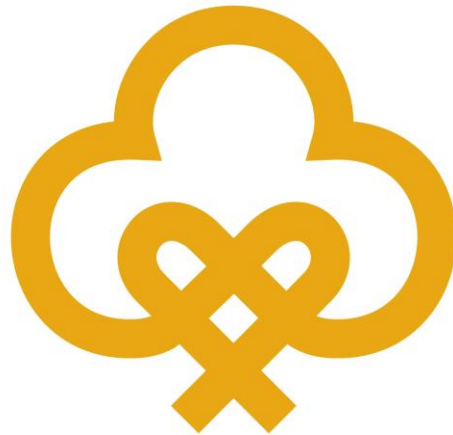




Schools in Pools - Kayaking

2012-13 Pilot



THE CALGARY
FOUNDATION

FOR CALGARY FOREVER

Executive Summary

Children in Canada face an obesity epidemic, physical inactivity challenges, lack fundamental movement skills, suffer from nature deficit disorder, lack water safety skills and are alienated from watersports.

The American Academy of Pediatricians recommends watersports as a healthy way for overweight children to get active and grow into their larger body sizes.

CanoeKayak Canada recommends children sized kayaks as a tool to educate children on how to balance, steer and propel boats before the age of 10.

Noted author and philosopher Richard Louv has written on the restorative powers of nature and its ability to boost mental acuity and creativity, promote health and wellness, build smarter and more sustainable businesses, communities, and economies, and ultimately strengthen human bonds.

Numerous studies have found that non-Caucasian populations are less likely to participate in water sports. Participation in recreational activities with mainstream Canadian society offers opportunities for societal integration and harmony.

Boating safety continues to be an issue in Canada.

There is an opportunity for schools to introduce young children to kayaking in local community pools before the age of 10. Kayaking is an effective tool to get



overweight children active again, neutralizing their weight disadvantage and utilizing their upper body strength. Getting kids started in kayaking creates physical literacy skills for all boating sports with balance, steering and propulsion control such as canoeing, rowing, rafting. The pool is the perfect environment to introduce kids to boating, it is safe, supervised and trusted. The fundamental movement skills and safe boating can all be taught to this group.

From the pool, children can progress to the lake and the river through a local canoe/kayak club. But it is the school system that will give children the best opportunity to get started towards a healthy and safe lifestyle that includes watersports for a lifetime of fun and adventure.

This document explains the rationale for Schools in Pools Kayaking and why they need to start paddling before the age of 10. Curriculum materials will be provided for the Grade 4-5-6, Junior and Senior High levels that tie into provincial educational standards. A video is available that shows how educational and how much fun a school kayaking program can be.

Background – the Obesity Epidemic

Canada's youth today face a worldwide epidemic (World Health Organization, 1997) that threatens their lives and livelihoods in the future. It is an insidious problem that is growing in its scope every day. The problem today is the lack of activity and increasing body mass in Canada's young people. The less active children become, the more challenges society will have with childhood and adult obesity, physical health and rising health care costs. Statistics Canada reports that 25% of children in today's society are overweight. And 80% of these children are predicted to struggle with weight issues for the rest of their lives (American Academy of Pediatrics (AAP), 2008). The AAP believes that diet and nutrition are part of the problem but the bigger issue is the lack of physical activity in the daily lives of our children. Problems arise when the lack of activity contributes to increases in weight and the increase in weight leads to decreases in physical activity especially when muscle fatigue and joint pain occur when children have to be physically active.

The American Academy of Pediatrics found that dieting was not an effective means to counter the obesity epidemic and overweight children respond best to a physical activity program that allows children to grow taller into their natural weight. However overweight / obese children avoid activities that emphasize agility and aerobic ability. The AAP found this population prefers activities that take advantage of their stature and muscle strength, such as water-based sports and strength training, rather than those that require weight bearing (eg. jumping, running) on underdeveloped legs.



With a nationwide epidemic in childhood obesity and adolescent inactivity there are fewer grade school children capable of or interested in running, jumping or weight bearing activities because of limitations with weight, leg joints and leg muscle capacity.

One of the key features of paddling sports is the weight disadvantage that so many people suffer in sport is neutralized by the water. Kayaking is a non-weight bearing sport that allows everyone to participate fully without having to run or jump or physically stress underdeveloped lower body muscles and joints. This can be of key importance to stop the downward spiral in physical activity that often starts in elementary school for many children.

CANADA'S SPORT FOR LIFE

Proficiency and participation in sport and recreation comes from a foundation of fundamental skills. These skills are developed at an early age and give an individual the ability to stay active throughout their youth and through adulthood.

FUNDAMENTAL MOTOR SKILLS - agility, balance, coordination and time/space orientation are the basis for all other sports and are known collectively as physical literacy.

FUNDAMENTAL MOVEMENT SKILLS - running, jumping, kicking, throwing and catching

Children should develop physical literacy before puberty and the onset of the growth spurt in adolescence. They are best learned through safe, fun and active participation in games in both structured and unstructured environments. There are three activities that are extremely important to the development of physical literacy:

- | | |
|-------------|---|
| Athletics: | run, jump, kick and throw |
| Gymnastics: | ABCs of athleticism (agility, balance, coordination and speed) as well as the fundamental movement patterns of landing, static, locomotion, rotation, swing, spring and object manipulation |
| Swimming: | for water safety reasons, for balance in a buoyant environment and as the foundation for all water based sports |

An individual who is not competent in the basic movement skills will have difficulty participating in a range of sports and will have fewer opportunities for athletic success and life-long enjoyment of physical activity.

Other activities develop balance while in movement:

- Skiing and skating
- Snowboarding and skateboarding
- Cycling
- Kayaking and canoeing



Without these basic movement skills, a child will have difficulty participating in any sport and will have fewer opportunities for lifelong enjoyment of physical activity or for any athletic success.

Kayaking requires individuals to learn a new balance mechanism, a completely different method of propulsion and controlling directional movement that is not part of the young child's social recreation and sports activities in Canada.

Introduction of these skills at an early age enable individuals to enjoy a variety of on-top of the water sports activities later in life. These other sports include: canoeing, sailing, rowing, rafting, sailboarding, surfing and general boating.

Background – Physical Literacy for Lifelong Enjoyment of Sports

The development of physical literacy skills for children is a critical issue in today's sedentary society. Canada's Sport for Life program has recognized this issue and is encouraging a program of physical literacy in children ages 0-5 to run, jump, throw, kick and swim to learn basic movement skills. These fundamental movements are followed up with developing skills in skiing, skating, cycling, boarding and other motor skills from ages 6-10.

Children need to develop physical literacy before their adolescent growth spurt and these are best learned through safe, fun and active participation in structured and unstructured games. Research indicates that physical literacy in sport and recreation needs to be developed before the age of 10. Proficiency and participation in sport and recreation comes from a foundation of fundamental skills. An individual who is not competent in the basic movement skills will have difficulty participating in sports and have fewer opportunities for athletic success and life-long enjoyment of physical activity later in life.

Alberta Education and our school systems are reviewing the physical education program in light of the Canadian Sport for Life model and the move to establish physical literacy skills in all children before the age of 10. Parents and care-givers are being encouraged to ensure their children have the opportunity to take part in all of these activities during the critical physical literacy years.

“In communities with limited recreational opportunities, and for parents with limited financial resources, this may be difficult to achieve. This makes school physical education programs critically important, since they provide the only opportunities for the development of physical literacy for EVERY Canadian child.” (Canada Sport for Life – webpage)

Using a watercraft is a foundational movement skill that is a unique learned behaviour. Aquatic skills for all watercraft require a fundamentally different movement pattern from normal sports. A watercraft in a floating environment requires balance, propulsion and directional control. Aquatic boating skills need to be developed before the age of 10 to be innately incorporated into a child's physical being. Unfortunately most watercraft are adult sized and not suitable for younger children.

Children sized kayaks are the perfect medium to develop these skills in the local swimming pool. These skills can then be transferred to canoes, rafts, rowing shells, surfboards, sailboats and even power boats in an outdoor setting as children mature.



Children can be started at age 8 with small children sized kayaks. Once basic swimming skills are in place, children can develop fundamental boating skills including:

- the balance mechanism of a boat in a fluid environment,
- a different method of propulsion using core trunk and upper body limbs,
- how to control directional movement in a method opposite of steering,
- water safety for boating activities

Background – Market Demand & Interest in Paddlesports

You have seen children in the bumper boats at the amusement park and how after a short 5 minute ride the boats shut down. If we give those children a child sized kayak for an hour and set them loose you have given them one of their first independent vehicles to drive around in. You can sense the fun that a class of school children can have in kayaks at their local pool or pond playing Tag, Simon Says, British bulldog, rugby, water polo, What time is it Mr Wolf?, and other games. At the same time they are playing games they are learning fundamental movement skills for boating such as balance, directional control and propulsion.

The latest Alberta Recreation Demand Survey in 2008 found that canoeing/kayaking was **the sport** with the 14th highest participation rate in Alberta. <http://www.tpr.alberta.ca/recreation/ars>

The level of activity in canoe/kayak sports was ahead of well known sports such as:

hockey	basketball	martial arts	mountain biking
figure skating	volleyball	gymnastics	horseback riding
curling	football	baseball/softball	climbing
cross country skiing		tennis and racquet sports	

When Albertans were asked what activities they would most like to try, canoe/kayak was the 5th highest desired activity that people wanted.

It has become a common sight to see cartopper kayaks at Walmart and Costco stores. Sea kayaks and kayak roof racks are easy to spot in the summer months and most people have kayaked before either at a beach resort, the lake cottage or floating down a local river. It is no longer the exclusive domain of



adrenaline filled youth or salty adventurers. Kayaking has become a mainstream sport that is flying underneath the radar screen at this time. School teachers and administrators throughout Alberta have expressed interest in a pool based kayak program and want to see how it can be incorporated into their aquatic education program.

Unfortunately we have not developed the infrastructure or support systems to encourage and develop this activity in our communities. We are lacking:

1. adequate pool space or time to provide the proper introduction to the sport
2. lakefront and riverfront launch sites with parking, change rooms and toilets
3. canoe/kayak clubhouses to store equipment, provide gathering spaces and instruction programs
4. municipal recreation programs to teach people to paddle
5. school based sports programs that build physical literacy skills for paddlesports

Participation in canoe/kayak programs have a significant barrier to entry due to the lack of programs and knowledge about how to get started.

Background - Nature Deficit Disorder, Cultural Affinity for Watersports, Mental Resiliency

There is a growth among children with what Richard Louv described as “nature deficit disorder” (Richard Louv’s, *Last Child in the Woods*) and parents, educators and community leaders are looking for ways to engage youth in healthy outdoor pursuits that can become lifelong interests. Looking at the Participation Rates of Albertans in sports, it is apparent that in spite of our school system’s focus on organized team sports it is the individual sports (hiking, cycling, swimming, aerobics, running, golf, downhill skiing, canoe/kayak) that are dominating adult pursuits. These activities will continue to dominate society’s activity list and part of that is the way in which they allow people to connect to the world outside our homes.

We need to create programs that meet these inherent needs and a kayak is one of those tools that efficiently and comfortably allows people the opportunity to interact with the aquatic environment outdoors. Kayaking often goes hand in hand with hiking, camping and mountain biking. All of these activities counter the nature deficit disorder.



Many new immigrants do not have a cultural or natural affinity with water sports and are alienated from a fundamental part of Canadian life, swimming, boating, paddling, sailing or other water sports. School programs that introduce these populations to boating have a benefit by integrating these distinct ethnic groups into Canada’s mainstream cultures.

Kayaking as it advances from easy maneuvers in

the pool to advanced maneuvers such as the ‘roll’ or running rivers demands a greater degree of mental resiliency and the ability to overcome perceived risks. These skills are not inherently dangerous, but have a high perceived risk when accompanied by the lack of oxygen underwater, the constriction on legs and feet inside the kayak, and the feeling of entrapment that many people have when paddling kayaks.

For some this is part of the challenge and they rise to it easily. For others the ability to face these fears and overcome them is as great an accomplishment as can be expected of anyone. The mental resiliency to do this is something that can be taught and will stand the child in good stead for the future as they face other challenges in their lives and need to overcome them. Teaching this mental skill at an early age in a supportive and risk free environment is inherently worthwhile.

Background – Boating Safety

Canada still suffers from far too many boating accidents and tragedies each year. Problems with not wearing PFD's, hypothermia from cold water exposure, boat speed, impaired boating and lack of safety awareness still exist across Canadian Society. The cost to Canada and the public at large is too real to be ignored.

The idea of introducing school children to boats in a safe environment has long been promoted in Canada. The younger that children can be introduced to safe boating practices the more likely they will follow these rules as they mature. Elementary school children are the best age group to receive this message and adopt it for their own for life. The challenge is how to reach these children with a meaningful and targeted message.

Unfortunately the vehicle that has been historically utilized in Canada, an open canoe, has been flawed and the teaching methodology outdated. The idea of using 1 canoe in a pool to teach a group of 12 or more children requires the participants to stand around for 10-15 minutes to wait their turn for a 1 minute opportunity to get into the boat. A canoe is too big for young children to maneuver and handle outside the pool environment. So the value of the boating safety message is often lost until the children are older – ages 12 and up – when they start to know it all and stop listening to our messages.

Young children need to be active and engaged to retain their attention and interest. Stand and deliver lectures and demonstrations by others, lacks the necessary components to be effective teaching methodologies.



A classroom of 15 students can all be actively in the water in a 25 meter pool with a fleet of 15-20 boats. Their personal involvement in the pool learning a new skill through interactive games and drills makes the teaching program a worthwhile investment for schools.

The Proposal – Make Kayaking part of the School Program across Canada

For all the reasons described above, kayaking needs to be introduced to school children in the Grade 4-5-6 period and then followed up with refreshers and add-ons in Junior and Senior High. This includes:

1. getting kids active to counter childhood obesity before the onset of puberty,
2. building physical literacy skills for boating activities before the age of 10,
3. supporting the public's interest in kayaking
4. getting children outdoors and interacting with the world beyond their backyard
5. helping to integrate immigrant cultures into Canadian leisure activities
6. developing mental resiliency and building the capacity to overcome perceived barriers
7. building a culture of boating safety through appropriate use of pfds, thermal protection and safe boating practices.



In developing the Long Term Athlete Development program for whitewater canoe/kayak sport, CanoeKayak Canada looked at best practices around the world in whitewater sport and determined that children should be given the opportunity to start paddling before the age of 10. Partnering with the objectives above provides a wonderful fit that can be nurtured to achieve many different goals.

Kayaks are THE BEST TOOL to accomplish all of these goals with our kids. The goal of the Kayak for Life program is to have every child in Canada within the next 5 years develop basic aquatic boating skills in a kayak at their local swimming pool as part of the Grade 4-5-6 curriculum.

To make this happen, we need to market the value of aquatic boating literacy using kayaks in pools for school programs to elementary, middle and secondary school teachers. Secondly we need to make the program easy to implement for teachers with appropriate curriculum materials and information packages. Finally we need to have facilities with the right equipment and trained staff that can fulfill the demand as it develops.

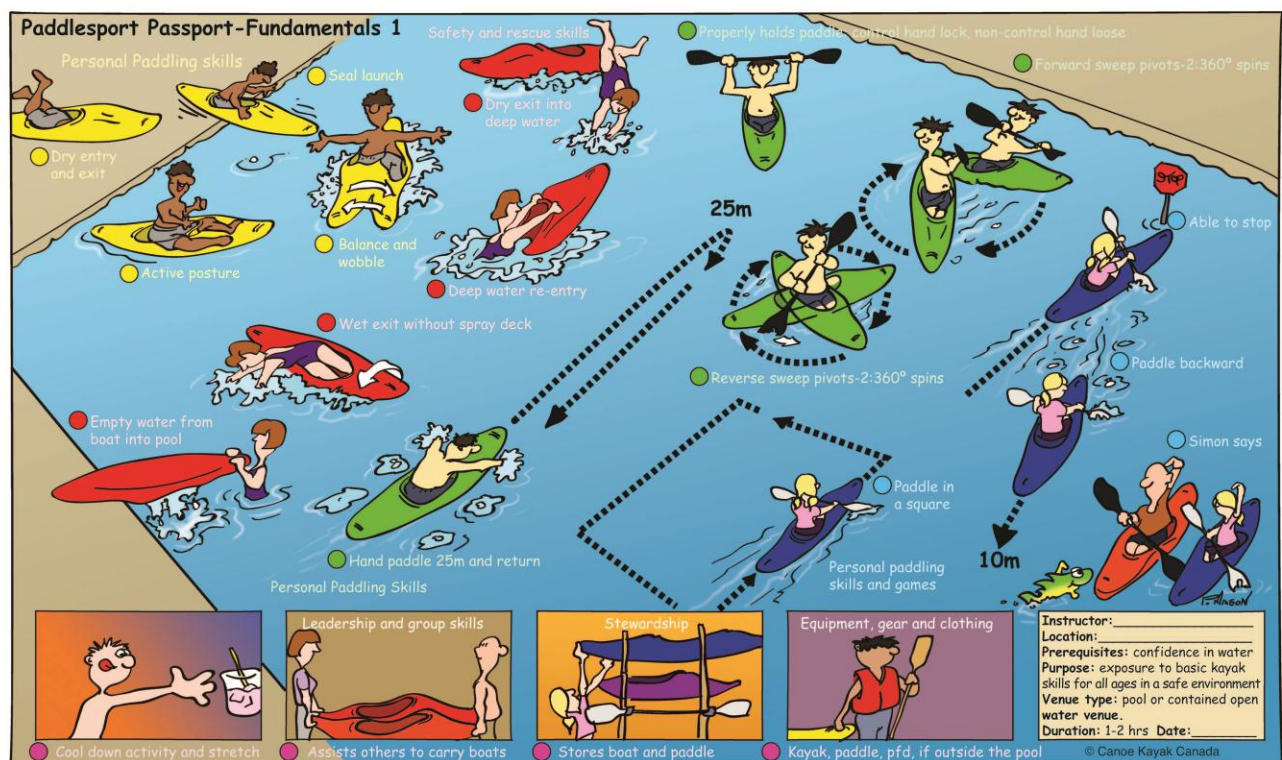
Kayaking Facilities

Canada is a cold country where outdoor aquatic sports are best enjoyed June to September. Kayaking is an aquatic sport that includes water immersion and swimming as part of the learning process. It should therefore be started in a warm comfortable body of water where the fear of getting wet and being cold is eliminated. The other factor is the need to have a facility that is trusted by the general public to be safe and enjoyable. The best facility that meets these needs is the local public indoor swimming pool as the introductory facility for kayaking. The local swimming pool is:

1. Trusted and safe
2. Staffed with trained lifeguards on duty
3. Warm and comfortable
4. Equipped with change rooms and showers
5. Reasonably accessible across Canada
6. Open year-round
7. Equipment is easily stored and accessible
8. Built around a mandate and purpose is to foster aquatic safety for citizens



But aren't pools always busy? Generally swimming pools are well utilized during early morning hours, lunch time hours and after school hours for a variety of activities including lane swims, aqua-fit programs, swim team and diving team programs, family swim and open swim times, moms and tots learn to swim and a variety of other aquatic programs.



However from 9:00 am – 11:30 am and 1:30 pm – 3:30 pm there are time slots that are often difficult to fill for most municipal pools. School aquatic programs are a great way to fill these times but the interest in swimming lessons drops dramatically after the basics are covered in Grades 1-3. Schools looking for meaningful physical education activities and pools are often not able to entice teachers to go to the pool after Grade 3 because the need for “learn to swim” programs and aquatic safety is not as strong.

By Grade 5, students’ interest in swimming lessons drops dramatically and while the kids all still want to go to the pool, the educational value that teachers are looking for has dropped and they have difficulty justifying the time and expense. Pools will often offer other types of programs such as aquafit, water polo, snorkeling or diving that can be used to attract older students back into the pool. But this has not been tremendously effective to fill the 900 hrs of billable hours available each year in a swimming pool.

Kayaking is a natural fit for schools after Grade 3, that can be easily integrated into the pool’s and the school’s programming functions. The local swimming pool provides a great facility that can be used for this purpose. In communities without an indoor pool, an outdoor pool or beachfront area can be used in June and September when the water temperature rises sufficiently to provide a comfortable experience.

The standard 25 meter – 6 lane pool is capable of handling 15 kayaks comfortably and this allows ½ of a class to get on the water at one time. The ratio of Instructors to Students in a pool environment with a lifeguard on duty is 1:15 but an assistant is highly recommended to assist with equipment issues.



School Kayak Programs

As a new program it is important to promote the program to elementary, middle and secondary school teachers on the value of creating physical health and developing aquatic boating literacy using kayaks in pools. There are three distinct levels in the kayak program that relate to the physical maturity of the different target markets.

1. Elementary Schools (Grade 4-6, ages 9-11) Fundamental Movement Skills

Developing balance, propulsion and steering control for boats, confidence in water, water safety skills and having fun on the water.



2. Junior High Schools

(Grade 7-9, ages 12-15)

Physical Health and Wellness

Creating opportunities for active sport participation, especially children with weight issues, physical inactivity problems and disinterest in team sports. Building lake safety skills and having fun on the water.



3. Senior High Schools

(Grade 10-12, ages 15-18)

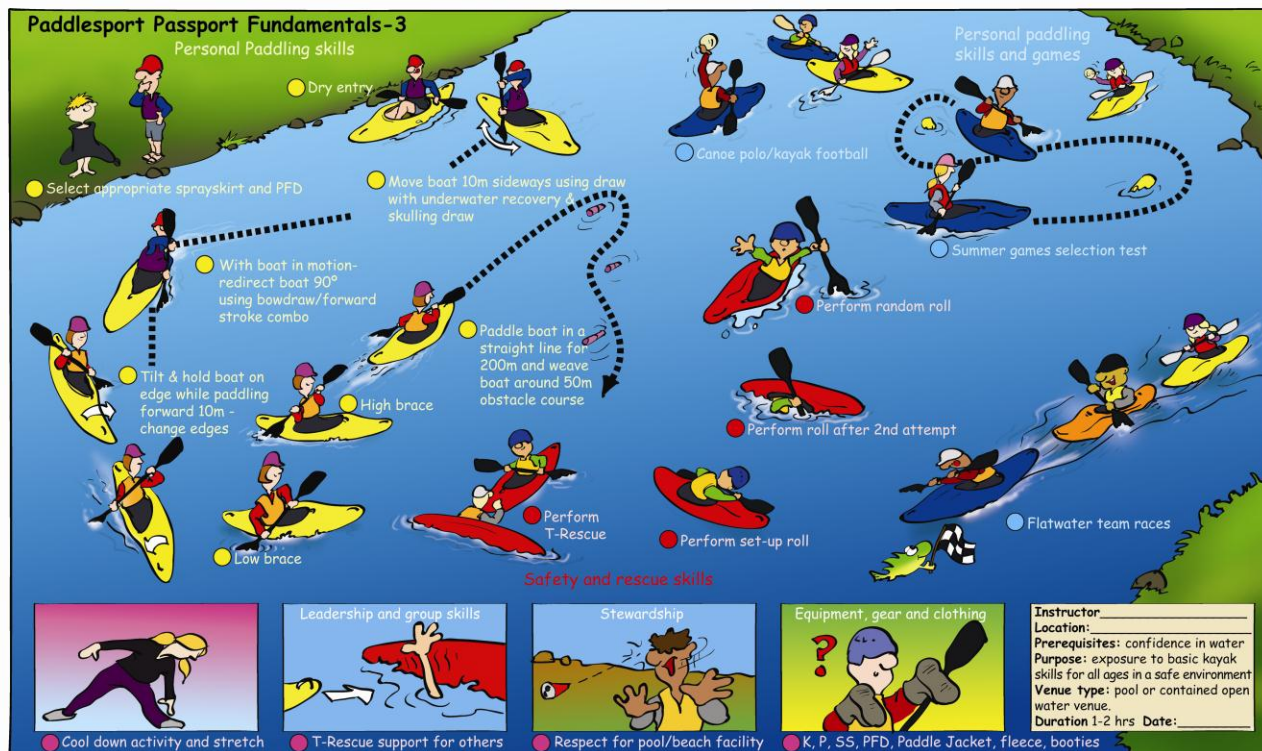
Outdoor & Environmental

Integrating paddling into individual recreational sports, outdoor programs, environmental awareness and water management strategies. Building river safety skills and having fun on the water.

Curriculum materials have been developed for each of these three levels for school teachers in Grade 4-6, Junior High and Senior High. This will make it easier for schools to adopt a kayaking program into their learning programs. Having pre-prepared curriculum materials with ties to other subject matters, such as language, science, math, environmental education and history will strengthen the buy-in from schools.

Short video clips will be produced that will promote kayaking as a fundamental movement skill in the Canadian Sport for Life model and highlight the ease in which children can start kayaking and the benefits to their participation.

CanoeKayak Canada will produce and distribute the **CKC-W Passport to Paddlesports** in both booklet and poster forms to promote the Kayak for Life program at schools and with participants. This will give youth a better understanding of the graduated method of developing physical literacy skills for boating and how they can progress in the sport. The **CKC-W Passport to Paddlesports** illustrated on these pages acts as a promotional tool and a skills checklist that can be taken home and pinned up on the family fridge as the participant completes each level.



Other promotional materials will be created for CKC's Physical Literacy for Watercraft Activities Program for schools and teachers.

With these tools in hand, CanoeKayak Canada, Provincial Whitewater Sport Organizations, Kayak clubs and local pools can promote the Kayak for Life program at Teacher's Conventions and School Board meetings to inform teachers and administrators on the value of kayaking to develop active sport participation, physical literacy and outdoor/environment engagement. We will also make these tools available to participating pools and schools to promote the program with teachers. Long term we envisage having schools and pools talking directly and scheduling time and running programs.

Program Activities

Following the Canadian Long Term Athlete Development model, kayaking has developed six stages of the progression in paddling starting with:

FUNDamentals	- learning to paddle on flatwater	Ages 7 and up
Developmentals (Learn to Train)	- learning to paddle on moving water	Ages 10 and up
Transformations (Train to Train)	- building skills in different kayak disciplines	Ages 12 and up
Pursuit of Excellence (Train to Compete) – focusing in 1 discipline for elite comp		Ages 16 and up
Train to Win	- developing elite world class athletes	Ages 21 and up
Active for Life	- enjoying the sport	Any age

- Age specialization appears to be a key issue for paddling sport because it is an early start sport, but it is also a sport where paddlers can start any age and can go on to enjoy a competitive career well into their 30's and can be active paddlers through the rest of their lives. The ages outlined are general guidelines. The individual tempo of development and maturation will influence when an athlete may reach a particular stage. However, each will go through the same stages



- A participant friendly start at the **FUNDamentals** stage, ages 7-10 in pools and camps and unstructured play in boats has emerged as a huge advantage in establishing aquatic literacy. It provides sound general development, athlete competency, physical skills, a rich social experience, and meaningful personal growth leading to building character and coping skills for success and achievement in all life activities, on and off the water. Each of the 3 levels in the Fundamentals Passport takes 1-2 hrs to complete but a lifetime to master.



- The **Developmentals** stage of the LTPD takes the basic skills and knowledge from the pool/lake and introduces the paddler to the river environment. The balance, propulsion and directional control skills provide the foundation to develop the necessary skills to safely and comfortably navigate down a river. There are 3 Passport levels in this stage and each takes 3-6 hours to complete. This level is for paddlers ages 10 and up.

- Having developed a roll, eddy turns, ferries, surfing and understanding currents, the athlete will be at a stage where they can transition into the variety of whitewater sport activity (recreational Grade III rivers, slalom, freestyle, canoe polo or wildwater). **Transformations** is this stage of the LTPD from ages 12-17 that gives athletes this opportunity. The three levels at this stage each takes a paddling season to master.



- Having made a choice of a whitewater discipline and boat will focus the activity of the training. The **Pursuit of Excellence** stage of the process from age 16 to 21 brings the athlete to a higher level of competence and gives them the skills to compete at the international level.



- The **Training to Win** phase picks up as athletes make the transition to the Senior Team and begin competing in World Cup, World Championship and the Olympics. In whitewater competition this stage can start as early as 21 but may take several years to break in to this select group.

- The **Active for Life** phase of the LTPD can be entered into at any time and from any phase after progressing through the **Developmentals**. Teenagers and Adults will quickly progress through the **Fundamentals** and **Developmentals** stages, often in a single instructional session.

There are different streams of participants in the **Active for Life** phase based upon the characteristic of the individual and their interests. The LTPD identifies 3 distinct groups;

- the Adventure for Life,



- Competitive for Life



- Explore, Enjoy and Experience for Life.

For more information on Canoe Kayak Canada's Long Term Paddler Development for kayaking go to <http://canoekayak.ca/english/content/whitewater>

Goals

CKC's goal is to train 4000 lifeguards, 1000 pool managers and 1000 teachers to run pool kayak programs. Every one of these individuals will touch 20-50 children each year and introduce kayaking as part of the physical and aquatic literacy program at a young age. In addition to this, teens and adults will learn how to paddle. The outreach of getting 1000 pools involved in kayaking is to expand the "bums in boats" to over 250,000 people each year once the program is fully engaged.



CKC will measure success in a variety of ways:

1. Number of pools visited and pool managers educated about kayak programming and the opportunities for revenue generation with minimal cost. Target for 1,000 Pools in Canada.
2. Number of lifeguards trained and certified as Pool Kayak Instructors 1. Target for 4000 lifeguards certified as CKC-W Pool Kayak Instructor.
3. Number of teachers that incorporate kayaking as part of their physical-aquatic literacy program in their classroom. Target for 1000 teachers in Grade 4-5-6 that use kayaking as part of their physical education program in school.
4. Number of children that are introduced to kayaking and have an opportunity to try it in their swimming pool. Target is for 150,000 children to learn to kayak each year. The goal of the CKC is to have every Grade 5 student in Canada exposed to kayaking in their local pool by 2016.
5. Number of teens and adults that are introduced to kayaking and have an opportunity to try it in their local swimming pool. Target is for 100,000 teens and adults to try kayaking at their local swimming pool.
6. Interest developed in the local swimming pool in elementary school will be transferred to after school programs that further engage participants in advanced kayaking skills. Those individuals that show a keen interest can then go on to a local club program that can take them out to open water and the river. Number of children, teens and adults that graduate from the pool onto the river to further develop their skill base and interest in the sport. Target is for 1 in 10 or 25,000 children, teens and adults to advance beyond the pool to a local club program.
7. Of the 25,000 people that try a local club program and progress to the Developmentals level – 1 in 10 will progress to the next level of Transformations meaning that 2,500 will try one of the competitive disciplines of kayaking (slalom, downriver, freestyle or polo)

Most importantly however is the children exposed to CanoeKayak Canada's kayak program will be find a new opportunity for physical activity and they will be well prepared to handle other watercraft in the future.

Challenges and Risks for Students, Teachers and Schools

Pool Based Programs

In the pool the level of risk and the challenge of setting up the program is minimized as much as possible. The pool provides a safe, non-threatening environment for this program. However, as with any other activity in life, risk and the possibility of injury can never be entirely eliminated.

1. If a rescue is needed there is always a trained lifeguard on deck at any public swimming pool in addition to the kayak instructor, teaching staff and assistants.
2. If there is a problem in the pool, students are within easy reach in a controlled area
3. Modern plastic kayaks come in a range of sizes from little wee ones for 50 lb kids to gargantuan sizes that will float a 300 lb person. This makes them easier to handle and move around.
4. Kayaks now have large oversized cockpits that allow students to fold their knees up and fall out of the boats easily.
5. The first lesson is taught without sprayskirts and uses the kayak as a floating toy to get the students comfortable with the boats and getting in and out.
6. The use of sprayskirts is delayed until the students are ready and then the students are taught how to deploy them properly and closely monitored to make sure the wet exit is smooth and uncomplicated. The instructor will be right on hand and ready to immediately rescue the student if necessary during these first trials.
7. If a student fails to wet exit properly, they are taught how to bang on their boat to get a rescue, they can dog paddle to the surface to get a breath of air and the sprayskirt can be kicked free if necessary.
8. Other safety issues in the pool
 - a. Running into each other – the boats are plastic so that is not a problem but t-boning another paddler could result in injury if the nose of the offending boat rides up over the cockpit rim and impacts the paddler in the abdomen.
 - the instructor will caution students to not ram other students especially in a t-bone position
 - b. Falling over near the pool edge can result in an upper body injury.
 - the instructor will limit tipping activities around the pool edge
 - the instructor will keep students away from the edge of the pool
 - c. Striking another paddler with the paddle can result in cuts and contusions.
 - the instructor will caution students to be careful with their paddles around others
 - the instructor will avoid congesting the pool with too many boats
 - the instructor will get students to spread out when they are doing drills.
 - d. Low diving boards or waterslides that protrude over the pool can catch paddlers unawares and result in cuts and contusions.
 - if possible the pool will raise the diving board or remove the obstruction
 - the pool will bumper the obstruction
 - the instructor will flag the obstruction
 - the instructor will warn paddlers to be aware of the problem
9. All other standard pool risks, running on deck, diving in the shallow end, roughhousing in the water, etc. are still safety concerns that the pool staff will be responsible for monitoring and controlling when necessary.



Pool Issues

1. The plastic river running kayaks used in pools are virtually indestructible so there is little worry about damaging the boats.
2. The neoprene sprayskirts will deteriorate from chlorine and need to be rinsed after use but should last several years.
3. The plastic paddles are strong and lightweight and will last a long time.
4. Students need to be cautioned about running into the sides of the pool to avoid damaging the pool tiles.
5. Each pool will have their own rules and methods for storing boats and gear, launching boats, and emptying the boats. The instructor and pool staff will manage these issues.



Class Management

1. The suggested Instructor to Student ratio is 1:15 in the pool. An assistant to help with equipment will make the class run much smoother until the students get familiarized with the process in selecting gear and getting on the water.
 2. Most classes have 25-30 students and will require the teacher to split the class in half for the kayaking lessons
 3. There is not enough space in a standard 25 m pool for other in water pool activities besides the kayak lesson. So one half of the class will have to find another activity during the kayak lessons. A larger pool, diving tank or other aquatic facility may provide a compatible activity.
 4. A weight room, bowling alley, ice rink or other nearby recreational facility that will also benefit from smaller class ratios may be an option for the teacher to take the other half of the class to.
 5. Depending on school policy the teacher may have to stay at the pool with $\frac{1}{2}$ of the class. In this situation the other $\frac{1}{2}$ of the class may need to join another teacher's class.
 6. One of the biggest obstacles to a kayak program is the cost and logistics of transporting the students to the pool. Ideally the pool is within walking distance of the school, otherwise students will need to be bussed to the pool, which adds time and cost to the logistics of a school kayaking program.
6. Equipment being brought into the pool from outside may be dirty and can contaminate the pool. It is important for any outside equipment to be clean before entering the pool and then washed on the pool deck again before being allowed into the water. Best practice is to keep boats in the pool building while in use and to minimize boats entering the pool from outside.
 7. There are many ways in which to store the equipment safely at the pool. On deck the boats can be stored on racks or vertically against an unused wall secured in racks or tied to the wall. Some pools have storage closets for bigger pool equipment and space inside the closets with racks or hangers. Boats need to be secured so they cannot tip out and fall on pool patrons. Paddles can easily be stacked in a corner or a bin where they can be secured so they don't fall over. Sprayskirts need to be washed down after use and then stored in manner that allows them to dry between sessions. Hanging skirts from racks or on the end of the kayaks works well.

Program Budget

Any program must demonstrate a positive benefit for the costs involved. Building and developing a kayak program for pools requires equipment, staff training and overhead costs that must be taken into consideration. The number of types of programs offered, number of sessions and subscription rate.

Operational Costs

The operational costs will include pool rental fees, staff time and training. Pool time varies from \$50 - \$150 per hour depending on municipal/institutional policies. For the purpose of building a budget a figure of \$100/hour is used. Individual pools can modify this fee as required to reflect their local situation. This does not reflect any overhead costs, marketing costs or administrative costs.

Pool Time \$100 /hr
Instructor Time \$25 /hr
Pool Staff Training $\frac{2 \text{ staff/year}}{\text{staff}} @ \$250 / \text{staff} = \$500 \text{ divided by } 178 \text{ Hrs} = \$2.81 / \text{hr}$
 \$127.81 /hr for Instructional Pool Programs \$100 /hr for non instructional programs

Where the pool is providing instructional services such as a lesson then there is an additional fee built in to cover this cost. Some pools might include this cost in their pool rental fees. Where the pool is offering a drop-in program, canoe polo session or slalom session then there would not be an instructional component and the cost would be just the pool rental time.

Capital Costs

The capital costs to acquire the kayak equipment, includes kayaks, paddles and sprayskirts. Other equipment such as Personal Flotation Devices, storage systems or accessories like canoe polo balls and nets, slalom gates, etc are not included in this analysis and would be a minor cost to any program.

	# of Units	Cost/Unit	Total Costs	Lifespan	Cost / Year	Uses/Year	Cost/Use
Kayaks	20	\$ 650.00	\$ 13,000	7 years	\$ 1,857.14	1300	\$ 1.43
Paddles	20	\$ 150.00	\$ 3,000	7 years	\$ 428.57	1300	\$ 0.33
Sprayskirts	20	\$ 125.00	\$ 2,500	3 years	\$ 833.33	1300	\$ 0.64
			\$ 18,500		\$ 3,119.05		\$ 2.40

The costs are based on the wholesale prices that are available for municipal bulk buys for this program. The estimated life span of a plastic recreational kayak in a swimming pool is 10 years but for this calculation we have reduced the lifespan down to 7 years. The uses per year are based on the number of times the boats are used in the variety of programs that a pool might run each year.

School Lessons

Each School Lesson will be for 2 - 1 hour sessions for 10-15 persons. Normal school classes are 25 – 30 students, so the other 1/2 of the school class will do another activity and then switch.

\$127.81 /hr for pool + = \$156.60 /1 hr for ½
 equip cost of \$ 28.79 session x 2 sessions = \$313.20 class

with a class of 12 students = \$26.10 /student for 2 - 1 hr lessons or \$13.05 /hr/student

Available Pool Time for School Programs

Pools have a wide variety of times that may or may not be available for new programs. Pools are often busy in the morning with morning swims, lunch swimming programs and afterschool programs. The School Kayaking program can fill a void in pool schedules from 9:00 – 11:30 AM and 1:30 – 3:30 PM. But they are often underutilized during these two mid-day periods. School swimming lessons for Grades 1-4 are a great way for pools to fill these times, but other grade levels may avoid using the pool for swimming lessons knowing that students do not want to do swim skill improvement. A kayaking program at the pool provides a new subject matter for schools to give to the students with real lifetime learning outcomes.

5 School days/wk with time available from 9-12 am 5 hrs/day = 25 hrs/week available and 1-3 pm =

25 hrs/week available @ 16 % utilization = 4 hrs/wk or 2 - 2 hr pool classes/ wk

Over the year this translates into a total use of the pool for school class kayaking.

2 - 2 hr pool classes/wk from
September to June = 34 weeks = 68 2 hr pool
classes = 136 hrs of pool time/year

This level of use translates into pool revenues from school program equal to:

Total Pool Revenues	136 hrs x	\$100 /hr =	\$ 13,600
Total Instructor Revenues	136 hrs x	\$25 /hr =	\$ 3,400
Total Equip Revenues	68 classes x	12 students @ \$ 2.40 /use =	\$ 3,916

The total number of children taught basic aquatic boating literacy skills in the school program equals:

34 School classes/year @ 24 students/school class = 816 students/year

Learn to Kayak Lessons

Evening and weekend learn to kayak programs are in popular demand by adults and children and can be taught as an additional revenue creating activity by pools and their trained staff.

1 session/wk \$142.20 /hr w instruction & equip \$142.20 with 6 Students

A six lesson package would cost each student \$142.20. Running a kayak program from September to June would give a pool 42 weeks of programs. This would translate into 7 packages of six weeks each. And this would provide additional revenues to the pool equal to:

Total Pool Revenues	42 hrs x	\$100 /hr	\$ 4,200
Total Instructor Revenues	42 hrs x	\$25 /hr	\$ 1,050
Total Equip Revenues	42 classes x	6 students @ \$ 2.40 /use	\$ 605

Drop-In Sessions (no instructor provided)

Another option for kayaking in pools is to provide a drop-in session with no instruction for active kayakers that have already completed the basic instructional sessions.

1 session/wk \$124.00 /hr w equip = \$124.00 with 10 Participants = \$12.40 /student/wk
1 session/wk at 6-9 pm for a 30 week season = \$3720

Total Pool Revenues	30	hrs	x	\$100	/hr		\$ 3,000
Total Instructor Revenues	0	hrs	x	\$25	/hr		\$ -
Total Equip Revenues	30	classes	x	10	students @	\$ 2.40 /use	\$ 720

Canoe Polo League / Slalom Training

Pools can also offer regular sessions in low use times such as late night or weekend evenings for canoe polo or slalom training to kayakers.

1 session/wk \$100.00 /hr no equip = \$100.00 with 10 Participants = \$10.00 /student/wk
 1 session/wk at 6-9 pm for a 30 week season = \$3000

Total Pool Revenues	30	hrs	x	\$100	/hr		\$ 3,000
Total Instructor Revenues	0	hrs	x	\$25	/hr		\$ -
Total Equip Revenues	30	sessions	x	10	people @	\$ 0 /use	\$ -

Total Annual Revenues

TOTAL POOL RENTAL FEES	\$ 23,800
TOTAL INSTRUCTOR REVENUES	\$ 4,450
TOTAL EQUIPMENT REVENUES	\$ 5,960

Capital cost return on Investment

When the revenues from equipment use is compiled between the different components there is a computation that shows the pool paying back the total cost of all the equipment in just over 3 years. With a lifespan of 7 years the pool will earn enough in revenues by the time the equipment is obsolete to replace the entire inventory.

Capital Cost payback \$ 18,500 divided by \$ 5,960 in equipment revenues/year = 3.1 Years

Pool Implementation Strategy

CanoeKayak Canada does not directly offer kayaking programs. CKC works with Provincial Canoe/Kayak Associations, Paddling Clubs, certified Instructors and Coaches, and private kayak schools to offer kayak programs. But CKC and our partners do not have the capacity to reach out and run pool kayak programs for every school in Canada. The Schools in Pools – Kayaking program is specifically tailored to be taught by pool staff during regular pool programs.

CanoeKayak Canada and the Provincial Canoe/Kayak Associations will work to connect local pools with schools to get the Schools in Pools – Kayaking program started.

1. Presentations will be made to Recreation Directors and Aquatic Supervisors to promote kayaking programs and to help the Pools acquire the necessary resources to run kayaking programs.
2. Presentations will be made to School Divisions and local educational decisions makers to promote the program and the opportunity for schools to utilize their local pools.
3. CKC Learning Facilitators will be made available to train local lifeguards that can run the program.
4. Once the program is launched and relationships built between local pools and the school system, CanoeKayak Canada will step back and assist as necessary.

CanoeKayak Canada's Schools in Pools Kayaking pilot project is sponsored by the Calgary Foundation.



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