Ensure your equipment is in good working order before you head out
- Bring appropriate charts, maps and directions

Group

- Paddling with a group is safer
- Ensure each group member has appropriate skills and equipment for the trip

Getting to the Water

Transporting and securing your boat

- Drivers are responsible for the load on, or towed by, their vehicles
- Use appropriate knots, ropes and straps to secure your boat
- Use appropriate racks or trailers for your boat
- Consider using locks to secure your boat

Paddlesport
education and skills
training is available
for several disciplines:
stand up
paddleboarding
canoe touring
river canoeing
river kayaking
surf kayaking
coastal kayaking
safety & rescue
rafting
adaptive paddling

At the Water's Edge

Equipment

- Make sure everyone has appropriate equipment, including a lifejacket, appropriate thermal protection, and appropriate safety gear
- Confirm that everyone's boat and paddle is in good working order before setting out

Navigation

- Make sure everyone knows the planned route
- Schedule some type of shuttle
- Make sure everyone understands navigational markers in the area they'll paddle (e.g., channel markers, dam warnings)
- Review any potential "no-boating" areas, such as security areas around military vessels, with entire group
- Avoid navigable channels and stay as close as feasible to shore

On the Water

Boarding, exiting and moving about the boat

- When boarding or exiting a boat, keep weight low, and move slowly to reduce the risk of capsizing
- Avoid switching positions once away from shore, and use good principles (such as moving one person at a time, moving slowly, and maintaining a low center of gravity) if you do move

Paddling

- Paddling in groups of three or more is generally safer
- Do not use drugs or alcohol while on the water
- Boat politely – look out for yourself and everyone else on the water
- Boat conservatively – stay within your skill level
- Hands-on instruction makes paddling safer and more fun



ACA Education and Instruction Courses

The ACA offers skills courses for paddlers of all skill levels and for those with a variety of recreational boating interests (such as pleasure, exercise, conservation, fishing, and hunting).

See Appendix A for descriptions of each individual program.

SmartStart for Paddlers

A safety education course for first-time paddlers delivered as a flexible 20- to 60-minute program. It is presented in flipchart or PowerPoint® presentation format.

Quickstart

This is a three-hour course that includes safety information and on-water skills. It is taught on small sheltered venues.

Introduction Courses

These six-hour courses provide time for safety education along with an extended opportunity to practice skills on protected quiet water.

Essentials Courses

These one-day courses are specific to each discipline and present safety information and paddling skills to beginners so that they may paddle safely and competently on flatwater and/or easy moving water conditions.

Basic through Advanced Courses

These one-day and multi-day courses are designed to help the enthusiast master the fine points of specific disciplines. They include the advanced skills needed to paddle safely and “play” at ad-

vanced levels and in water conditions which require additional safety training and boat maneuvering skills.

Note: *As an ACA Instructor, you are certified to teach a body of knowledge determined by the level of the certification. You are thereby permitted to utilize the established course outlines provided on the ACA website (www.americanca-noe.org). You also are permitted to conduct courses of your own design limited by the curriculum / content included in your certification and the need to maintain safe, logical teaching and on-water protocol.*

Instructor Certifications

Why Become an ACA Instructor

Although people pursue certification for many different reasons, the results and rewards of a certification workshop are remarkably similar. There is the experience gained and knowledge shared by fellow candidates throughout the class. The certification process teaches a specific and proven standard of practice. The Instructor Trainers will demonstrate and teach a central model which instructors can adapt for their own teaching. Finally, registered courses are eligible to be covered by ACA liability insurance.

The Value of Certification

Certification provides a consistent platform from which instructors work. The certification threshold is the minimum standard of performance expected from instructors. This certification is nationally, even internationally, recognized. ACA certification is transportable, giving instructors the ability to carry it from place to place, regardless of where the instructor was originally certified.

Certification confers credibility on the instructor. It shows that the instructor has met the most widely recognized standard in the industry. Because the certification must be regularly updated, it assures prospective students that the instructor remains current in the field, and continues to meet the standards.

The courses are more than just a list of topics. The courses represent sets of skills, safety procedures and other materials deemed appropriate for the particular environments of the disciplines. The fact that these programs are established and developed by a national panel of experts is significant. This program of training is revisited on a regular basis to ensure its relevance.

Instructor Trainers teach certification courses to instructor candidates. These Trainers have even more stringent maintenance requirements and are highly motivated by their love of the sport.

ACA Instructor Trainers are masterful teachers, exemplary paddlers, and are an important link in the valuable process of ACA certification.

Levels of ACA Instructor Certifications:

- Instructors (teach the general public)
- Instructor Trainers - ITs (teach general public and certify new instructors)
- Instructor Trainer Educators - ITEs (teach general public, certifies new instructors, mentors new Instructor Trainer candidates)

Certification confers credibility on the instructor. It shows that the instructor has met the most widely recognized standard in the industry.

ACA Instructor Competencies

Eligibility Requirements

- Be 18 years or older
- Be a current ACA member in good standing
- Be able to independently complete all skills, activities and rescues listed in the appropriate ACA
- Certification Course Outline and Instructor Criteria documents
- Be able to effectively communicate, including effective verbal communication
- Be able to manage all personal care and mobility independently (see Essential Eligibility Requirements on-line: www.americancanoe.org/eec)

Instructor Competency

Students need a competent instructor who is capable of providing a good learning experience without a high degree of risk. Instructor candidates must be able to demonstrate their proficiency in risk management, general technical knowledge, paddling, and teaching.

Administrative requirements such as minimum age, dues, and maintenance of certification as covered in the policy manual must also be met.

Additional necessary competencies include:

- In-depth knowledge of discipline
- Active maintenance of skills in clinics and updates
- Ability to demonstrate and explain the subject matter
- Ability to make appropriate evaluations concerning the students, the course, the conditions, etc.

Safety Awareness and Risk Management

Safety awareness includes the ability to conduct the class with safety foremost in mind. It also includes the ability to present safety information in an effective manner with guidance to the student on how to recognize and prevent problems. This is an absolute neces-

sity for instructors: Instructor certification will not be granted if this ability is not demonstrated effectively.

The instructor must be able to demonstrate a concern for the well being of others and show an ability to assertively manage the group when necessary.

Risk management is a critical and complex skill. In order to prevent problems, an instructor must understand and anticipate hazards, be able to recognize them, and know how to avoid them. Because paddlesport has inherent risk, avoiding hazards is not always possible. The instructor must have strong rescue skills and be able to provide care for students should a mishap occur. ACA Instructors, ITs, and ITEs are required to maintain appropriate First Aid and CPR training from a nationally recognized First Aid and CPR provider throughout the term of their ACA Certification.

Technical Knowledge

Technical knowledge includes a general knowledge of paddlesport, safety, equipment, conditioning, paddling theory, water reading, venue-specific paddling strategies and rescue.

Paddling Skills

An instructor must be able to demonstrate and model safe and efficient technique and to handle his or her own boat competently.

Instructors perform demonstrated strokes and maneuvers calmly, with grace and excellent control.

Teaching Skills

In order to address the various learning styles students will exhibit, an ACA instructor must be able to employ a variety of teaching methods in the classroom and on the water. An effective presentation is interesting, is organized in a logical progression, and provides a level of detail appropriate to the level of the student being taught. A successful teacher conveys enthusiasm for the sport and an ability to connect with students.

Evaluation

As an instructor, you must be able to evaluate your students accurately, fairly, and appropriately. This evaluation process is at work throughout the course and includes your ability to make good choices about conditions, student progress, and group dynamics. Evaluation is also central to the Instructor Certification Examination. As an instructor candidate, you will be evaluated by your peers and trainers in the Instructor Development Workshop.

All certified instructors represent the American Canoe Association. Therefore an instructor's knowledge, demeanor, ethics, and background can affect the credibility of the program and the organization. During the development process, your trainer will provide you with a subjective evaluation of your ability to teach effectively.

Points in the evaluation may include:

- Did you understand the material well enough to teach it?
- Did you deviate from the lesson plan?
- Were you able to handle questions and communicate effectively?
- Did you stay on time?
- Did you display characteristics that would detract from the class, the program, the individuals involved, or the ACA?

You will be asked to fill out course and trainer evaluations at the end of the course. You are also encouraged to ask questions and share comments with your trainer, as appropriate, throughout your training.

Interpersonal Skills

An instructor must demonstrate the following abilities:

- Coordinate course activities in a controlled manner
- Establish a positive learning environment and be open to a variety of viewpoints
- Communicate clearly and effectively, and be able to listen well and be inclusive of others
- Provide feedback in an accurate and encouraging manner
- Exude and inspire confidence by setting an enthusiastic teaching example
- Observe the "respect people at all times" rule
- Show an open mind that avoids dogmatism and encourages innovation
- Prepare in advance and plan alternatives
- Exercise judgment in responding to unforeseen situations
- Present verbal communications without distractions
- Provide adequately trained assistants

Specific requirements for individual disciplines and levels of certification vary. They are available in the discipline-specific instructor manuals and/or listed by discipline at americancanoe.org.

Developing an Effective Paddlesport Program

This manual is primarily directed at helping you, the individual instructor, plan and implement safe, effective courses. But the courses you teach form only one part of your students' ongoing learning process, and they may also be components in a larger paddlesports program.

The following guidelines will help those directing and participating in a paddlesports program such as a school, a club, or a camp. Remember that being a good instructor requires thinking about the big picture. You should look beyond the limits of your specific course and consider how it will serve your program, the students' needs, and the development of the sport as a whole.

You may have a variety of goals and objectives for your instruction program. One of your goals may be to introduce youth to the fun of paddling; another may be to offer training to lakefront staff for safety reasons. These courses will be quite different, but it is important to have the content of each well defined and to meet the standards as outlined in the ACA course curricula.

Paddling instruction should be offered frequently and on a predictable schedule. Programs must be available and easily accessed at the time the paddler is interested. As an instructor and/or program developer, you should think realistically both about your own ability to offer courses and about how your students will be able to develop their skills outside your courses.

Depending on the goals and objectives of your program, consider offering various types of courses and instruction in different formats, including classroom and field-based SmartStart for Paddlers, QuickStart, and multi-lesson courses.

Think about the variety of potential students. The majority of paddling courses are directed at adults, but since paddling can be an ideal family activity, you might consider also offering instruction for different age and skill levels. Make sure that all your programs match the developmental stages of the learners.

Elements of an Effective Paddlesport Program

Planning

Effective Programs:

- Establish goals and objectives for training.
- Involve partners in educating/reaching a broader audience.
- Provide several layers of training

Selection

Effective Programs:

- Recruit instructors with experience and knowledge in appropriate subject areas.
- Screen instructors.
- Inform potential teachers, instructors and volunteers of what will be expected of them prior to training.

Professional Development Workshops/Sessions

Effective Programs:

- Train instructors in education theory and models of good instructional practices.
- Model effective teaching methods during training.
- Incorporate social support into training.
- Discuss appropriately safe and effective settings for instruction.

Consider Staffing Needs

Depending what kinds of programs you wish to offer, you will need to obtain or have instructors obtain different kinds and levels of ACA certification. Make sure to plan ahead and try to predict future certification needs.

In addition to certified instructors, it is recommended that programs are offered with the services of a “competent aide.” This aide does not need formal ACA certification. However, the selection and preparation of the “competent aide” is critical to ensure good teaching and accurate, consistent delivery of ACA information and materials. Orienting your competent aide in teaching strategies and in ACA curricula and materials will make your courses and your program more effective.

Think About Promotion

Marketing is a critical and sometimes-overlooked component of a successful program. How are people going to find out about your courses? Schedule and promote courses and programs well ahead of time.

The hardest paddlers to reach are those who do not realize that courses exist locally or who do not see the need for them. Developing an effective paddlesports program may require raising public awareness in your area about the availability and the benefits of instruction. Consider some of the following media avenues:

TV, radio, and print advertisements

Print or video programs at boating retailers

Information that accompanies the purchase of a boat (point of purchase)

One-on-one information from retailers to the purchaser of a boat (or from partner organizations that inform new members) and/or

Public relations efforts through newspaper articles, television appearances, etc.

Be Creative

Many people who don't think they need paddling education will come to an event that offers other benefits. Consider offering programs such as “Take your kids kayaking,” or “How to fish from your canoe,” or “Bird-watching by boat.” You can include paddle-sport safety information in these programs, and you can demonstrate for participants the value of taking a skills course.

Offer a Variety of Information

Making safety and paddlesports information available and visible is important even after skills training. Manufacturers or retailers often include paddling safety information with their products.

The ACA Store offers a number of books, videos, and DVDs which provide a variety of information individuals can view at their leisure. The Web is also a good resource. Make sure your students are familiar with these other options for learning more about paddlesport skills and safety.

Consider your resources

Think about working with local retailers and outfitters. This kind of mutually beneficial cooperation can help students develop an awareness of the bigger paddling picture, and it can also help your program. Retailers and outfitters, for example, may consider a discount for participants in your program, or you can participate with them in joint advertising and sponsorship of events. By

working with other local organizations, you can also help increase safety. For example, some paddling clubs require participants to wear PFDs at all events, and this regulation boosts both PFD use and sales.

Be aware of the regulatory future

Each year more states enact laws requiring education for boaters. Some of these laws pertain to particular segments of boaters, such as youth or personal watercraft operators. More than half of the states currently have some form of mandatory boating education for power boaters.

Nationally, a general consensus exists among boating safety educators and organizations that a



Program Development Review

How will you make people aware of:

- The need for paddling instruction?
- The time and place of local courses?

Make a list of benefits and incentives you can provide to get people to participate in paddlesport safety education.

What are the goals and objectives of each of your paddling courses?

Does your lesson plan contain the important information that must be included?

If you are offering a skills course, does it comply with ACA approved curriculum?

Outline three ways you will promote your program.

How will you design your course to match the developmental stages of the learner?

List three ways you will empower your students.



Unit 3—Environmental Stewardship

This section contains information you need to know to understand the ACA's Stewardship mission and the impact you have as an ACA representative. ACA instructors are urged to incorporate stewardship information and guidance into all courses and programs as appropriate.

Stewardship

Stewardship of the paddling environment is one of the three strategic tenets of the ACA. Without clean water, safe and well kept access, and low impact usage behavior, our lakes, rivers and coastal areas may become unavailable for recreational use by paddlers.

The ACA stewardship program focuses on maintaining and enhancing both the natural and regulatory environments for paddlers at the national level. In addition, the ACA helps paddlers at the community level exert influence over pertinent local issues.

The ACA instructor corps has a role to play in the ACA stewardship program. Environmental stewardship should be a key value shared by every paddler, and ACA instructors are in a position to communicate this concept to students and peers.

Research shows that environmental sensitivity is developed through significant, positive contact with the outdoors over a long period of time. In addition, the social context in which stewardship education takes place is as important as the methods by which stewardship concepts are taught. The social circle that exists in a paddling course provides good social reinforcement for the stewardship messages being presented.

This section presents background information in environmental stewardship for the paddling instructor. This information was developed by experts working on behalf of the Recreational Boating and Fishing Foundation. It has been adapted from the "Best Practices Workbook for Boating, Fishing, and Aquatic Resources Stewardship Education."

Environmental Stewardship

Environmental Stewardship is briefly defined as "informed, responsible action/behavior on behalf of the environment and future generations." A more detailed definition would be as follows:

“Stewardship is the moral obligation to care for the environment and the actions undertaken to provide that care. Stewardship implies the existence of an ethic of personal responsibility, an ethic of behavior based on reverence for the Earth and a sense of obligation to future generations.

To effectively care for the environment, individuals must use resources wisely and efficiently, in part by placing self-imposed limits on personal consumption and altering personal expectations, habits and values. Appropriate use of natural resources within the stewardship ethic involves taking actions that respect the integrity of natural systems.”

As expansion of human development puts more pressure on our water resources, it is critical that people practice, on an increasing basis, stewardship of those resources. Waterways stewardship education is a process to help individuals acquire and learn to apply stewardship skills and capacities needed to enable them to make informed choices and take environmentally responsible actions. The terms “ethics,” “morals,” and “character” are used interchangeably here to refer to the same concept—an internal system that determines socially and environmentally acceptable behavior. A stewardship ethic is at work when a person feels an obligation to consider not only his own personal well-being but also the well-being of his surroundings and human society as a whole. Based on research conducted by the Recreational Fishing and Boating Foundation in 2002, researchers have come to three important conclusions about environmental education:

Ecological awareness and knowledge are not enough to cause enduring behavior changes, but they can provide a basis for subsequent learning and participation.

Ownership (a personal connection with one or more natural areas, and knowledge of and/or investment in problems/ issues) is critical to responsible environmental behaviors.

Instruction and experiences intended to foster ownership and empowerment (a sense of being able to make changes and resolve important problems, and use critical issues investigation skills to do so) often permit individuals and groups to change their behavior.

Effective Stewardship Education

Effective programs clearly state the organization’s mission, program goals, and instructional objectives. Further, these are aligned with one another to clearly reflect the nature and purpose of stewardship education.

Characteristics of a good steward include:

- Understands that humankind is a part of, and not apart from, or superior to, the natural world and that stewardship entails not only preservation of the natural world, but informed and ethical choices regarding the size and scope of human activity in the natural world.
- Has knowledge of ecological and water resource management concepts.
- Has knowledge of pertinent problems and issues.
- Feels a personal connection to natural resources.
- Can identify, analyze, investigate, and evaluate problems and solutions.
- Understands beliefs and values (beliefs are what individuals hold to be true, and values are what they hold to be important regarding problems/issues and alternative solutions/action strategies).
- Seeks to understand all aspects of an issue (e.g., environmental, scientific, social, political, historical, and economic).

- Participates actively through outdoor activities such as paddling.
- Has acquired a knowledge of and demonstrated skill in using action strategies essential to sound stewardship.
- Reflects a sense of obligation to future generations and the earth.
- Accepts responsibility because a steward knows he/she impacts the environment through every action.
- Understands the difference between intention and consequence (does the action truly have the desired effect?).
- Has the belief and/or feeling that working alone or with others, an individual can influence desired outcomes through his actions and takes personal responsibility.
- Acts in an informed and responsible manner.
- Is willing and able to pass stewardship concepts to peers and others.

The characteristics of a good steward can be categorized into three sets of variables: “entry-level,” “ownership,” and “empowerment.”

These variables contribute to environmentally responsible behavior.

Entry level

Entry-level variables include a person’s environmental sensitivity and knowledge about ecology. When individuals have little knowledge of or sensitivity toward the environment, programs must provide information and teach basic ecological concepts.

Ownership level

Ownership variables are those that permit individuals and groups to personalize environmental problems and issues, so they take ownership of them. These variables include a personal connection with one or more natural areas, an in-depth understanding of the issues, and personal investment in, and identification with, an issue.

Research indicates that when people directly experience the destruction of natural areas with which they are intimately familiar, they develop a sense of ownership for those areas. Perhaps more importantly, when individuals and groups are able to expand and apply knowledge/skills by investing their own time, energy, and resources, they often develop a sense of ownership for that problem/issue.

Empowerment level

Empowerment variables give people a sense that they can make changes and help resolve important environmental issues. Empowerment variables include perceived skill in using environmental action

ACA stewardship programs:

—Activate a network of support and leadership for grassroots advocacy

—Work toward greater access to waterways for paddlers

—Support creation and promotion of watertrails

—Provide resources for waterway cleanup efforts

—Advocate on public policy issues that affect paddlers

strategies and skills, knowledge of action strategies, an internal locus of control, the intention to act, and assumption of personal responsibility. To promote/foster empowerment, programs should:

Help participants develop guidelines and foster internal motivations for responsible behavior toward other people and the natural world while paddling.

Help participants develop guidelines and foster internal motivations that will serve as a foundation for responsible behavior toward the natural world beyond the specific context of paddling.

Stewardship is a long-term process. It calls for a series of complementary education efforts and may work best when learning takes place in a combination of formal and non-formal learning environments.



Unit 4—Teaching & Learning Styles



Learning about Learning

Learning by doing is the cornerstone of all paddling instruction. This section covers key concepts of how students learn. Understanding these concepts is vital to being successful as an instructor.

There are a few underlying ideas about paddling instruction that guide the American Canoe Association's instructional program. These instructional ideas support the organization's mission to serve the paddling public.

Learning is the process through which people acquire skills and knowledge. The acquisition of skills involves an improvement in physical and mental abilities, while the acquisition of knowledge refers to the gaining of new facts and ideas.

In examining instruction, the focus cannot be upon how instructors teach. Instead, the primary emphasis of this unit will be an exploration of how people learn. It will also examine the components of a successful learning environment for the individual.

Motor and Cognitive Skills

Paddling draws on two types of skills: motor skills and cognitive skills. Motor skills include the physical actions that result in measurable events; for example, a boat is turned as the result of a stern draw. An example of a cognitive skill would be learning when to use the stern draw. Most of the skills we need to paddle are a combination of motor and cognitive skills. The instructor's job is not simply to teach the mechanics of paddling but also the decision-making needed to move the boat effectively and safely.

Learning By Doing

Paddlesports instructors need to get their students involved in doing what they came to the course to do—paddle. People will usually remember something if they learn the skill

kinesthetically.

To paraphrase a proverb: I hear, I forget. I see, I remember. I do, I understand. The more senses involved in the learning process, the better the recall. Lectures and extended demonstrations with little or no interaction limit learning.

20-40-60-80

A good rule of thumb is this: We remember 20 percent of what we hear, 40 percent of what we watch, 60 percent of what we do, and 80 percent of what we discover for ourselves.

While these figures can be endlessly debated, the message an Instructor should take from this is to provide a safe environment, and simple, pointed direction, so that the majority of students will progress optimally.

Learning by doing provides students with an important sense of adventure, physical, and mental challenge. The instructor's task is to keep the perceived risk at an acceptable level while keeping the real risks at a minimum. This minimizes the opportunities for injury but keeps the element of excitement in the learning experience. As a result, students can focus on developing the skills without excessive fear. In many paddling venues, some experience with fear—especially in the controlled setting of a course—can be invaluable. Students may need help in distinguishing when they should ignore the “butterflies” in their stomach and when they should pay close attention and, for example, get off the water. Students need to develop a responsible attitude towards knowing their own limits in adventurous settings.

Factors that Affect Learning

Instructors should modify teaching styles, skill progressions, and the order and depth of topics to be addressed depending on the students and the learning environment.

What is taught should be consistent with ACA course curricula. How the material is presented and in what order depend on the instructor's point of view, experience, and personal style. The more experienced the instructor, the wider the variety of instructional methods and techniques from which he or she can choose.

A student's willingness and ability to learn will be affected by more than just his or her innate learning style. The instructor must also take into account a variety of other factors when creating a successful learning experience:

Physical Characteristics

The size, strength and fitness of participants vary a great deal and can alter a person's performance. Instructors may want to tailor the course to suit the abilities of the participants without sacrificing the integrity of the program. Be sure to work with people to help them adjust to their tasks. For example, some paddlers may have very poor hamstring flexibility so the instructor will need to help these paddlers get the most out of their personal range of motion and teach simple stretching exercises to promote comfort in the boat.

Age

Children learn kinesthetic skills more easily than many adults, and they are less concerned by how others may see them. Adults, on the other hand, are less likely to accept challenges that may leave them embarrassed or frustrated. The pace and style of learning will typically be quite different for these two groups.

Motivation

The instructor needs to remember that paddling appeals to different people for different reasons. Some of the primary motivators include skill development and fun. Learn about what motivates the students, and use this knowledge to help the learning process. For example, students who

are there mainly to have fun might benefit greatly from some games and play time. Some paddlers come because a friend or family member has encouraged their participation, and these students may be a little more reluctant to participate fully. Be sure to take steps to get them involved in the learning process.

Fear

Being on the water and learning an unfamiliar skill can make some people nervous or frightened, and frightened people do not learn effectively. Instructors need to recognize and to respect the student's fear. The Instructor should design a learning experience that allows students the kinds of small, incremental success that help build confidence. Encouragement without coercion can also help the nervous student feel more confident in his or her ability to take on certain challenges.

Environmental Concerns

When people sign up for classes, they have a mental image about how events will unfold, and that image probably does not include wind, rain or cold. Human nature may prevent full participation during challenging weather even though students are well dressed and equipped to stay warm in wet conditions. Instructors can put a positive spin on inclement weather and should remain flexible in order to help students achieve their goals despite environmental challenges. Safety for all participants must, of course, remain the primary concern.

Communication

Instructors must establish clear lines of communication between the students and themselves. A repertoire of simple interactive activities can promote healthy relationships and enhance the students' experience.

Keep the Fun in Learning

As stated earlier, fun is a primary motivator. Be sure to use some activities other than skill practice to get the students excited about learning to paddle. Games that have an application to skill development can help fuel student interest.

Barriers To Learning

The previous section covered the physical and environmental factors that affect learning. Let's take a look at some of the barriers that are directly related to motor- and cognitive-skill development.

Fear

The instructor must always remember that the students are probably more frightened than they appear. Situations that the experienced instructor sees as perfectly non-threatening may make students deeply anxious—and trying to hide that anxiety in order to seem competent and brave. This fear will have serious negative effects on how students learn. People trying to focus

Paddling appeals to different people for different reasons. Some of the primary motivators include skill development and fun. Learn about what motivates the students, and use this knowledge to help the learning process.

on surviving or not making fools of themselves cannot focus on acquiring a new skill.

Primacy / Recency

In learning skills, the first and last parts of the demonstration or presentation tend to be remembered better than the information presented in the middle. The Whole-Part-Whole teaching method is quite effective for this reason.

The Law of Use and Disuse (Old Habits Are Hard to Break)

Remember that a student's current knowledge is the foundation for further learning. Adult learners bring to the class a set of previously learned motor and cognitive skills. The more time spent doing something one way, the longer it takes to create a new motor matrix (map) of how to perform the same task a different way. Be supportive and patient as learners attempt to make changes to accommodate newly learned information.

Attitudes (Opinions)

Everyone has an attitude or opinion about almost everything. These preconceived views often influence how students respond to new information, especially when that new information differs from or challenges previously learned skills and ideas. Instructors should be aware that students may, for this reason, resist new concepts and techniques.

Ego

Performance related activities often produce situations where a learner's ego will be his or her own worst enemy. If perceptions are strongly held and firmly rooted, even small discrepancies from the learner's standpoint are perceived as serious differences. When performance or attitudes are challenged, an ego-defensive response can impede learning. Avoid this response by working individually with a person in this situation, since group pressure can make the situation worse.

Incomplete Information

Incomplete information causes the learner to impose his or her own organization on the situation, trying to improve, simplify or reorganize, and he or she will often draw incorrect conclusions. For example, if a skill is only partially demonstrated the learners will fill in the blanks with their own variation on the skill.

Learning Styles

Teaching requires that the instructor understand the different ways in which learners acquire new skills. Some people like to see a demonstration first while others like to hear some of the specifics then see a demonstration. Others prefer to try the actions and gain feedback through physical sensation.

When learning skills by doing, the student learns the most when as many senses as possible are involved. As a result, Instructors should create learning environments where students are challenged in a variety of ways. For example, talking about a skill, modeling it, and also allowing students to practice themselves will draw on a variety of senses and accommodate a variety of learning styles.

Instructors should also be alert to the needs of different kinds of student populations. For example, younger students are more likely to benefit from a fast-paced hands-on workshop, whereas an older group might enjoy a hands-on program at a slower pace with more information presented verbally and visually.

Students are typically dominant in one or two ways of learning with other styles supporting the dominant preference. Someone may be a watcher, thinker, doer, feeler in that order of preference.

Learning styles often change with age and experience. The following are generalized descriptions of the four basic types of learners:

‘Watchers’

These students need to develop a mental image of how the skill should look. This learning style tends to take time because the learner is observing as much as possible. Listening supports the

watcher’s mental imagery. The student then synthesizes the information and applies it.

‘Feelers’

These students operate more instinctively. Analogies are very useful for these kinesthetic learners, especially if one already-familiar sport can be related to paddling meaningfully. These students benefit more from actually experiencing the sensations of paddling than from descriptions.

‘Thinkers’

These learners need lots of detailed information describing how to do a skill, and they usually want to understand the fundamental principles behind paddling. They are more likely than the other kinds of learners to read books and magazines, watch videos, and browse web sites on the subject. They might be described as analytical in their approach, and they may inadvertently test the depth of the instructor’s knowledge.

‘Doers’

Give these learners a paddle and stand back. Lengthy explanations are lost to the doer. The doers will fidget, shuffle and squirm until it is time to do the activity. These intrepid individuals prefer to learn by doing first and to ask questions later, and they are the first to volunteer as “guinea pigs.” Instructors who schedule long presentations first and defer practice time until later will lose the attention of doers.



Children and Adults as Learners

There are significant differences between children and adults as learners. Understanding the differences will help you adapt your instruction style to each group.

Children

Accept the information being presented at face value.
Have little or no previous experience on which to draw.
Rely on others to decide what is important to be learned.
Expect fast paced, hands on environment.



Have little ability to serve as a knowledgeable resource to fellow students.

When a child learns a skill, the child is also “learning how to learn” the skill and may have few past examples to draw from. Make it fun. Actively involve the students in as many ways as possible. Limit the amount of lecture and focus on hands-on.

Adults

Will evaluate the information presented based on their own experiences and beliefs.
Decide for themselves what is important to be learned.
Expect what they are learning to be immediately useful.
Have much past experience upon which to draw; may have fixed points of view on a topic.
Have a significant ability to serve as a knowledgeable resource to the trainer and fellow students.

When working with adults, don't be too rigid in conducting the class. Establish a climate of collaboration. Your students will be rich resources for one another. Consider group discussions. Give individual challenges or attention when possible in recognition of individual experience levels. Help students assess where their abilities are now and where they might want to be. Make the instruction relevant to what they need to know based on why they are participating in paddlesport instruction. Be organized. Adults do not want the perception that you are wasting their time. Give adequate practice time. When correcting skills, be sensitive to the paddlers' self-esteem and self-confidence, giving corrective feedback in a positive manner.

Student Expectations

Before the course begins, establish the reasons your students are taking the class. Students are more motivated to learn when the course's content matches their goals. An experienced instructor adjusts teaching styles and content to each student's needs.

What your students “want”

Fun! Recreational indulgence is essential. This is probably the prime motivator for most participants. Make sure students have as much fun as safely possible, and use fun as a means to help teach key skills.

Safety

Risk is an integral part of paddling, but people do not want to be exposed to unnecessary hazards. Make sure students understand the elements of risk in the course by helping them understand the consequences of choosing to partake in risk-oriented activities. Also, explain the risk management procedures used in the class.

Prudent instructors recognize student desires to accept physical challenges but are careful to manage real risks with appropriate training and precautions.

Excitement

Learning how to paddle safely and effectively can be exciting. The instructor should foster this excitement, always remembering that over-stimulation can sometimes reduce learning. Students need to learn how to execute exciting skills as safely as possible.

Mental Comfort

Students will thrive in a positive, supportive environment, free of intimidation and harassment. In challenging or stressful class situations, watch for behaviors that indicate inner feelings. People react differently to stress factors such as fear and excitement.

Skill Acquisition

Students want to develop the appropriate level skills to the best of their ability. As the instructional experience progresses, student ideas of skill development may change.

Success

Success is an important ingredient for further participation. While successful accomplishment of some challenges may be just out of reach, class activities should be success-oriented. Even failed attempts can leave students with some sense of accomplishment if the Instructor keeps the tone upbeat and positive. Keep students focused on how to succeed, especially when challenged.

What your students “need”

Direction

Students need an instructor to direct activities in a manner that helps them to learn fundamental skills successfully.

Physical Comfort

Students need an environment that enhances their physical comfort. They also need to be dressed properly for the activity. Students that are cold, hot, hungry, thirsty, ill-equipped or scared will probably not be focused on learning. Provide adequate drinking water, food, shelter and restrooms. Bring along extra equipment and appropriate clothing to share with the students. Be sure the students are ready to learn. In other words, set the scene for accomplishment.

Instructor Competency

Students need a capable instructor to help provide a successful

Words that describe an effective instructor include:

- Enthusiastic
- Competent
- Organized
- Effective technique
- Leader
- Positive attitude
- Good judgment
- Fun-loving

learning experience without a high degree of risk, and students should not need to rely upon the instructor as a guarantor of their safety.

Characteristics Of An Effective Instructor

A lesson taught by a trained instructor can bring the pleasure of paddling to a student much faster than a trial-and-error learning experience.

Most instructors use a variety of teaching strategies, styles, and organizational skills. The following list serves as a guide to becoming an effective Instructor.

Enthusiastic

Instructors who teach for the love of paddling typically energize students. This esteemed quality shows up frequently on course evaluations.

Competent and Knowledgeable

Being highly skilled and knowledgeable in teaching and paddling are essential instructor traits. Thorough knowledge of paddlesport, and its trends and changes, is essential. The process is one of continuing education, where instructors should paddle with others, attend “update” clinics and remain in contact with other knowledgeable individuals.

Program Organization

An instructor is responsible for efficient organization of a lesson plan and the overall execution of the program, including equipment logistics and travel arrangements. The lesson plan involves a meaningful progression of activities that avoids a high degree of risk.

Ability to Model Effective Technique

The ability to demonstrate effective paddling skills is a necessity.

Instructors should be able to demonstrate

skills at a level higher than students. An ability to model technique in slow motion is important so that a skill can be broken down into component parts.

Success-Oriented

Students appreciate instructors who build on success. Challenges are good and important for students, but the challenges should be reasonable and achievable for their skill level.

Fun-loving

The instructor should incorporate related activities or games that enhance skills or learning experiences. Students want to have fun. Selected games can be used to facilitate development of vital physical and interpersonal skills. Games can also be effective rewards for hard work.

Leadership

Instructors should keep their students on track and focused. Stick to the lesson plan and stay on schedule.

Positive Attitude

Maintaining a positive atmosphere keeps students motivated.

Correcting student mistakes while emphasizing their positive efforts will create an upbeat learning environment. Beware of false and trivial praise since they can damage instructor credibility.

Criticism should be constructive and offered with sensitivity and respect.

Anticipate Needs

Students may or may not understand all the physical, mental, and environmental implications of paddling. The instructor should anticipate this lack of understanding and plan to provide for these needs.

Good Judgment

Every paddling program should be con-



ceived thoughtfully and executed responsibly by the instructor. Instructors must be able to take charge of difficult situations which may arise on water while realizing that many events are not in their control.

Instructional Strategies

Part of being an effective instructor is having the ability to think through the key points of a lesson and the various ways to present them. The success of your lesson has as much to do with delivery as with content. The following general concepts are the foundation for the delivery of a course.

First Things First

Set the stage for the course activities by providing introductions and an overview of the program. Spend time sharing personal expectations about the course and establishing personal goals.

When taking a class, people generally prefer a certain amount of predictability as to what will happen next. A thumbnail sketch introduction should provide just enough detail to emphasize the important points about the course and its stated objectives.

How the course starts tells the students a lot about the instructor. First impressions are lasting. Here are some suggestions for exercising good class control. Have all materials and visual aids ready and at hand including any notes, and organizational materials that facilitate the plan of action. Running around to gather teaching aids sends the wrong signal to the students. Being prepared helps control nervousness, both the student's and the instructor's! Choose words that best relate to the class participants. Keep your choice of words simple, clear and concise. When speaking, make eye contact; this engages students and ensures their attention.

Smile—it reduces class nervousness.

Plan to make the classes active and interactive. Warm-up activities should have a purpose such as getting to know people and personalities, developing trust and communication skills, preparing the body for activity and having fun.

Keep It Simple and Safe (KISS)

Providing students with lots of information may impress, but too much detail will certainly overwhelm and confuse them. Provide students with only the details necessary to learn the skill being taught. Some learners want more information about the topics, but avoid getting bogged down by giving too much information.

Learn to focus on what is important. Use questions to maintain group participation and interest by bridging to your next topic.

You may also be able to defer a student's question to a later time without cutting off the discussion. Be sure to listen to and understand students' questions. Remember that if one student has questions, others may, too. While lots of questions may indicate interest, students may also be seeking clarification and need further explanation. Try to answer questions succinctly without too much digression.

Progression

Presentations should present progressively more challenging skills.

Start with simpler skills such as safely getting in and out of boats, then proceed to more difficult skills.

By starting with easier skills, a student builds self-confidence and a positive attitude that improves learning.

Be aware of the learning progression. Consider student abilities, interpersonal behavior, weather, equipment, class objectives and the fun factor. Skills should become progressively more challenging as students understand the fundamentals.

Divide complex skills into more easily executed tasks. This does not mean that the skills have to be slowly and tediously developed.

Progressive learning of serial skills will build confidence and understanding of how to link skills effectively. Presenting students with challenges that are clearly beyond their reach will risk personal frustration and potentially increase the risk of injury.

Difficult skills should be presented as challenging but achievable.

A challenge will help keep students en-

gaged in the activity, but note that repeated failure is an indicator for the Instructor to scale back on expectations. Working individually to encourage fast learners can work well, but it can potentially discourage others who feel left out or slighted. Try to balance group needs with individual student needs, and use one-on-one sessions in a fair and equitable way. The learning progression should be based on the needs of the less-skilled paddlers in your class.

Troubleshooting

Instructors sometimes get carried away with enthusiasm and forget how difficult some skills are. If the instruction is not achieving the desired results, the Instructor has to ask "why is this not working?"

Sit back, so to speak, and take stock of the situation. Is it the pace of the class? How do the students feel? Observe and listen to what your students are communicating to you through their actions and words. Learn to read their actions over the length of the course and be flexible to try to meet their needs. Are they tired, cold, hot, hungry, bored, distracted or frustrated? When in doubt, ask questions that will lead to better understanding of the situation.

Instructional Methods

Instructional experience combined with training and education is key to developing a personal approach to instruction. This next section looks at some of the many styles that instructors can use.

Basic Instructional Methods

A basic teaching method involves three parts: demonstration, explanation, and practice.

Demonstration is essential to teaching physical skills so that participants can watch and analyze efficient technique. An instructor's demonstration may occur at a

normal pace or in slow motion to illustrate various parts of a specific technique. Avoid lengthy demonstrations that bore students. Some paddlers value demonstrations more after they have practiced the technique, because their increased understanding through experience will enable them to analyze the technique more closely. A demonstration of ineffective technique is often effective in illustrating common problems. Demonstrations from different angles (front view or side view) offer greater understanding.

Demonstration and explanation often occur simultaneously so that a narrative can help to underscore components of technique.

Explanation of the demonstration is necessary to encourage greater understanding. The intent is to draw attention to the more important components of the technique without becoming too technical. Keep the explanations simple.

Team teaching, where one instructor performs a skill and the other instructor provides commentary, is effective in providing good demonstrations and explanations.

Practice is an integral part of skill-building because it encourages coordinated movement. Paddle handling or “sensitivity” is developed, and proper body positions are reinforced. Practice takes time, and people often need a warm-up period and frequent reviews to perform new skills smoothly.

Practice allows participants to refine their skills, especially when an instructor provides immediate feedback to reinforce the practice. Once the paddler performs the skill without thinking about it, then the purpose of the practice has been realized.

Developing efficient technique is exhilarating, and students need enough practice to experience that feeling.

The ACA instructional program is a progression of success-oriented yet challenging skills, each built upon another.

When necessary, instructors should break the complex skills down into manageable parts. This type of process can manage the class efficiently and move it step-by-step towards its objectives.

Lecture or Command (Teacher-Centered)

The instructor is the center of the students’ attention with this style.

Lecture is a very efficient way of providing the students with lots of information, but student interaction is at a minimum.

While a certain amount of command-style teaching is unavoidable, more effective instructors minimize their use of lecture.

Practice is an integral part of skill-building because it encourages coordinated movement. Paddle handling or “sensitivity” is developed, and proper body positions are reinforced.

Modeling

This style of teaching is not always very direct or conspicuous, but it is vital to the skills-development part of the program. Students watch the instructor to see what is expected of them. When modeling a skill be sure to execute it precisely. Instructors may even want to exaggerate the movements at times.

Sometimes instructors will demonstrate a skill then ask students to imitate the skill. This is a direct and obvious modeling effort. Other times throughout a course, an instructor is “just paddling”, but the students are always taking note of what the instructor is doing. This is the less conspicuous use of modeling. Students learn not only by what the instructor says, but also by the instructor’s actions.

Task

In this approach, instructors give students specific tasks or activities to perform. Typically the instructor or assistant will model the activity and explain it, then have the students perform the task.

Interactive (Reciprocal)

This technique involves interaction between two or more students.

One student will perform an activity while the other watches and provides an analysis of the first student’s performance. This strategy allows students to be closely involved in their own learning, to cement their own skills by helping to improve the skills of others, and to interact productively with other group members.

Interactive technique is particularly useful for the instructor in larger classes or when individualized attention may leave the rest of the class unfocused or bored: for example, the most adept students could be paired off to work with each other, leaving the Instructor free to focus on those who

need one-on-one attention. The

Instructor oversees the activity and keeps all the students on track.

In some paddling venues, this approach works quite well. In others, however, it might be less useful. For example, if the students do not yet have the skills or knowledge to provide informed feedback to each other, the Interactive approach may be less productive.

Role Playing/ Scenarios

Skits are a creative tool that taps into one or more individuals’ creative abilities. These can be particularly helpful in addressing topics such as planning, group leadership issues, environmental concerns and drier subject matter.

Guided Discovery

As time-consuming as Guided Discovery is, the instructor learns a great deal about what the student knows or can demonstrate.

This method of instruction can probe the mind and physical know-how of a student through a succession of questions or challenges. Younger paddlers can respond well to this technique.

The skilled instructor will take a topic or skill, ask the student or students a question, and patiently wait for an answer. If necessary, the question is restated. Once an answer is proposed, the instructor seeks further clarification, with another question.

The questions should lead the student to a desired solution. For this technique to work its magic, the instructor must not answer the question. The difficulty of the questions should match the capacity of learners.

Physical skills can also be shaped with questions and answers.

That is, the student answers the question regarding technique with a verbal and a physical response. While Guided Discovery is quite effective, managing instructional time is a challenge.

A set of questions can demonstrate student comprehension of the material. The instructor wants the student to develop and demonstrate “ownership” of the skill by tapping the student’s ability to express it. A potential hazard of this style is that the instructor can come across as an interrogator instead of mentor. Keep the questions light, focused and appropriate to the group.

Remember that students want to learn and have fun.

Problem-Solving (Student-Centered)

The problem-solving instructional strategy spectrum is arguably the most challenging for the student. Instruction is mainly the facilitation of learning. The instructor provides a problem for students to solve. Students are encouraged to use a variety of methods to find their own solutions to the challenge(s). The instructor oversees the class actions. The learners must be motivated and time must not be of the essence. Teenagers are well suited for this teaching strategy.

Teaching Moment

Use non-planned or otherwise unstructured situations that occur as the basis for learning. For instance, an unplanned capsized boat may allow a group lesson on how to perform a boat-over-boat rescue.

Teaching a Skill

Establish Group’s Attention

On land—Form a circle or semi-circle with students’ backs to the sun.

On water—In quiet water, securely position boats in a line next to each other against shore, stern first, paddlers facing away from the sun.

Position yourself within the group to provide direct supervision, give immediate feedback and safety in the event of a mishap.

Be sure to designate boundaries for your outdoor classroom and be aware of restless or inattentive paddlers.

M + D3 = Motivation + Demonstrate + Describe + Do It!

Motivate—People direct attention to where their interest, experience and need suggest. Put your students at ease. Tell stories to prove the importance of learning a new skill. Name the skill you are going to present and define any new terms. State the purpose of the skill and explain when, how, why and where it can be used.

Demonstrate—One instructor describes and demonstrates. In team teaching, one instructor describes while the other demonstrates.

Describe—Teach only one skill at a time. Face your students while presenting the information. Make eye contact with every member of your class. Explain while showing the skill—show and tell. Make sure everyone understands. Ask for questions.

Generally, periods of practice separated by periods of rest result in more efficient learning than do longer periods of practice with few or no interruptions. Apply and adapt skills to numerous situations—drills, relays, and tests. Use actual scenarios. Have students teach skills to others. Be realistic about what students can achieve.

Points to remember include:

- One skill at a time.
- Stress only one or two key points.
- Keep details to a minimum.
- Make sure your demonstration is visible to the students.
- Demonstrate the skill more than one time. Use different points of view or emphasize different aspects of the skill each time.
- Modeling-quality presentations should be done in slow motion.
- If demonstrating a complex skill, show the entire skill first.
- Show the individual components of the skill. Link the component parts when explaining the sequence.
- **Do it!**—Give the students a chance to practice in the form of a drill, game or other activity. Be prepared to use a variety of teaching skills to assist learner performance.

Feedback

Provide specific, corrective feedback, without being critical. Be objective. Never be judgmental. Offer specific alternatives to identified errors. Prompt correction of errors leads to further success.





Unit 5—Organizing and Conducting a Class

Instructor Responsibilities

Your responsibilities as an ACA Instructor are to:

- Represent the ACA in a positive manner.
- Be familiar with course materials and present them effectively.
- Plan, coordinate and manage the course in coordination with the national office as appropriate.
- Create a user-friendly, non-threatening environment that provides opportunity for student success.
- Present material that is free of sexual or cultural stereotypes and sensitive to physical challenges and cultural diversity.
- Adapt your teaching style to the abilities and culture of participants so they can meet course objectives.
- Provide for the health and safety of students, making sure that all teaching and practice areas are free of hazards and that equipment is suitable for use.
- Organize the class environment to minimize distractions and provide for individual and group success.
- Be prepared to answer questions or know where to find the answers.
- Cover all material in the course outline.
- Provide copies of appropriate ACA texts and brochures.

- Be able to demonstrate the skills.
- Use corrective feedback to evaluate participants' progress and correct problems.
- Supervise and give guidance to any competent aides assisting with the course.
- Issue student participation cards or other course documentation.
- Submit course records to the ACA national office according to the SEIC Policy Manual (Appendix C).

ACA Procedural Requirements

Certified Instructor— Maintenance Responsibilities

Once notified of level of certification, Instructors are eligible to teach and insure courses taught with ACA course outlines. The course outlines available on the ACA website are examples of courses representing the body of knowledge instructors are certified to teach. As an ACA Instructor, you can develop and teach any course that follows a logical, safe teaching progression that falls within the content of your instructor certification.

The Instructor Certification period is until December 31st of the fourth year following certification. To hold active Instructor Certification, it is required that individuals maintain annual ACA membership and SEIC registration.

Without current ACA membership and SEIC registration, Instructor Certification is not valid.

The ACA office must be notified of all changes to personal information including address, telephone, e-mail and name changes.

For certification maintenance information, see Appendix C.

Class Limits, Guidelines and Venues

ACA courses have eligibility requirements and minimum instructor-to-student participant ratios. Please check specific course outlines for a listing of requirements. Before conducting a course, always check for updated documentation posted on the ACA website. See the SEIC Policy Manual (Appendix C) for more information.

Registering Courses

Registering and reporting of courses must be done according to current guidelines.

Registering a course may be completed by filing out the appropriate form.

Liability insurance is available for pre-registered courses.

For all forms and insurance guidelines go to www.americancanoe.org.

Reporting Courses

Instructors are required to report a minimum number of courses.

Specific requirements are found in Appendix C, or online at americancanoe.org.

Conducting a Course

Conducting a course begins well before the arrival of the students.

Facilities and Meeting Sites

Know your the teaching environment prior to the workshop. Obtain the permission of private landowners to cross their properties. Respect the rights of other people (like the fishing community) to use those sites.

Physical Setting

Select a proper setting for your training. Weather and terrain can affect learning, and participants should be properly protected from weather and water. Sheltered practice sites can lessen the frustration of learning new skills. Instructors should choose water sections that do not overwhelm a paddler's abilities. The difficulty of water can be increased when a paddler

is able to handle it safely.

Avoid shouting across noisy rapids or crashing waves. Choose practice areas that allow participants to rest in eddies or sheltered water and speak to partners and the instructor.

Course Lengths

The minimum recommended length of each course is provided in the Course Outlines found on the ACA website. There may be factors that influence the length of a course. Exceptions to these minimum time recommendations should be pre-approved by the SEIC Standards Committee.

A significant factor not accounted for in course outlines is the time required to move students from one place to another. Movement into and out of the water will significantly add to the time requirements for the course. Class movement must be considered when planning each session. The course outlines do not take into account relief and lunch breaks (if applicable). Consider this when planning your course schedule.

Instructor-Student Ratios

The minimum recommended Instructor/Student ratio is provided on the ACA website. The use of a “competent aide” is permitted to ensure these ratios are met. Questions regarding these ratios may be directed to the SEI Department. If you have participants with disabilities, additional instructor help is recommended. The more competent aides you use, the more individual attention can be given, and students will progress faster.

Equipment and Gear

Organize all classroom materials, handouts and program equipment (including paddles and gear) prior to the start of the program. All equipment should be in good condition. Develop a checklist for paddling equipment which matches the nature of the program. Remote locations, wilderness, and open-water programs will require additional gear. Generally an instructor organizes:

- Boats
- Lifejackets
- Paddles
- First Aid Kit
- Rescue bags, slings, or lines
- Group rescue gear (pulley, carabiners, prussic, etc.)
- Emergency Repair Kit
- Helmets (if appropriate)
- Equipment required by state or federal law
- Additional warm, dry clothing

A significant factor not accounted for in course outlines is the time required to move students from one place to another. Movement into and out of the water will significantly add to the time requirements for the course.

- Appropriate Communication Equipment (VHF radio, Cell Phone, EPIRB, etc.)

The instructor also informs the students prior to the start of class about what the course activity will include (getting wet, rescue sequences, etc.) and they are expected to provide:

- Personal clothing/ protective gear including wet suit or dry suit
- Water and snacks/food
- Emergency whistle
- Bug spray and sunscreen
- Completed student medical form/ reminder to bring individual medications
- Signed liability form (minors must provide a parental waiver)
- Other needed information includes where and when to meet, fees, transportation arrangements, emergency contact information, and expected rules of conduct

Rules of Conduct may include (the following are examples only):

- Agreement to follow the Emergency Action Plan.
- Mandatory Attendance and Participation (for certification courses).
- Use of alcohol or illegal drugs prohibited before or during a course.
- Tobacco use is permitted only during breaks and only if done in a responsible manner. Demonstrate "Leave No Trace" principles.
- Proper attire maintaining a level of decency. No bare feet.
- Agreement to abide by the rules established by the host or landowner.
- Work as a team to provide a safe and enjoyable learning experience.
- Agreement to notify the instructor if

there is a need to depart early for any reason.

- Agree to a learning experience free of harassment from any participant. Agreement to report any harassment from peers or students.
- No cell phones, pagers or other disruptions during class.
- No pets.
- No firearms or other weapons.
- Agreement to respect the rights of others including boaters, anglers, and property owners.

Failure to follow these or other stated rules of conduct may lead to dismissal from the course.

Lesson Plans

Skills course outlines are available on the ACA website for all courses. The courses are written by the appropriate ACA Discipline Committees and are approved by the Board of Directors. They are considered as the minimum standard of care for conducting a course at that level. A registered course must include the content of the course outline, although the instructor is authorized to modify a course outline to fit teaching style and program needs. If you have questions regarding modifications to a course, contact the SEI Department for clarification or a written exception.

Lesson planning helps you prepare to teach, helps you stay on track, and provides a record of the content of the lesson. Especially when working with a team of instructors, lesson planning ensures the topics are presented in a logical order or progression and that the individual subject is presented at the appropriate time.

Fundamental Skills vs Maneuvers

Individuals need to learn how to paddle efficiently, but the initial emphasis must be on fundamental skills rather than maneuvers. If

basic skills are practiced first, then that repetition leads to an increased chance of success in mastering the maneuvers. Fundamental skills provide a foundation for the execution of maneuvers. If the process is abbreviated, a student's maneuvers may be poorly executed.

Fundamental skills in paddling include:

- Balance—a centered, relatively upright body
- Boat Lean—weight transfer through knee pressure, foot pressure and hip snaps
- Basic Body Mechanics – efficient use of the lower body and upper body for boat lean and stroke execution
- Paddling Strokes – for power, turning and bracing
- Coordination and Fluidity – smoothness in technique where the body and craft function as one unit
- Timing in executing strokes, particularly in tandem craft

Maneuvers refer to:

- Paddling in a straight line, forward and reverse
- Eddy turns
- Landing in Surf Conditions
- Ferries
- Spins
- Sideslips or Shifts
- Surfing
- 90- and 180-degree turns

Lesson Organization

Elements of a Teaching Progression

The ACA recommends that instructors use these elements in their paddling lessons:

- Orientation to paddling, including safety
- Introduction of paddling strokes
- Practice of paddling maneuvers
- Open or moving water practice site
- Trip with multiple water features appropriate for course

Critical to learning new skills is a progression of activities that encourages students to develop solid skills. The varying needs of students will affect the nature of the progression.

Generally, flatwater practice has the advantage of promoting a non-threatening atmosphere where paddlers can concentrate on refining their strokes and executing efficient maneuvers without the interference of strong current or waves. Moving water, open water (coastal) and whitewater practices provide an opportunity for students to concentrate on judgment and timing in executing maneuvers already practiced.

These elements of a lesson plan offer a controlled setting for students to receive many opportuni-



ties to watch demonstrations, practice specific skills or maneuvers, receive individualized feedback and seek additional technical information.

The purpose of an organized progression of activities where one component builds upon another is to help paddlers experience a sense of accomplishment and improvement. Stronger direction by the instructor at the outset speeds the introduction and practice of skills. This direction of specific activities allows the quick spotting and immediate correction of errors. Participants expect constructive feedback in a lesson, and they are looking for guidance in improving their skills.

The organized approach doesn't preclude a relaxed setting. But the time to be more informal in approach is later in the lesson after people have attempted the exercises. More informality is then appropriate as students will have questions about techniques that arise from their practice. At this point, they also need a less organized program that lets them practice at their own pace.

Orientation to Paddling

Orientation provides paddlers with an overview of paddlesport and to basic safety issues. It is usually a dry-land session that prepares students for the activity and acquaints them with basic strokes.

The orientation acquaints newcomers with general explanation of paddling.

An Introduction—The course outline is described to the students as well as what is required of them. The schedule and organization of the program are explained.

Equipment Review—Paddlers are acquainted with their responsibility to select equipment appropriate to their skills (boats, paddles, flotation, etc.) and equipment that is in good repair.

Clothing Review—Personal preparedness is addressed.

Accessory Equipment Review—Group and rescue gear is reviewed so that paddlers understand from the beginning of their involvement with the sport and that groups are collectively responsible for their outings, including accessory equipment.

An Orientation to Safety—Basic safety considerations are outlined to acquaint participants with inherent hazards in the sport. Their personal assumption of risk should be reviewed since an instructor cannot guarantee their safety.

Beyond a general orientation, the introduction is also a time to orient students to more specific technical elements in paddling. Students prepare to learn paddling strokes.

Basic Biomechanics—Effective use of the body can create more efficient paddling. A stretching and conditioning program can set the stage for introducing strokes. People ready their inactive muscles for the upcoming program, and various stretches can target specific muscles. Many elements of paddling theory can be delivered as students stretch their upper and lower bodies (See Unit 7: Conditioning).

Basic Stroke Mechanics—An understanding of laws of motion helps to relate the execution of strokes to boat reaction. Participants begin to learn the language of the sport and develop clear communication. Draw mock boats in the sand, or sit or kneel in boats on land. Both can orient paddlers to basic stroke positions.

The instructor can walk among the paddlers and assist them in getting their paddles in the right positions. Moving them gently into position can help them understand the correct feel. The instructor saves time and reduces frustration.

The dry land practice is also important for orienting kayakers and canoeists to exiting procedures in the event of capsize. This dry practice of wet-exit technique is especially important for students concerned about tipping over.

Participants get bored or frustrated with too much dry-land practice, and an instructor must be conscious of the group's desire to get to the water. More technical explanations are often effective when students have wetted their paddles. They will absorb more information when they try the techniques and feel the water against their paddles.

Introduction to Paddling Strokes

The next step is to create a controlled instructional setting to practice strokes. Instructors often use a site at the edge of the pond, lake, river or beach where an appropriate shoreline exists. The water should be deep enough to wet the entire blade and allow a wet exit without hitting the bottom. It should be shallow enough to allow paddlers to empty swamped boats easily.

Balance, boat lean, and sometimes bracing can be a good first lesson. Paddlers in closed boats practice wet exits initially to learn safe exits from their craft. Open-boat paddlers also need the practice to develop that comfort. If poor weather does not allow boat lean and tipping practice, many instructors begin with turning strokes to foster early success. Many boats have a natural tendency to turn, and the paddlers can capitalize on that characteristic by practicing specific turning strokes. Turning strokes also encourage efficient use of the paddler's body.

Power strokes are often introduced later in the lesson after participants have achieved success with turning and bracing strokes. They can be more difficult to learn, so students can become demoralized if they begin with those strokes.

In creating lesson plans for your program, you should:

- Set goals
- Establish objectives
- Block-outline the course (based on your objectives)
- Outline each topic in the block-outline

Practice of Paddling Maneuvers

The on-water site is often blended with the shoreline introduction of strokes to reinforce the effect of specific strokes. Once a series of strokes has been practiced in the controlled shoreline setting, the paddlers should launch their craft to fully experience the effects of the strokes on the boat movements.

Many paddlers need substantial calm-water practice and suffer in their development when this is cut short. If the paddlers encounter some difficulty, drop back a step. Return to an easier skill introduced earlier to review a familiar move.

Practice Sites with Current or Tides

Paddlers need a carefully planned transition from flatwater to moving water or open water with waves and movement. New paddlers are often tense in this initial transition. Choose a practice site carefully to ensure the paddlers can develop a sense of control. After paddlers are comfortable with this introductory site, introduce them to sites which require quicker reflexes, more precise moves and better judgment.

Student Evaluation

Developing a “Critical Eye”

The ability to coach a student lies at the heart of a successful instructor. The ability to watch a student's performance, analyze the movement, and communicate the corrective actions is a skill that must be practiced and honed. In working with students, the instructor should:

Use a Positive Approach

There are no bad or wrong strokes. Point out the efficiency of proper technique. Follow general guidelines for modeling of strokes, but be sensitive to individual body type, strength, fitness, and abilities.

Efficiency versus inefficiency

Technique (movement analysis) begins with the relationship between the paddler and the craft. Learn to spot the differences in inefficient form.

Inefficient performance may also result from inappropriate equipment (improper sizing of a paddle, seat height, or fit).

Communication

When evaluating a student, use a positive approach. Begin with some initial praise for the performance. Then give a specific recommendation to improve efficiency. Address only one inefficiency at a time.

Video Analysis

Videotaping allows the student to visualize what they feel on the water. Video tape each paddler completing a specific sequence of maneuvers. For instance, have each student paddle forward in a straight line between two fixed points, pivot or turn in a 360-degree arc each way. A standardized sequence of maneuvers provides students with planned areas of focus and makes review of the tapes with all students more meaningful.

Unit 6—Liability & Risk Management



As a paddlesports instructor and class leader, you are the expert responsible for the safety of your students. In teaching a class, you will constantly be making decisions on how the class will be conducted and how to ensure the safety and well being of your participants. This is true for most outdoor pursuits, but it is particularly true for activities such as paddling that involve inherent risks.

Risk management is the process used to deal with the risks inherent in paddling and paddlesports instruction. This process, in a nutshell, involves identifying the risks that you and your students will face during a class, determining what can be done to prevent these things from happening, and planning what you will do if, despite your efforts to prevent them, some sort of mishap occurs.

Most risk management involves adopting appropriate policies, procedures and teaching progressions to ensure that students are able to learn in a safe and fun teaching environment. It requires careful planning, and may also involve creating and then testing procedures for dealing with emergency situations.

A complete risk management program will also include insurance coverage for your instructional program. An injured student may claim that the instructor is legally liable for his or her injuries. Likewise, the family of a student that dies during a class may also claim the instructor is liable for their loss. Insurance provides the last line of defense by paying for legal representation if you get sued, and paying for all, or a portion of, a claim if you are found to be legally liable.

A Word about Legal Liability

A comprehensive discussion of the law of negligence is beyond the scope of this book. Instructors should look to other sources for detailed information on the subject. Instructors should also recognize that negligence law varies by state. Therefore, an instructor will need

to consult with a lawyer in his or her state for the best guidance. Also, every situation is different, with its own unique facts and circumstances, so no book can provide definitive advice on every situation.

Nevertheless, a few of the general principles of negligence law can be instructive as you formulate a risk management plan for your activity. We review some of these general principles below.

The Duty of Care

Speaking in general terms, an instructor has a duty to his or her students to act as a reasonable and prudent instructor would act in conducting a course. As an instructor, you may be held legally liable for negligence if you fail to act as such a person, and your failure causes an injury to a student. Negligence is based on the “reasonable person” standard, so a paddlesports instructor’s actions would be compared to what a reasonable instructor would do under similar circumstances. A person may be held liable for doing something wrong, for failing to do anything, or for attempting to do the right thing but doing it incorrectly.

The lesson for paddlesports instructors in this duty of care is that instructors should constantly be asking themselves whether the manner in which they are conducting their class is consistent with, or more careful than, the generally accepted safety practices of other paddlesports instructors working in similar situations.

Foreseeability

A paddlesports instructor’s duty of care extends to all foreseeable risks that may arise during a class. To fulfill his or her duty, an instructor must consider all of the risks, hazards and dangers that may present themselves during a class, and formulate a plan for (1) avoiding these dangers, or (2) managing these risks when they come up. Instructors should take this responsibility seriously, and think carefully of the hazards that may

arise during a course. For example, a reasonable instructor should foresee the possibility that the weather may change during a class, and that a change in the weather could create hazardous conditions for students. Instructors should have a plan for keeping the class safe if weather changes occur.

Of course, there are limits to this duty. Instructors are not expected to be prepared for hazards that are not reasonably foreseeable. For example, it is unlikely that an instructor would be held legally liable for injuries to student caused by an airplane crashing into the teaching facility. The likelihood of such a crash is so remote that a reasonable and prudent instructor would not be expected to foresee it, and would not be expected to prepare for it.

Assumption of Risk

As noted, paddlesports involve inherent risks. Students who understand this risk, accept it, and voluntarily choose to participate in your course may be limited in their ability to recover legal damages if they are injured during the class.

This legal concept is called “assumption of risk.” It is the basis of the waiver and release of liability required in most outdoor instructional programs, including paddlesports. A signed waiver and release of liability is meant to be evidence of the participant’s assumption of the risks involved in the activity.

In order to be effective, a participant’s assumption of risk must be made knowingly, with a thorough understanding of the risks he or she may face. For this reason, instructors should thoroughly explain the risks inherent in paddling to their students, and should ensure that students understand these risks before they agree to participate.

In addition to its legal implications, assumption of risk is an important part of a risk management program. If properly administered, it can be a powerful tool to prevent accidents. Students that are truly aware of

the risks involved in paddling will be better able to identify situations that make them uncomfortable. With this knowledge, they may choose not to participate in order to reduce the likelihood of injury. Conversely, students without this knowledge are less able to make good decisions, and may put themselves in situations where injuries could occur.

With these legal principles in mind, you are ready to formulate your risk management plan.

Elements of an Effective Risk Management Program

No single risk management strategy is suitable to every teaching situation, but most effective risk management involves the following seven components:

1. Providing adequate supervision to students during the course
2. Providing sound planning for the class, and maintaining current instruction/coaching competencies
3. Warning participants of the inherent risks of the sport
4. Providing a safe learning and paddling environment
5. Correctly evaluating students' abilities, injuries and incapacitating conditions (including matching or equating students fairly and evenly)
6. Providing proper first aid and emergency procedures
7. Maintaining records of planning and implementation (documentation)

Proper Supervision

Every instructor should ensure that his or her class is properly supervised at all times. Instructors should develop a plan for ensuring that all areas of the class on both land and water are properly supervised, and should review this plan with class leaders. The supervision plan should cover all areas used for the class, including the parking lot, locker and changing rooms, storage areas, classrooms, etc.

With regard to managing class activity, the supervision plan should position class leaders so they can maintain both visual and auditory contact with the students. Classes involving children call for a more detailed supervision plan. The guidelines that follow provide a good starting point for managing class activity:

- Never leave the class unattended. If you must leave the class, move the students to a safe place off the water.
- Use an adequate number of qualified and competent assistants, and explain their responsibilities to them before the course begins. NOTE: ACA instructor-to-student ratios are

In order to be effective, a participant's assumption of risk must be made knowingly, with a thorough understanding of the risks he or she may face. For this reason, instructors should thoroughly explain the risks inherent in paddling to their students, and should ensure that students understand

guidelines. You may need more assistants in some situations.

- The more dangerous the activity, the closer you need to be to the student. For example, you should be in close proximity when students are completing capsized and wet exit drills so that you are able to help the student if necessary.
- Closely supervise students when they are performing a skill for the first time.
- Recognize the warning signs for when an activity is getting out of control. When in doubt, take the time to calm the students down before resuming the class.
- Establish a “stop signal,” and tell students they should stop what they are doing when they see or hear the signal and pay attention to you.

You will be able to enhance these general guidelines as your experience and knowledge increases. Always remember that your number one priority is your students’ safety.

Sound Planning

Sound planning is a part of each component of your risk management plan. “Proper prior planning prevents problems.” Problems may arise from improper planning, improper execution of an approved plan, or a lack of planning.

As an ACA certified instructor, students expect you to provide them with proper instruction based upon the current “best practices” and techniques within the paddling industry. If you plan to teach, review and update your current lesson plans, policies and procedures to reflect changes made in the course curricula and equipment since your last teaching activity. In reviewing or formulating your plan, recognize that people acquire skills at different rates, and consider whether your plan follows the appropriate progressions and learning sequences. Finally, plan so that you are able to adapt to students with different learning styles, skills capabilities and motivation, and will be able to teach to a wide range of students effectively.

After each class, review your plans and the ACA course curriculum. Note any deviations made from either the plan or the curriculum, and record the reason for the deviation. If appropriate, amend your written plans accordingly.

Warn of Inherent Risks

Inherent risks are those risks that are inevitable to the sport but acceptable to the participants. Since paddling occurs on water, the risk of drowning or permanent injury from a near-drowning experience is a risk inherent to paddlesports. Your students need to know, appreciate and understand these risks so they can consciously and knowingly accept the dangers involved in the sport.

As a part of your risk management process, you should identify the risks inherent in the situation in which you are teaching and plan how you will convey risk messages to your students. Recognize that the perception of risk is related to the skill level and age of the student. An experienced paddler will have a greater understanding of and respect for the water than a beginner. Likewise, children do not comprehend the risks of paddling as well as adults. Prepare your risk messages so that they are age and skill-level appropriate to ensure that your students will be able to fully understand them and knowingly assume the risks presented. Repeat these messages throughout your course to remind students of the risks, and explain what they can do to minimize them.

Waiver and Release of Liability

A waiver and release of liability is a legal contract whereby a person surrenders the right to recover money damages for another person’s negligence. In today’s world, participants are often asked to sign a waiver in exchange for the opportunity to participate in an activity that has inherent risks.

The effectiveness of waivers varies from state to state, but the following general rules apply:

- To be valid, a waiver must be signed by a competent person. Parents usually must sign for minor children
- The waiver must provide enough information for the participant to understand the nature and scope of the activity covered by the waiver
- Some value must be exchanged between the two parties for the waiver to be valid, e.g., participant signs a waiver in exchange for the opportunity to participate in the activity
- Waivers to release a person from responsibility for a criminal act are not valid
- Waivers do not protect a person that is grossly negligent, i.e., who shows a total, complete or wanton lack of regard for the safety or rights of others
- Waivers that violate public policy are unenforceable

Paddlesports instructors should use waivers written specifically for paddlesports. Allow students time to read, review and ask questions about the waiver. Students for whom English is not the primary language should be given extra time to review the waiver.

If you develop your own waiver, have it reviewed by an attorney knowledgeable in sports law. NOTE: Any paddling class or event sanctioned by the American Canoe Association must use the ACA waiver without revision, unless otherwise approved in advance by the ACA.

Informed Consent

Some sports programs use an “informed consent” form instead of a waiver. An informed consent form explains the dan-



gers of the sport or activity, and informs participants that they are free to withdraw consent and stop participating in an activity at any time.

The form may also encourage participants to ask questions about the activity.

As with a waiver, by signing an informed consent form, participants acknowledge that they have been made aware of the risks of the activity and knowingly accept them. However, this form differs from a waiver in that the participant does not waive his or her right to seek monetary damages, nor does it attempt to release the instructor from liability.

Safe Physical Environment

The instructor is responsible for providing a safe environment for students. Teaching in a natural environment setting poses safety challenges, but instructors must take all practical and reasonable measures to keep students out of harm’s way.

Begin by inspecting the facilities and areas where you will be teaching. Develop a form to use when you inspect your class location and retain the completed forms with your class records. Include all areas to which your students will have access.

In particular, inspect these areas:

- Support areas such as parking lots, locker rooms, storage areas, offices and classrooms
- Teaching areas, including the water, shore and general area around your teaching site. For non-pool situations, inspect the area up- and down-river and up- and down-wind of your teaching location
- Entrances and exits to the facilities
- Floors, walkways and surface conditions
- If applicable, seating and spectator areas
- Lighting and electrical systems
- Fencing, barriers or perimeter areas
- Access areas for emergency supplies

In your inspections, focus on maintenance and design features of the facilities. Also consider how you will evacuate a student or the entire class in case of an emergency. The ability to respond quickly to a medical emergency and provide ready access to medical personnel is critical to planning and providing a safe environment.

Proper Equipment

Providing a safe environment also includes ensuring that equipment is in good condition. Before every class, inspect the equipment you will provide to your students, including any helmets, paddles, boats, spray skirts, boat floatation, personal floatation devices, etc. Ensure that your equipment meets all applicable standards and requirements.

Document these inspections and any corrective measures taken. When your class begins, inspect your students' personal equipment to ensure its safety, and have a student use your equipment if necessary.

As part of your class, you should train your students in the proper use of paddling equipment, and inform them of the dangers of using equipment improperly or in inappropriate situations.

Evaluate Your Students' Abilities

As the instructor, you need to know the skill level, abilities and limitations of your students in order to evaluate their preparedness for the class, and to assist you in customizing your teaching plan for your specific students. When evaluating students, consider their readiness to perform both physically and mentally, and inquire about their skill level and experience. Also take into account the student's height, weight, age and gender when implementing your teaching plan. If you plan to use a reciprocal teaching method or buddy system, consider all of these factors when assigning partners.

As noted above, some paddling programs gather medical information from participants. If you receive medical information, review it prior to class, and prepare for any medical situations that may arise. If you do not use medical forms, you may want to gather medical information informally by asking the participants if they have any "hidden disabilities" or medical conditions that may affect their ability to participate in the class.

With all medical inquiries, be sensitive to student privacy and dignity. Allow them to respond privately if they wish, and respect the confidentiality of the information they provide.

Medical and Emergency Procedures

When accidents happen, the long-term consequences depend in part on your actions during and after the incident. Managing an incident well requires adequate preparation.

One way to prepare is to be trained in first aid and CPR. The ACA encourages all instructors to have current first aid and CPR training at a level appropriate for the courses and locations in which the instructor will be teaching. Instructors who teach in wilderness areas far from emergency personnel should consider a higher degree of first aid or medical training than those who teach in metropolitan areas. Your teaching plans should also indicate the level of medical training that you will require of your teaching assistants.

Teaching equipment should include at least one and preferably two well-stocked first aid kits. These kits should be inspected before and after each class and restocked as needed. You should also have other emergency equipment available, such as throw ropes, a knife, and other equipment appropriate for the situation.

Establish emergency response procedures in your teaching plan. Your emergency response protocols will depend upon the location of the class, the availability of emergency personnel, the quality of nearby medical facilities, and the available methods of contacting emergency personnel. Once you have established procedures, practice them to confirm that they are appropriate and achievable. Identify locations to take your students if forced to “shelter in place” due to weather or other conditions.

When planning a class in a remote area, determine in advance how you will contact emergency personnel. While cell phones can be valuable tools, they are often unreliable in river valleys and remote areas where many instructors teach their classes. Also determine, in advance, how you will describe your location to first-responders in the event of an emergency, since many older 911 sys-

tems are unable to determine your location from your call. Finally, have local emergency numbers for your teaching location.

Use accident and incident reports to document any injuries or near-misses that occur during your class. The accident report should gather information about the injured party, the nature of the person’s injury, a description of the accident and contact information for any witnesses. A periodic review of all incident and accident reports is helpful in identifying ways to improve the quality of your program.

Maintain Records and Documentation

In the event of an accident, the instructor’s actions may be scrutinized to determine if he or she acted appropriately. The instructor’s best defense is to retain incident records that describe his or her actions. Incident records should include:

- Documentation for all of training activities in which you participated as a student, i.e., classes and workshops you attended and dates of certifications
- Program files including registration forms, waivers and release forms or informed consent forms, medical forms and class rosters
- All written plans used in the class (emergency procedures, supervision, lesson plans, etc.) plus any revisions made
- Contracts with facilities and organizations for which you taught, etc.
- Accident and incident reports
- Insurance policies and certificates of insurance
- Other documentation of the high degree of care you provided to your students.

Waiver and release forms, informed consent forms and other forms with information about minors should probably be kept forever, especially if there was an incident.

When planning a class in a remote area, determine in advance how you will contact emergency personnel. While cell phones can be valuable tools, they are often unreliable in river valleys and remote areas where many instructors teach their classes.

Consult an attorney in your area to determine how long you should keep your other program forms and records.

Managing Behavior

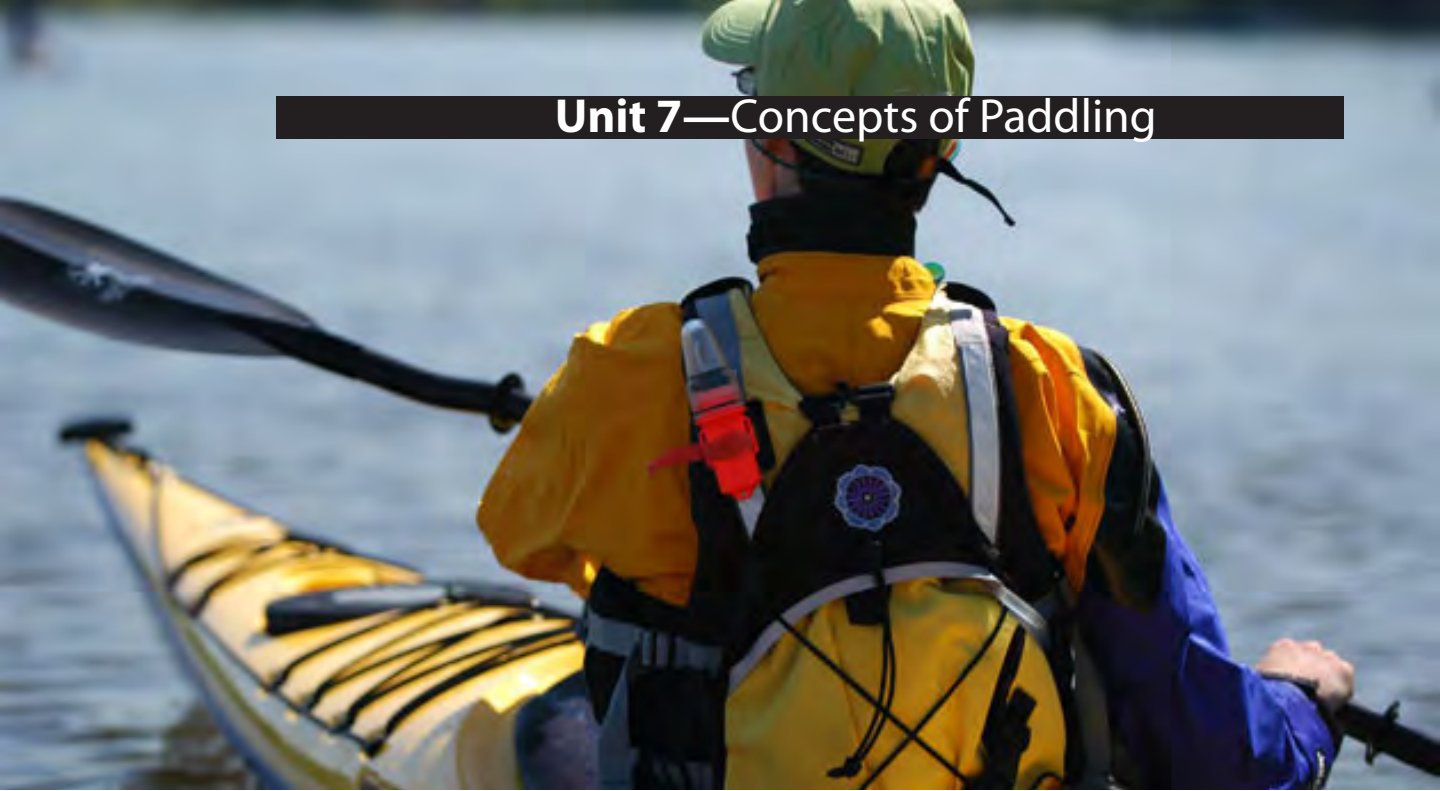
As the instructor, you are responsible for maintaining control over your class. You must be prepared to discipline students acting inappropriately. This may be difficult with paying customers, but your highest obligation is to keep all of your students safe. If one person is endangering himself and/or the rest of the group, you must take action. In extreme situations, you may be forced to tell students to leave the program.

Be sensitive to warning signs that a person or class may be getting out of control, and take steps early to diffuse the situation. Train younger instructors and assistants on how to constructively intervene with unruly adults, and when to get your assistance. Finally, be sure you know how to reach the police if necessary.

Summary

As a paddlesport instructor, you assume tremendous responsibility for the safety and well-being of your students. Your best strategy is to understand your responsibilities and develop plans to manage risks. Effective risk management requires a genuine commitment, but making that commitment will increase the chances that your classes will go smoothly, and will make your management more effective when accidents occur.

Unit 7—Concepts of Paddling



To paddle effectively, the blade must be square to the stroke, the body must safely utilize large muscle groups to increase power and reduce fatigue, and the boat must be quiet in the water to reduce resistance and misdirection. Paddling efficiently requires blending these potentially contradictory considerations.

By explaining a few basic concepts of paddling to beginners, the instructor will speed the learning process. These concepts apply to all paddle-powered craft, although not equally.

The instructor can teach these basic concepts effectively by dividing them into three categories: Blade, Body, Boat.

To paddle effectively the blade must be square to the stroke, the body must safely utilize large muscle groups to increase power and reduce fatigue, and the boat must be quiet in the water to reduce resistance and misdirection. Paddling efficiently requires blending these potentially contradictory considerations.

Blade

While the safety of a stroke is always the paddler's first concern, the effectiveness of that stroke is the next most important consideration. Remember Newton's third law of motion: for every action, there is an equal and opposite reaction. In this case, the action is the paddle stroke while the reaction is the movement of the boat in the water. The following concepts will help make paddle strokes effective:

1. The blade should be at right angles (square) to the direction of travel. If the paddler wants to move

straight ahead, for example, the paddle blade should be aligned perpendicular to the keel-line of the boat as well as perpendicular to the surface of the water to provide the most “bite” in the water.

2. Breaking a stroke into component parts can help some students learn more quickly. One simple set of stroke parts is referred to as “C-P-R”. The Catch, when the paddle is planted or thrust into the water, the Power phase, when the boat is moved, and the Recovery of the paddle back into position for another Catch make up this “C-P-R.” Strokes can also be divided into four main groups, Power, Correction, Turning, and Bracing or Righting strokes. Power strokes propel the boat through the water; examples are forward and back strokes that move the boat in (hopefully) straight lines. Correction strokes counteract a boat’s natural tendency to veer away from a power stroke, and help the boat stay on course. Stern draws, pries, “J” strokes, and even sweeps can be used as correction strokes. Turning strokes are used to change course. Sweeps are common turning strokes. A Brace is used to avoid flipping over. Low and High braces are the most commonly thought of strokes in this category, but almost any stroke can be used by the off-balance paddler to regain balance and “Right” the boat. If the paddle blade moves relative to the boat during the stroke it is termed “dynamic.” A forward stroke is dynamic. If the paddle blade stays stationary relative to the boat it is called “static.” A hanging draw is an example of a static stroke.
3. Think about moving the boat instead of the paddle. With each stroke, imagine anchoring the paddle in the water (as if planting the paddle in concrete) and moving the boat. The paddle will move at least a little relative to the boat and water, but a properly chosen and performed stroke will more effectively move the boat.
4. For forward travel, move the stroke parallel to and as close to the keel line as is practical. This usually means having a relatively vertical paddle shaft. For easy turning, move the paddle blade as far from the pivot point as possible. This usually means having a relatively horizontal paddle shaft. In both cases, be careful not to compromise safe body position or balance.

Body

The paddler’s body must be used safely and effectively. Some key concepts of body mechanics are:

1. Keep both arms within the “Paddler’s Box” at all times to protect the vulnerable shoulder joint. This box extends roughly forward from a line through both shoulders, and down from about the top of the paddler’s head. Allowing an arm to move behind the line through the shoulders can be dangerous, because the shoulder is weaker with the arm in this position. A sudden loss of balance or a strong stroke with the arm in this position can cause a shoulder dislocation. Keeping both arms within the “Paddler’s Box” will avoid nearly all shoulder dislocations.
2. Flexibility has many benefits. Three ranges of motion are key to safe and effective paddling; “hinging” forward at the waist, or “tucking,” bending to the side to form the spine into a “C” shape, and last but not least, rotating the torso around the axis of the spine. The flexibility to bend forward at the waist is important for ducking under tree limbs, for avoiding a shallow bottom if the boat flips over, or for reaching far forward for some strokes, and for performing fore and aft weight shifts. Bending to the side can help to recover or maintain balance. The “J” lean, where the paddler’s head and shoulders are kept over the torso around the axis of the spine. The flexibility to bend forward at the waist is important for ducking under tree limbs, for avoiding a shallow bottom if the boat flips over, or for reaching far forward for some strokes, and for performing fore and aft weight shifts. Bending to the side can help to recover or main-

tain balance. The “J” lean, where the paddler’s head and torso are kept over the leaning boat’s centerline to keep from tipping completely over (capsizing) is an important technique. Rotating the torso during the forward stroke plants the blade further forward, allows the paddler to utilize large muscle groups effectively, and keeps the arms in the Paddler’s Box. By using the arms as struts that connect the paddle to the powerful torso muscles not only is power enhanced, but the arms don’t tire as easily. Torso Rotation makes paddling more efficient and enjoyable.

3. A relaxed but erect posture allows the paddler to perform powerful strokes, maintain balance, and stay comfortable for long periods of time.
4. The lower the paddler’s weight, and any additional load, is kept in the boat, the more stable the craft will be.

Boat

All paddle craft, despite their differences, share a few basic characteristics, so paddlers should understand the following principles:

1. The longer and skinnier the hull, the better it will tend to track in a straight line. The shorter and wider the hull, the easier it will spin.
2. To move forward as efficiently as possible the boat should be trimmed as flat as possible, or slightly stern down. Bow down trim compromises directional control.
3. The hull must be kept quiet in the water. As the hull rolls (side to side), pitches (end to end), or yaws, (wagging its stern like a dog wags its tail), the frictional resistance, or drag, is increased. Even holding the boat heeled over at a steady angle, or loading the boat to be bow or stern heavy will reduce efficiency. This increased drag requires more work

from the paddler to make the boat move forward.

4. While carrying momentum through a turn, the boat will be more stable if it is leaned (more properly “heeled”) into the turn. This is just like riding around a curve on a bicycle, the faster the boat is moving, the greater the angle of lean needed to maintain balance. Be sure to lean the boat, not the body. The paddler’s center of gravity should remain over the centerline at all times to increase stability.
5. The Pivot Point is the spot on the hull that the boat will spin around. When the boat is not moving relative to the water, the pivot point is roughly in the middle of a properly trimmed boat. But as the boat gains speed, the pivot point moves toward the bow. As the water builds up on the leading end of the hull and moves past, it provides resistance to any sideways movement. This is why many boats are hard to turn with bow steering strokes, and as the boat moves faster, these strokes take even more work to be effective. If, on the other hand, the steering strokes are applied at the stern, the boat will turn much more easily. The paddler has more leverage on a stroke far away from the pivot point.

These few concepts are not meant to be a complete list of everything needed to understand how to paddle safely and efficiently. Not only are there other important principles of paddling, each of the concepts can be elaborated on. For example, any particular boat design can be considered to occupy a position on a spectrum, with radical pivoting ability on one end and radical tracking ability on the other. Instructors teaching classes in boats far outside the median will need to address specialized boat- and paddle-handling technique. Individuals’ different physical abilities may require adaptation of equipment and/or technique.



Unit 8—Conditioning

Instructors field many questions from students about the best ways to get in shape for paddling because their ability to paddle effectively is directly related to their physical fitness. The nature of a fitness program depends upon the type of paddling, the individual's level of fitness at the outset and the intensity of the person's involvement.

Racers might train to win, recreational paddlers condition themselves to increase their enjoyment, and wilderness travelers may be more interested in increasing endurance for long-distance travel. Paddling can be an incredibly demanding activity in whitewater, or it can be a leisurely, relaxing cruise through a wildlife sanctuary. Regardless of a person's goals, some degree of conditioning will make the experience a rewarding one.

Recreational paddlers can burn an estimated 600 calories an hour when they paddle vigorously. Racers use more calories in a short period of time, depending upon the nature of their efforts, while touring paddlers may burn a similar number of calories over a longer period of time.

As with every physical endeavor, participants experience satisfaction in increasing their body awareness, in developing sensitivity for essential (skills such as balance and rhythm) and in stretching the limits of their performance beyond normal exertion. A conditioning program is one way that helps a paddler experience that satisfaction.

This unit is a primer on conditioning so that new paddlers can begin to understand the relationship between fitness and performance.

Components of Conditioning

An individual, whether the goal is racing or recreational enjoyment, must begin by considering four major elements in a conditioning program:

1. Strength
2. Endurance
3. Flexibility
4. Cardiovascular fitness

Strength refers to power and speed in the execution of paddling strokes. Increased strength in large torso muscles will increase a paddler's power and speed. Strength is an important consideration for racers or enthusiastic whitewater paddlers who are sprinting or turning quickly across the water. For developing strength to paddle quickly, the exercises should copy the stroke mechanics as closely as possible.

Recommended Exercises: Short sprints and playing with power moves (enders, surfing); obstacle courses teach maneuvering; gate courses in mild current.

Endurance refers to the ability to repeat motions without fatigue.

As endurance increases, so does a paddler's ability to paddle for longer periods. Endurance becomes important to long-distance paddlers, whether recreational tourers or down river racers. To develop endurance to maintain speed over time, match the exercise rate to the same rate for the event (race, tour, play session).

The number of strokes should be at least the same number as those used in the event, and the work time should be equal to the target time of the event.

Recommended Exercises: full-length runs against competitors or the clock; daily tours of intermediate and full lengths if preparing for a trip.

Flexibility refers to the stretching ability of muscles or a full range of motion without tension upon the muscles. Stretching strategies are varied, but most athletes agree that muscles must be warmed up before stretching is beneficial. Mild activity, such as

leisurely paddling or running in place will warm the muscles.

Stretching prior to intense activity loosens the muscles and wakes them up more fully, while stretching after an activity can help avoid cramping or soreness. Flexibility in paddling directly affects a paddler's ability to rotate his torso into position for strong power strokes and effective turn strokes.

Cardiovascular Fitness refers to the effectiveness of the heart, lungs, and blood circulatory system in pumping oxygenated blood to body tissues. Improved cardiovascular fitness means more oxygen in the blood is reaching the tissue which can then work more efficiently. As a result, improved cardiovascular fitness leads to better muscular performance.

Stretching for Paddling

Shown are stretches that benefit the parts of the body used in paddling. While the sport is sometimes viewed as an upper-body workout, paddlers find that their legs are an important factor in leaning and stabilizing the boat.

Paddlers may find the following stretches helpful in preparing for the sport. Some stretches can be performed with paddles or with the help of a partner.

Remember to breathe deeply and rhythmically when stretching.

Upper Torso, Shoulders and Arms

■ Interlace fingers above the head with palms facing up. Reach up to feel the stretch in the arms, shoulders and upper back. Push slightly back with the hands for a greater stretch. Hold for 15 seconds.

■ Place palms flat on the ground with fingers pointing to the knees. Lean back slowly to stretch the forearms and wrists. Do not force the stretch. This stretch can relax the grip of students who clench their paddle tightly (along with rotating the wrists in circles). Hold for 20 seconds.



Figure A



Figure B



Figure C

■ *Figure A:* Raise one arm above your head, then bending at the elbow, lower your forearm behind your head. With the other hand, grab your elbow and slowly pull so your fingers extend down your spine. Hold for 15 seconds. Switch sides.

■ Hold a piece of clothing or a paddle near the ends with straight arms. Move your arms up, over the head and behind the back. Do not force the stretch. Hold 10 to 20 seconds.

■ *Figure B:* Hold your arm in front of you and cross it over your chest. Using your other hand, squeeze your arm into your chest just above the elbow. Feel the stretch between spine and shoulder blade.

■ Extend an arm fully, level with the shoulder. The stretch occurs in the arm and shoulder. Hold for 15 seconds. Extend the arm rearward at the same level until the stretch is felt in the shoulder. Hold for 15 seconds. Repeat on the other side.

■ Raise arm in a 90-degree angle with palm facing forward. Rotate forearm forward and down until palm is facing backward. Extend rotation until the stretch is felt in the shoulder. Hold for 15 seconds.

■ *Figure C:* Power strokes engage pectoral muscles while paddling. Place your hands behind your back, grab your own wrist, and slowly lift upward. Or, using a tree or a buddy, hold your arm out to the side, palm pressing against the support, and slowly turn your body outward, facing away from the support. Switch sides.

■ Extend arm fully, level with the shoulder. A partner places a hand on top of the arm, above the elbow. Push up against the arm as the partner pushes down gently. This isometric stretch is felt under the arm. Hold for 5 seconds.

■ *Figure D:* Hold one arm out in front of you, palm facing up. With your other hand, grab your outstretched fingers from below and gently pull them down toward your body. Switch sides. This is also a great stretch to loosen your forearms if they tighten up after paddling long distances.

Lower Back, Hips and Legs

■ Lie flat on the back and keep the arms straight out at the sides. Lift a leg to a vertical position. Keep the leg straight to feel a greater stretch in the hamstring. Hold for 15 seconds. Alternate legs so that both legs are stretched 3 times.

■ *Figure E:* Lie flat on back, legs outstretched. Lift one knee, grasp with both hands and pull towards chest, feeling stretch just above your hamstring. Hold for 30 seconds and repeat with other leg.

■ Lie flat on the ground. Lift one knee, grasp it with both hands and pull it toward the opposite shoulder. Hold for 15 seconds to stretch the buttock. Repeat with the other knee.

■ *Figure F:* Stand with your feet far apart, slightly wider than your shoulders. Keeping your spine perpendicular to the ground, lunge to one side, keeping the opposite leg fairly straight. Feel the stretch on the inside of your straight leg. Switch sides.

■ *Figure G:* Stand with your feet a little farther than shoulder-width apart. Being careful not to lock your knees, bend forward at the waist. Grab both ankles, and gently pull your torso in to your legs to increase the intensity. Stand up, breathe, and then bend forward at the waist. Grab one ankle with both hands and press your chest to your knee. Stand up and switch sides.

■ Lie on your back with bent knees. Keep the lower back and shoulders on the ground. Lift one leg over the other leg. Let the top leg pull the bottom leg toward the ground, until lower back and side of hip feel the stretch. Hold for 30 seconds and repeat on the other side.

■ *Figure H:* With your feet shoulder-width apart, place your hands on top of your head and slowly bend to one side, feeling the stretch along the other side of your body. Switch sides. Next, breathing evenly, place your hands on your hips and slowly bend backward at the waist so your chest faces the sky.

■ *Figure I:* While standing upright, bring your heel to your butt and hold at the ankle. Be sure to point your knee straight down at the ground while holding this stretch. Focus on a blade of grass to keep your balance, or use a paddle to support yourself.

■ *Figure J:* Begin on the ground on your hands and knees. Plant the balls of your feet on the ground, and slowly straighten your legs until your body forms an inverted "V."



Figure D



Figure E



Figure F



Figure G



Figure H



Figure I



Figure J



Figure K

- *Figure K:* You never know when you will find yourself out of your kayak or canoe, scrambling over rocks and rough terrain. Paddlers are not immune to ankle sprains. Draw slow, wide circles in the air with your toes, rotating at the ankle. Change directions, and then switch feet.
- Sit with one leg bent and that foot near the knee of the other leg. Keep the second foot near the body. Slowly lean back until the quadriceps feel the stretch. Use the arms for support. Hold for 30 seconds and repeat on the other side.
- Stand with the feet should-width apart and the hands on the hips. Rotate the upper body slowly to stretch the torso. Hold the position for 15 seconds at the farthest parts of the twist. Hold a paddle near its ends and move it behind the body. Rest it against the shoulders or buttocks for additional stretching.
- Place feet shoulder-width apart and pointed outward. Heels remain on the ground, bend the knees and squat down to feel the lower back stretch. Hold onto a tree for support and hold for 30 seconds.
- Sit with one leg straight. Bend other leg, and cross it over the straight leg with the foot resting on the outside of the straight knee. Rotate the upper body away from the bent knee, supporting the body with one arm and leaning the other against the bent knee. Push against the bent knee to stretch the side and back farther. Hold for 15 seconds and repeat on the other side.

General Considerations in Conditioning

Conditioning is affected by several factors in exercise: its frequency, its duration, the tempo, and the type of training.

To be effective, exercise should be frequent and of adequate duration and intensity. Sports physiologists recommend minimum conditioning activities:

1. Three times a week
2. 20-minute sessions
3. Heart rate of 120 beats per minute

The recommended heart rate is a matter of age, weight and physical condition. In determining the appropriate heart rate, the advice of a physician is recommended, especially for participants who are older, heavier and out of shape.

Conditioning occurs in two forms:

General conditioning focuses on development of the overall body through a wide range of activities. General conditioning offers an excellent way to sense improvements in cardiovascular conditioning.

Specific conditioning simulates closely the movements in the sport and strives to develop the same muscles that will be used in the activity. Specific training often provides a feeling of direct accomplishment, because the person is aware of very specific improvements in strength, endurance and flexibility.

While general conditioning is important, physical training that is specific in nature is more important to athletes who wish to excel in a sport. The best training for paddling is paddling.

Allow enough time for conditioning to reduce the chance of injury and to increase effective performance. Participants should begin a training program in advance of the paddling season. A full-year commitment to conditioning is necessary among racers, but other participants can modify their involvement.

Paddlers need to match their intensity of training to the intensity of participation early in the season. Individuals who have not prepared themselves for rigorous paddling should not begin the season with an excessive challenge, or injury may result.

Unit 9—Safety on the Water

Recognition and Avoidance of Common Hazards in Paddlesport

Unique Paddling Hazards

A comprehensive approach to safety can make the difference between a safe, pleasant day on the water and one that includes a brush with danger, an accident, or even a fatality. Since the risks inherent in paddlesport are often different from the risks of other watersports, it is important to know the unique hazards of paddling.

Water itself is one of the great, unrecognized hazards. Because of the nature of the crafts, the paddler is more likely to end up in the water than other types of boaters are, and a responsible paddler should always assume that he or she is likely to get wet. A simple awareness that water can be cold and deadly is a vital part of enjoying paddlesports in a safe manner.

A serious obstacle to instilling this vital concept in many potential victims is that they don't consider themselves as "paddlers" per se, don't seek out instruction, and often ignore paddler-specific safety education. For example, many hunters who practice flawless gun safety venture out into paddlecraft without adequate knowledge of the risks and basic safety skills, or paddling safety equipment.

Watercraft Size and Stability

The size and stability of canoes and kayaks are key risk factors that far too many people do not fully appreciate. Being relatively small and narrow, these craft require a special attention to issues such as balance and wave action. Inexperienced paddlers often make critical mistakes such as standing in or leaning over the edge of a canoe. These actions dramatically change the center of gravity and increase the likelihood of capsizing.

These same factors mean that a certain level of skill and attention is required to safely navigate these craft in choppy waves, wind or strong

current. In today's world, people are often unwilling to take the time and effort to acquire the basic skills and knowledge needed to operate a canoe or kayak safely.

Any circumstance that increases the likelihood of a person swimming in the water without a Personal Flotation Device (PFD) is also likely to result in fatalities. Each year more than 4,000 people in the United States die from drowning. Many of these fatalities occur in the relative safety of a swimming pool. It should be no surprise then, that when people end up swimming in the variable waters of a river, lake, or ocean without benefit of a PFD, a significant number of fatalities occur.

Perception of Skill Required

Narrative descriptions of fatal canoeing and kayaking accidents reviewed by the ACA indicate that many of the victims exhibited little or no paddling skills and failed to practice even the most basic safety precautions. This raises a concern that many people who operate a canoe or kayak do not take the craft seriously or perceive the associated safety risks. It appears that the simplicity of design that characterizes a canoe or kayak is often misinterpreted as an indication that these craft are simple to operate and inherently safe.

Impact of Weather Conditions

The challenges presented by various weather conditions are an integral part of paddling. Weather can have an enormous impact on the operation of a canoe or kayak, particularly for the inexperienced paddler. Wind can quickly turn a pleasant paddle on a placid lake or inlet into a very challenging paddle. Rain falling miles away can change a calm river into a pushy torrent. Cold weather and rain can sap a paddler's energy, cause hypothermia, and greatly reduce the margin for error.

Experienced paddlers understand the significant role weather plays in canoeing and kayaking, and prepare accordingly. Checking weather forecasts, knowing personal limitations, and wearing proper clothing are key to having a safe and enjoyable paddling experience. Those who fail to understand and prepare for the risks associated with different weather conditions significantly increase the possibility of mishap.

Cold Water

Cold water is extremely dangerous. It quickly robs the body of its strength, diminishes coordination and impairs judgment. Immersion in water as warm as 50 to 60

degrees can initiate what has been called "Cold Water Shock." When a paddler capsizes and is suddenly immersed in cold water, the body's first reflexive action is to gasp for air, followed by increased heart rate, blood pressure and disorientation.

The immersion can even lead to cardiac arrest. Without proper equipment and apparel, the body can become incapacitated in just a few minutes. Without a lifejacket, this is a

Because of the nature of the crafts, the paddler is more likely to end up in the water than other types of boaters are, and a responsible paddler should always assume that he or she is likely to get wet. A simple awareness that water can be cold and deadly is a vital part of enjoying paddlesports in a safe manner.

very dangerous and often fatal combination.

When paddling where the water temperature is 60 degrees Fahrenheit or colder, a wetsuit is a must and a drysuit is highly recommended. This is also the case if the combined air and water temperatures are below 120 degrees Fahrenheit.

Cold water or cold weather can also lead to dangerous hypothermia. Hypothermia occurs when exposure to the elements prohibits the body from reheating and maintaining its core temperature.

Typical symptoms of hypothermia include shivering, impaired judgment, clumsiness, loss of dexterity and slurred speech.

Wearing a properly fitted life jacket and protective clothing adds hours to your survival time.

Low-Head Dams

Low-head dams are one of the most dangerous features encountered by river paddlers. Unfortunately, these are common on many rivers (not primarily whitewater ones) and often do not look overly threatening. In fact, they can be virtually “invisible” from the low sight angle afforded by a typical upstream paddlecraft, until the boat is too close to the drop to escape the powerful currents. These dams are usually easy to avoid, but too many people are uninformed about their potential deadliness.

Instructors should put special emphasis on the dangers of these dams and stress the importance of recognizing and avoiding them.

Strainers (Sweepers)

Paddlers on rivers and ocean currents must be particularly cautious around fallen trees or other obstacles in the water that permit water to pass through while retaining solid objects. The current can push boats or swimmers toward the strainer, causing them to become entrapped. All paddlers must understand the potential risks of such obstacles, be able to recognize these hazards, and have

the skills to avoid them.

Whitewater

Whitewater is created when fast moving water flows over, around, or through obstacles in the riverbed. The gradient of a river increases the velocity of the water, and obstacles (river features) create wave action ranging from mild to extreme. Whitewater presents a whole set of challenges and hazards that cannot be thoroughly covered in this Instructor Manual but should be covered more thoroughly in the specific courses. Those wishing to paddle on whitewater rivers, even moderate ones, must seek competent instruction and learn the risks involved.

Surf Zone

Many coastal areas are subject to surf conditions that can be hazardous. Surf conditions change frequently, sometimes very rapidly, and even moderate waves can be powerful. Waves and/or current can push unwary paddlers into obstacles such as rocks, piers, jetties, and other boats. Piers and fallen or floating trees form dangerous strainers, and even a sandy shore can be dangerous if a boater is propelled onto it out of control. All users of the surf zone — boaters, swimmers, anglers and others — need a significant level of knowledge and skill before venturing out.

Remoteness

More adventurous paddlers often seek out remote places to paddle and experience nature on its own terms. This remoteness can be an inaccessible river gorge or open ocean only a few miles from a highway. It can also be a vast wilderness a hundred miles from the nearest person. This remoteness also greatly decreases a paddler’s margin of error. Even a minor miscalculation can have fatal consequences.

Basic Safety Knowledge

Safety is—first and foremost—an attitude. The prudent paddler can recognize hazards,

assess risk, know his or her limits, and exercise good judgment. Beyond this safety- first attitude, knowing the following important safety practices will help make any paddling experience a safer one. The prudent paddler should:

- Know the importance of wearing a PFD, regardless of one’s swimming ability.
- Not drink alcohol immediately prior to or during a paddling trip, and never paddle while under the influence of alcohol or drugs.
- Understand the limitations of the vessel with respect to size, carrying capacity, stability and designed purpose.
- Plan ahead. Research the venue; check the weather, and make sure skill level, equipment and provisions are adequate for the trip.
- Know how to swim; even with a life jacket on. Being comfortable in the water is a big advantage in case an unexpected capsize occurs.
- Avoid paddling alone. There is safety in numbers — more eyes to look for hazards, more minds to assess risk, more hands to help with rescues.
- Consider the skills of paddling partners and their ability to help in the event of a capsize.

Proper Gear and Clothing

Many paddlesport accidents involve paddlers who are ill-equipped for the conditions. Hypothermia, for example, is a major threat but can be offset by proper gear and a good knowledge of how to stay warm even when wet. It is essential that all gear is well suited to the type of paddling planned. Canoes and kayaks vary widely in their design and intended uses, and accidents can and do result from paddlers taking a craft designed for a lake onto moving water or onto the ocean. Kayaks designed for open ocean-touring lack the maneuverability required for running whitewater and can be quite hazardous if taken on rivers requiring “tight moves.” The many issues involved in matching gear to conditions cannot be covered here, but it is essential to know a craft’s intended uses and to respect those intentions.

The most important and basic rule of paddling is: Wear a lifejacket (PFD)!

Unfortunately, this practice is not ingrained in the minds of many casual paddlers. It is not sufficient to have a lifejacket loose in the boat. It must be worn securely.

Paddling Skills

A chief pleasure of paddlesports is that the paddler relies only on his or her own physical skills to propel the craft. Hazards, however, arise when paddlers do not have the skills needed. It is imperative that all paddlers practice the necessary paddling skills.

These basic skills should include:

- Knowing how to balance the boat and keep it from capsizing. This includes entering and exiting these often tippy boats without turning over or falling out, and performing all maneuvers necessary with the boat upright.
- Being able to propel the boat in a (relatively) straight line.
- Being able to turn the boat in either direction quickly and efficiently — preferably, even in waves and current.
- Being able to stop the boat’s forward progress, and back up at least a short distance.

- Rescue and recovery skills. A paddler should be able to quickly perform a “self rescue,” and should be able to effectively assist with the rescue of others.

No one should venture out onto water without training and assume that he or she is instinctively prepared to meet any circumstance. Experience does not equate with knowledge or skill. Many people operate canoes and kayaks for years without developing paddling skills or practicing basic safety. Being lucky enough not to have an accident does not make one a safe and capable paddler. All paddlers should educate themselves, either by reading available literature or by seeking qualified instruction, preferably both.

Rescue

Because canoes and kayaks are small, avoiding capsize is more dependent on the skill of the operator. Recognizing this, all paddlers must also know what to do in the event of an upset and be skilled in getting themselves and their gear to shore or back into the boat. Many kayaks and certain types of canoes can be rolled back to the upright position after a capsize while the operator is still in the craft. In decked boats such as touring or whitewater kayaks and properly designed and outfitted open boats such as whitewater canoes, rolling can allow the boater to continue paddling immediately. Learning and practicing self-rescue and recoveries are integral and important responsibilities of prudent paddlers.

Paddling with a well-trained and supportive group improves the safety of each member of that group. Some, or ideally all, of the group should be trained in rescue and recovery, have taken First Aid and Cardiopulmonary Resuscitation (CPR) classes, and share common goals and interests regarding the paddling trip. Watching out for each other is simply an accepted part of paddling for all experienced paddlers.

Visit www.americancanoe.org for the International Scale of River Difficulty, the Beaufort Wind Force Scale and other valuable resources.

Personal and Group Organization, Safety and Rescue

Every paddler must be prepared to accept the consequences of an error in skill or judgment that leads to a swamped craft. Tipping over and swimming are an integral part of the sport. Paddlers must be prepared to accept the responsibility of preparing for a mishap, rescuing themselves and, if possible, rescuing others.

A goal of paddling instruction is the education and training of participants in preparation and rescue techniques. Students should understand that each rescue situation is unique and usually requires one or more rescue techniques appropriate to a given situation. The student's personal preparation plans a big role in the outcome of a mishap. The development of the proper skills is a necessary part of a student's experience, and knowing a variety of rescue techniques is valuable.

The first step is an awareness of procedures to prevent the occurrence of a mishap in the first place.

Personal Clothing

Paddlers may suffer from exposure to cold weather and cold water if they are not properly protected. The prospect of hypothermia is present in every season.

Proper clothing delays the onset of hypothermia, but it doesn't necessarily prevent it. Clothing lengthens the functional survival time of wet paddlers, meaning they have more time to get themselves to safety.

“Layering” is a concept that applies to all outdoor sports, and many paddlers use extra layers to increase their warmth and comfort. The system involves the use of:

1. A wicking layer. Used closest to the skin, materials like polypropylene or silk transfer moisture from the skin to outer layers.
2. An insulating layer. This middle layer soaks up moisture near the skin and continues to move it away from the body to the outermost layer. Common materials for such garments are synthetics.
3. A protective layer. The outer layer protects against wind and water. This outer layer shell is usually made of laminated materials like breathable coated nylon. For colder conditions, consider a wetsuit or dry suit.

Wetsuits—Constructed of neoprene and often nylon, wetsuits use a layer of water or perspiration next to the skin as an insulating layer. Physical activity heats the thin layer of water and the neoprene inhibits heat loss to the air. The recommended thickness for paddling is one-eighth inch of neoprene for flex-

ibility. Booties are often reinforced on the sole for increased foot protection.

Drysuits—Constructed of waterproof fabric, drysuits are designed to prevent water from entering the suit. Rubber gaskets at the neck, wrists and ankles provide a tight seal: drysuits reduce heat loss as well as keep the paddler dry. Wear polypropylene or similar garments in conjunction with drysuits to absorb perspiration.

Personal Gear

Lifejackets or Personal Flotation Devices (PFDs)—Paddlers should choose a US Coast Guard approved lifejacket (PFD) for adequate buoyancy, physical protection and warmth. The Type III models are recommended. Choose a lifejacket designed for the type of paddling you will be pursuing. For calm, flatwater or warm conditions, paddlers may wish to wear a US Coast Guard approved inflatable device.

Helmets—Paddlers in decked boats, boats with thigh straps, or paddlers in surf zone areas use a helmet for head protection against injury when rolling their boats. Paddlers should choose a helmet that protects the frontal lobe of the head.

Group Organization Helps to Prevent Problems

Each member of a paddling group (whether in a lesson or on subsequent trips) has specific responsibilities to promote safety. While the group is collectively responsible for the conduct of a particular trip, individuals are responsible for judging their qualifications to participate and in what manner.

Individuals may assume other responsibilities within a group. For instance, a lead craft should contain at least one experienced paddler with solid trip-leading skill sets. The sweep craft is the last boat and passes other craft only in an emergency. The sweep craft carries spare gear, extra paddles and first aid equipment and keeps the group intact.

Other group responsibilities include knowing and following the paddle and whistle signals, keeping the group compact to enhance organization, maintaining sufficient spacing to avoid collisions,

Paddling with a well-trained and supportive group improves the safety of each member of that group. Some, or ideally all, of the group should be trained in rescue and recovery.

communicating messages, and judging the difficulty of the water and the nature of participation and safety as the trip progresses.

Rescue Priorities

Every paddler must understand rescue priorities to help reduce confusion in rescue situations. Rescuers must avoid compounding a problem by becoming victims themselves. The priorities are:

1. People
2. Boats
3. Equipment

1) The first priority is a paddler in the water. All rescue operations are based on the paddler's initiation of a self-rescue. Boaters should recover from an upset with an Eskimo roll whenever possible.

Paddlers should swim to safety immediately if imminent danger exists.

An integral component is a paddler's responsibility to a partner. If a paddler cannot see his partner, he must establish voice contact to insure that the other person is conscious, uninjured and beginning self-rescue. Communication between partners is an essential element of effective rescue.

Experienced paddlers will usually instinctively self-rescue with their paddles in hand because of training and practice. Boats and other equipment are rescued only when it is safe to do so.

2) The second priority is the swamped boat. Paddlers should try to execute a self-rescue with the swamped boat if possible. The boat has flotation and is easily spotted by rescuers. However, if the weight of the boat inhibits safety or the ability to continue a self-rescue, the paddler should leave the boat and swim to safety.

3) The third priority is other equipment. On flatwater, equipment will float near the swamped craft, and gear bags will bob in the

water until paddlers are safe and the bags can be collected. In whitewater, equipment gathers in eddies or along river bends for collection later.

Establishing rescue priorities helps to promote quick efficient rescue. If all paddlers understand their responsibilities in a rescue operation, then the rescue can often be managed more effectively.

General Group Responsibilities in All Rescues

When a boat capsizes or swamps, all paddlers must evaluate the situation and determine a good course of action to rescue victims safely. Rescue situation can vary greatly, and the different nature of each incident determines which techniques are appropriate.

These general guidelines can help:

1. Alert others paddlers to the presence of victims in the water.
2. Swimmers initiate self-rescue procedures immediately and be ready to accept assistance from others.
3. Other paddlers assist in a rescue to the best of their abilities when safe to do so.
4. All paddlers not involved in assisting the swimmers stop as soon as they can safely do so, and they continue to evaluate the unfolding rescue in the event that their assistance is needed.
5. All paddlers should avoid converging on the rescue scene, because additional accidents may result.

Rescue skills require training and practice to execute them instinctively. As paddlers tackle trips of a remote nature and rivers of increasing difficulty, their skills should match the demands of each environment.

Individual rescue techniques, including boat outfitting and proper equipment, are taught in each discipline.

Conclusion

This manual serves as the definitive resource for information on ACA teaching models, techniques, responsibilities, and support.

The instructor will find this resource to be valuable for the duration of his or her teaching career. What this book cannot do is guarantee you will become a safe, effective instructor. That takes great effort, experience, working with more experienced instructors, taking part in continuing education, and more.

This manual gives the new instructor tools for getting started on the path toward the goal of providing safe, effective instruction.

This book is a required text for all ACA Instructor Certifications.

Programs, and is a vital part of the Instructor Development process, along with discipline- and level-specific resources available from the ACA Store found online at our website, www.americancanoe.org. A thorough understanding of the material contained in this book is essential when attempting to become a certified ACA instructor.

Certification should not be the end goal for the instructor candidate. Instead, ACA instructors must strive for the aforementioned safety and effectiveness. This is a never-ending quest and a particularly rewarding one. This manual is a foundation for learning by all instructors. It is only by maintaining the student's thirst for more knowledge and greater skills that the instructor will reach his or her full potential.

Welcome to the exciting, rewarding field of paddlesport instruction.

Be safe! Have fun!

The most important and basic rule of paddling is: Wear a lifejacket! It is not sufficient to have a lifejacket loose in the boat. It must be worn securely.



Bibliography

American Canoe Association. (2008). Canoeing. Human Kinetics.

American Canoe Association. (2009). Kayaking. Human Kinetics.

American Canoe Association. (1996). Introduction to Paddling. Birmingham: Menasha Ridge Press.

American Canoe Association, . (2004). Essentials of River Kayaking. Birmingham: Menasha Ridge Press.

American Canoe Association, . (2005). Essentials of Kayak Touring. Birmingham: Menasha Ridge Press.

American Whitewater, . (1998). Safety Code of American Whitewater [Brochure]. (1998). Margaretville: American Whitewater.

Gullion, L. (1987). Canoeing and Kayaking Instruction Manual. Birmingham: Menasha Ridge Press.

Human Resource Development Press, Inc., . (1988). Train-The-Trainer: Practical Skills That Work. Amherst: Human Resource Development Press, Inc..

Ohio Department of Natural Resources Division of Watercraft, (2000). Ohio Boating Education Course. Unpublished Manuscript.

Recreational Boating & Fishing Foundation, . (2003). Best Practices Workbook for Boating, Fishing, and Aquatic Resources Stewardship Education. Unpublished Manuscript.

Snow-Jones, A., Black, G., Dillon, P. S., & Jenkins, D. (2004). Critical Judgment II: Understanding and Preventing Canoe and Kayak Fatalities 1996-2002 [Brochure]. (2004).

Springfield, VA: American Canoe Association, Inc.. The American National Red Cross, . (1995). American Red Cross Lifeguarding Instructor's Manual. St. Louis: Mosby Lifeline.

Webre, A. W., & Zeller, J. A. (1990). Canoeing and Kayaking for Persons with Physical Disabilities. Newington: American Canoe Association, Inc..

Whitley, K. (n.d.). ACA Instruction Manual. Unpublished Manuscript.

Whitley, K. (n.d.). ACA Instruction Manual. Unpublished Manuscript.

Appendix A

Useful Information—Paddlesport in General

There are many types of canoeing and kayaking. This diversity is present in vessel type, paddling technique, and in the waters that are traveled. Here is a list of the most common varieties:

Flatwater Canoeing—This is canoeing on a lake, reservoir, slow flowing river, or other relatively calm body of water. Falling within this category is everything from taking a rental canoe out on a lake for a few hours, to going on a multi-day canoe journey down a gentle river.

Recreational Kayaking—Like flatwater canoeing, this type of kayaking occurs on flat or slow moving water. It is characterized primarily by the use of slow and stable recreational kayaks. These kayaks are fairly inexpensive, wide, and usually have a flat-bottomed hull. This is the fastest growing segment of the kayak market. Some consider recreational kayaking to be an entry level of kayak touring.

Kayak Touring—Sometimes referred to as sea kayaking, includes such diverse activities as day kayaking on a small lake, multi-day kayak excursions, and kayaking on the open ocean. Touring kayaks are typically long, sleek, have storage compartments, and are designed for speed and efficiency. These kayaks are often used for long expeditions and are very sea worthy.

Whitewater Canoeing—This form of canoeing occurs on rivers and streams with fast current and rapids. It occurs on everything from mild, bouncy class I and II rivers, to raging class IV and V rivers. All types of canoes are used on very mild whitewater, but paddling more difficult whitewater requires the use of canoes specifically designed for whitewater use. Whitewater canoes are designed with more rocker for quick turning and accommodate the use of floatation bags to keep water out and improve buoyancy. Some whitewater canoes are decked and resemble whitewater kayaks.

Whitewater Kayaking—This describes kayaking on rivers and streams with fast current and rapids. Whitewater kayaks are less than 12 feet in length, typically made of plastic, and can take paddlers into the deepest, wildest gorges, through powerful rapids, over waterfalls as high as 80 feet, and down raging flood-swollen rivers. Whitewater kayakers are always on the cutting edge of testing the navigability of rivers and streams. Over the past 20 years technical advances in the design of whitewater kayaks have turned once unrunnable chasms into popular play spots.

Squirt Boating—This subcategory within whitewater kayaking is so unique that it deserves separate mention. The main objective of squirt boating is, as odd as it seems, not to play in the surface waves of whitewater, but to play in the underwater currents created by rapids. Squirt boats are low volume kayaks, typically made of fiberglass or Kevlar, that function best just below the water's surface.

Wilderness Tripping—This categorizes the taking of extended canoe or kayak journeys deep into wild, uninhabited landscapes. These journeys are typically longer than a week and require the use of large canoes or kayaks that have a lot of storage space.

Surf Kayaking—This activity utilizes short kayaks, similar to those used on whitewater, to surf ocean waves. Surf kayakers try to catch and surf waves the same as traditional surfers. The main differences are that the kayakers are sitting down and use a paddle for steering.

Outrigger Canoeing—Very popular in Hawaii, this traditional South Pacific type of canoeing uti-

lizes a canoe with an outrigger. The outrigger canoe is very stable and used for general recreation and competition on the open ocean.

Canoe Sailing—Just like it sounds, this is the sailing of canoes that have been outfitted with a sail. The sport of canoe sailing dates back at least to the 1800s.

Poling—In most river canoeing the objective is to travel downstream. The objective in poling is to travel upstream utilizing a canoe and a long pole.

Stand Up Paddleboarding—SUP is a widely versatile new sport and discipline withing the ACA. SUP can be done on just about any type of water from the surf zone, to whitewater, to inland lakes and coastal estuaries, even open ocean and multi-day trips.

ACA Programs & Materials

The American Canoe Association national instruction program has been a driving force in paddle-sport education for more than 30 years. In 1929 prior to the establishment of its own instructor certification program, the ACA was instrumental in the development of a standardized paddlesport nomenclature in conjunction with the American Red Cross, Boy Scouts of America and Girl Scouts of the USA. Today, the ACA has a host of available courses covering many different craft and environments.

ACA courses range from basic skills workshops to Instructor Certification courses. “Quickstart” orientation courses may be as short as three hours while more advanced Instructor workshops may run to 60 contact hours of instruction. Courses are available in:

- Touring Canoe—Designed for flatwater environments such as ponds and lakes
- River Canoe—Designed for moving waters and whitewater through Class IV
- River Kayak—Designed for moving waters and whitewater through Class IV
- Coastal (Sea) Kayak—Designed for tidal marsh areas and coastal areas with surf up to one mile from shore in specific wind conditions.
- Swiftwater Rescue—Designed for the whitewater paddler and/or rescue personnel who may be called to assist in an entrapment or rescue situation.
- Surf Kayak—A specialized type of paddling which occurs in the coastal surf zone using whitewater type craft
- Stand Up Paddleboard—Designed for flatwater to moving water rivers and beginner surf zone.
- Rafting—The ACA rafting program is centered on the personal or family raft
- Adaptive Paddling courses are available for most craft in order to facilitate Instructor’s ability to modify programs for those requiring adaptations due to injury or disability.
- Operation Paddle Safe—designed for individuals who need documentation of exposure to safe paddling practices but not instructor certification.

Additional ACA training and educational materials include:

SmartStart for Paddlers—a 20-minute safety orientation targeting newcomers to paddlesport.

National Livery Safety System is a series of three canoeing tapes (2 general public, 1 staff training), a risk management manual, and livery posters. It is designed to be used in commercial livery/rental facilities to expose staff and the paddling public to safe paddling practices.

National Paddlesport Safety System is a series of three tapes including Whitewater Rafting, White-water Kayaking and the award- winning Coastal Kayaking. These tapes are also designed for use in livery/rental facilities.

QuickStart Your Canoe/QuickStart Your Kayak videos are produced to offer safety education to the new paddler. ACA Website: See additional information on-line at www.americancanoe.org



Appendix B

ACA courses are open to all individuals who satisfy the following essential eligibility criteria.

ACA Skills & Assessment Courses:

In order to participate in an ACA Skills or Assessment Course, each participant must satisfy the following essential eligibility criteria:

- Be able to independently participate in all individual skills and activities listed in the course outline while also maintaining an appropriate and safe body position
- Be able to hold their breath while under water and, while in the water wearing a properly fitted lifejacket, be able to independently turn from a face down to a face up position keeping their head above water
- Be able to effectively communicate with the instructor and other course participants
- Be able to manage all personal care independently, or with the assistance of a companion
- Be able to manage all personal mobility independently, or with the assistance of a companion

ACA Instructor Certification Courses:

In order to participate in an Instructor Development Workshop (IDW), an Instructor Candidate must satisfy the following essential eligibility criteria:

- Be 18 years or older
- Be a current ACA member in good standing
- Be able to independently participate in all skills, activities and rescues listed in the appropriate ACA Certification Course Outline and Instructor Criteria documents
- Be able to effectively communicate with the Instructor Trainer and other course participants
- Be able to manage all personal care and mobility independently

In order to participate in an Instructor Certification Exam (ICE), an Instructor Candidate must satisfy the following essential eligibility criteria:

- Be 18 years or older
- Be a current ACA member in good standing
- Be able to independently complete all skills, activities and rescues listed in the appropriate ACA Certification Course Outline and Instructor Criteria documents
- Be able to effectively communicate, including effective verbal communication
- Be able to manage all personal care and mobility independently

ACA Adaptive Paddling Workshops:

In order to participate as an instructor or assistant instructor in an Adaptive Paddling Workshop, each individual must meet the following essential eligibility criteria:

- Be 18 years or older, or accompanied by an adult
- Be able to manage all personal care and mobility independently or with the assistance of a companion who accompanies the participant*
- Be able to get in and out of a canoe or kayak independently or with the assistance of a companion
- Have prior experience paddling a canoe or kayak, paddling safely on flat water
- Be able to perform a wet exit independently
- Be able to re-enter the canoe or kayak following a deep water capsize independently, or with the assistance of one other paddlecraft

*Note: If a companion accompanies a participant and also participates fully in the instructional activities, the companion may be charged as a participant, at the discretion of the sponsoring organization.

In order to participate as a student in an Adaptive Paddling Workshop, each individual must meet the following essential eligibility criteria:

- Have a significant mobility impairment that limits ability to participate in recreation activities
- Be able to breathe independently, not require medical devices to sustain breathing
- Be able to hold head upright without neck / head support
- Be able to maintain a closed mouth / lips while under water
- Following instruction in the pool, be able to independently turn from face down to face up and remain floating face up while wearing a properly fitted personal flotation device (life jacket)
- Be able to manage personal care independently or with the assistance of a companion* (friend or family member) who accompanies the individual

*Note: If a companion accompanies a student and also participates fully in the instructional activities, the companion may be charged as a participant, at the discretion of the sponsoring organization.

Non-discriminatory Essential Eligibility Criteria

What Every Paddling Instructor, Outfitter and Paddling Program Provider Needs to Know About People With Disabilities

You want to do the right thing. You want to include people who have disabilities in your program. But you have questions – Is it safe? What should I say? What will I have to do? What if I say no? To get the most complete answers, take an Adaptive Paddling Workshop. But in the meantime here is some knowledge that you need to have. Under the Americans with Disabilities Act (ADA) of 1990, a person with a disability can not be denied participation in a program that is available to people who do not have disabilities, unless that person with a disability does not meet the “essential eligibility criteria” that is applied to all people prior to participation in that outfitter/guide’s program.

Developing Nondiscriminatory Essential Eligibility Criteria

Paddling instructors, outfitters and paddling program providers provide a wide spectrum of activities and programs. The purpose of essential eligibility criteria is to establish whether or not an individual can participate in an activity based on his or her ability to perform the basic functions of the activity. In order to participate in an activity, all potential clients must be able to meet the nondiscriminatory essential eligibility criteria established by the instructor, outfitter, or program provider for that specific activity.

The essential eligibility criteria for each program must be provided to all potential clients. It can be posted on your website as a portion of the specific program’s description, on any materials provided to the potential client, as part of the registration materials signed by the client. The key is that the essential eligibility criteria must be applied to ALL potential clients. If the essential eligibility criteria is only applied to potential clients who have disabilities, the criteria would likely be considered to be discriminatory when put to a legal challenge.

In reality, the concept of essential eligibility criteria is something most instructors, outfitters and paddling program providers already apply to potential clients - that is following your own goals, concepts and guidelines in determining which potential clients are likely to be able to participate successfully in the program. The problem is the criteria many programs follow is only in the head of the individual presenting the program, instead of being written down. As a result, two mistakes are likely to be made in applying that essential eligibility criteria to a potential client who has a disability:

Subjectivity: The guidelines used are often subjective. Most instructors, outfitters and program providers pass their teaching traditions through the oral method and do not have these criteria written down. This could spell trouble if you’re ever challenged on whether you apply the criteria equally to everyone. You need to document your eligibility criteria carefully.

Stereotyping: Many program providers are forced to make quick assessments of a potential client’s abilities without any real knowledge of what the potential client’s capabilities. Many people have some stereotypes about the abilities of people with disabilities. When these stereotypes shape the decision process, the chances are likely to increase of unfairly assessing the ability of a potential client, who has a disability, resulting in discrimination.

The purpose of developing essential eligibility criteria is to give both the program provider and the potential client the information they need to make an accurate, objective assessment when deciding if their abilities are appropriate for a specific program. This means that employees must be able to clearly explain the criteria for participation. The criteria must be based on functional compo-

nents and applied equally to every potential client. Instead of a program provider disqualifying a person from registering for a course or a trip because the potential client uses a wheelchair, the program provider must apply the criteria for safe participation in that activity.

The model suggested here is similar to the job description required by employers. Employers must identify the essential and nonessential functions of a job, and then determine whether the individual can perform those essential functions. Following this logic, you are urged to identify the basic eligibility criteria of the experience you are providing and then determine whether the individual can safely perform those functions.

In determining whether a person can successfully participate in your services, you must base your decision on what an individual can do—not on a stereotype. If they can perform the basic functions of an activity, they can participate. Therefore, employees and potential clients must understand the eligibility criteria.

Steps to Developing Nondiscriminatory Essential Eligibility Criteria

Developing guidelines based on what you need your clients to be able to do should be an easy process. You probably already have guidelines in your head—you just need to write them down. Think of this as an exercise in writing down common sense, and you are well on the way to success! Follow the steps outlined below:

1. Think in terms of physical and mental abilities necessary for participation in your programs and activities. What does it take to participate in the specific activities of your program such as getting into a canoe or sea kayak, using a paddle? Do you have to be smart? Do you have to be strong? Do you have to understand directions? Does it require an understanding of highly technical factors? Could adaptive equipment be used?
2. Break the activity into the basic stages of participation (for example, putting on equipment, using equipment, and returning equipment to a specific area). In effect, you need to separate the program into the discrete activities or variables that make up the program. Could a companion safely assist an individual in the completion of the task?
3. Consider the abilities necessary to remain safe. What are the most likely causes of death or injury involved with that activity and what does someone need to do to avoid them?
4. Prioritize the stages described in #2 into the critical abilities necessary for safety. For example, in paddling a canoe the ability to remain seated and balanced (with support if needed) is a higher safety priority than the ability to execute specific paddle strokes.
5. Do not use limiting words like “walk,” “climb,” or “see.” Instead describe the end result that must be accomplished in nondiscriminatory terms, such as access, ascend, or identify.
6. Consider basic rules or etiquette that the participant must follow. These include issues such as yielding to others who have the right of way or waiting for the rest of the group to catch up.
7. Determine if the guidelines may be satisfactorily met with the help of a companion. An individual may not be able to perform a function independently, but that same individual might easily do it with the help of a friend, or family member.
8. Edit for simplicity. Stick to the basic physical or mental abilities necessary to participate—the fewer the better.

Sample Non-discriminatory Essential Eligibility Criteria

Participants must:

1. Be 18 years or older, or accompanied by an adult.
2. Be able to manage all personal care and mobility independently or with the assistance of a companion who accompanies the participant.
3. Be able to get in and out of a kayak independently or with the assistance of a companion, following instruction.
4. Be comfortable in the water including: floating on back independently with a properly fitted PFD, turning from face down to face up independently while wearing a properly fitted PFD, and holding breath while under water.
5. Be able to maintain a balanced, upright position when seated in a kayak, with adaptations if needed. Public Lands,” by the US Forest Service; Greg Lais of Wilderness Inquiry, Minneapolis, MN; and Sam Crowley of Sea Kayak Specialist of Marquette, MI.

Sample Essential Eligibility Requirements

- **Entering and Exiting:** The ability to enter and exit the canoe independently or with the assistance of a companion (staff member / counselor, etc.)
- **Seating:** The ability to remain seated and balanced, using adaptive support if necessary.
- **Paddling a Canoe:** At least one person in the canoe must have the ability to move it through the water in a stable manner and return it back to the launching area.
- **Safety:** In the event of a capsized – the canoeists must have the ability to get out from under the watercraft, independently. **and** the ability to right oneself and remain face up in the water with the aid of a lifejacket (PFD).

Note: No adaptations providing head or neck support will be accepted.

The key: Essential eligibility criteria focus on ability, rather than disability. Referring to an activity in terms of who can participate, rather than in terms of who can't, counteracts the tendency to stereotype what a person with a disability can do.

Providing the Nondiscriminatory Essential Eligibility Criteria

Instructors need to inform potential clients of the essential eligibility criteria once they have been developed. This can be done by directing clients to the appropriate resources (websites, brochures, posters).

For more information contact the ACA National Office – Safety Education and Instruction Department: sei@americancanoe.org

Information provided in this document concerning essential eligibility criteria is based on the Americans with Disabilities Act with credits to the “Accessibility Guidebook for Outfitter/Guides Operating on

Appendix C

Course Reporting:

In order to fulfill Instructor, Instructor Trainer (IT) or Instructor Trainer Educator (ITE) maintenance requirements, it is necessary to report a minimum number of courses. However, the SEI Department encourages Instructors to report all courses using either the regular Skills Course Report Form or the EZ Skills Course Report Form found on the Form page. Having an accurate assessment of the ACA's safety, education and instruction outreach is a vital component in advancing the mission of the association.

Instructor Maintenance Requirements:

By the end of the 4 year certification period, the following minimum maintenance requirements must be met in order for the certification to be renewed for an additional 4 years:

Maintain annual ACA membership and SEIC registration

Instructors must teach and properly report a minimum of two classes every four years. At least one class should be at the highest level of certification.

Successfully complete an Instructor Update during the certification period.

Instructor Updates can be accomplished by one of the following methods:

- Participate in an actual Instructor Update course at your highest certification level
- Assist with an IDW or ICE at the highest level of certification (with the pre-approval of the facilitating IT) and complete a review of ACA Policies & Procedures with the IT
- Complete an approved Endorsement (check with the SEI Department beforehand)
- Co-teach a skills course at your highest level of certification under the supervision of an IT in that discipline and complete a review of ACA Policies & Procedures with the IT

Appendix D

Who Can Teach What?

Canoe Touring - Freestyle	Level 1	Level 2	Level 3	Level 4	Level 5
Smartstart for Paddlers					
QuickStart your Canoe					
Introduction to Canoeing					
Flatwater Canoe Safety & Rescue					
Essentials of Canoe Touring					
Freestyle Canoeing					
Canoe Camping		*	*		

* indicates can be taught w/ endorsement

River Canoeing	Level 1	Level 2	Level 3	Level 4	Level 5
Smartstart for Paddlers					
QuickStart your Canoe					
Introduction to Canoeing					
Flatwater Canoe Safety & Rescue					
Essentials or River Canoeing					
River Canoeing					
Whitewater Canoeing					
Advanced Whitewater Canoeing					
Canoe Rolling			*	*	*
River Canoe Day-Trip Leading Assessment			*		
Canoe Camping		*	*	*	*
River Canoe L1 Skills Assessment					
River Canoe L2 Skills Assessment					
River Canoe L3 Skills Assessment					
River Canoe L4 Skills Assessment					
River Canoe L5 Skills Assessment					

* indicates can be taught w/ endorsement

Stand Up Paddleboarding	Level 1	Level 2	Level 3 WW	Level 3 Ocean	Level 4 WW
Introduction to SUP					
Essentials of SUP					
Whitewater SUP					
Advanced Whitewater SUP					
Surf SUP (Ocean)					
SUP L1 Skills Assessment					
SUP L2 Skills Assessment					
Whitewater SUP L3 Skills Assessment					
Whitewater SUP L4 Skills Assessment					
Ocean Surf SUP L3 Skills Assessment					

Safety and Rescue	Level 1	Level 2	Level 3	Level 4	Level 5
Essentials of River Safety and Rescue	No L1 Safety and Rescue certs - All L1 Safety and Rescue courses are discipline specific				
River Safety and Rescue					
Swiftwater Rescue					
Advanced Swiftwater Rescue					
Swiftwater Rescue L4 Skills Assessment					
Swiftwater Rescue L5 Skills Assessment					

Rafting	Level 1	Level 2	Level 3	Level 4	Level 5
Essentials of Rafting - Paddle	no L1 certs available a/o 09/2012				no L5 certs available a/o 09/2012
Essentials of Rafting - Oar					
Rafting - Paddle					
Rafting - Oar					
Whitewater Rafting - Paddle					
Whitewater Rafting - Oar					

Coastal Kayaking	Level 1	Level 2	Level 3	Level 4	Level 5
Smartstart for Paddlers					
QuickStart your Kayak					
Introduction to Kayaking					
Flatwater Kayak Safety & Rescue					
Essentials of Kayak Touring					
Basic Strokes and Maneuvers					
Strokes and Maneuvers Refinement					
Open Water Skills					
Tidal Currents					
Surf Zone					
Roughwater maneuvering, towing and rescues					
Advanced Surf Zone					
Kayak rolling		*	*		
Traditional skills			*	*	*
Coastal Kayak Day-Trip Leading Assessment			*		
Coastal Kayak L1 Skills Assessment					
Coastal Kayak L2 Skills Assessment					
Coastal Kayak L3 Skills Assessment					
Coastal Kayak L4 Skills Assessment					
Coastal Kayak Camping		*	*	*	*

* indicates can be taught w/ endorsement

Surf Kayaking	Level 1	Level 2	Level 3	Level 4	Level 5
Smartstart for Paddlers					
QuickStart your Kayak					
Introduction to Kayaking					
Flatwater Kayak Safety & Rescue					
Sit-On-Top Surf Kayaking					
Essentials of Surf Kayaking					
Surf Kayaking					

no L1 certs
available a/o
01/2009

no L5 certs
available a/o
01/2009

Sit On Top Kayaking (Note: L1 Instructor - Coastal or River)	Level 1	Level 2	Level 3	Level 4
Smartstart for Paddlers				
QuickStart your Kayak				
Introduction to Kayaking				
Essentials of Sit On Top Kayaking				
Sit On Top Coastal Kayaking				
Coastal Kayak L1 SOT Skills Assessment				
Coastal Kayak L2 SOT Skills Assessment				
Coastal Kayak L3 SOT Skills Assessment				
Coastal Kayak Camping		*	*	

no L4 certs
available a/o
06/2012

* indicates can be taught w/ endorsement

River Kayaking	Level 1	Level 2	Level 3	Level 4	Level 5
Smartstart for Paddlers					
QuickStart your Kayak					
Introduction to Kayaking					
Flatwater Kayak Safety & Rescue					
Essentials or River Kayaking					
River Kayaking					
Whitewater Kayaking					
Advanced Whitewater Kayaking					
Kayak Rolling		*	*		
River Kayak Day-Trip Leading Assessment			*		
River Kayak L1 Skills Assessment					
River Kayak L2 Skills Assessment					
River Kayak L3 Skills Assessment					
River Kayak L4 Skills Assessment					
River Kayak L5 Skills Assessment					
River Kayak Camping		*	*	*	*

* indicates can be taught w/ endorsement