

Year 12 SACE Kayaking Lesson Outline

Recreational Kayaking

Recreational kayaking includes paddling efficiently, turning or stopping effectively to avoid obstacles, manoeuvring to approach other kayakers or a jetty and being safe which would include identifying dangers, avoiding capsizing as well as performing a rescue should a capsize occur, and leadership of a group.

This would include performing and understanding the biomechanics of the following:-

- Forward and reverse paddling
- Sweep strokes
- Stern rudder
- Draw stroke
- Support stroke
- Emergency stop
- Rescues suitable to the kayak, eg. wedge, X and assisted/buddy

For this to occur students need the opportunity to experience poor technique as well as good technique so they can analyse the difference using subject-specific terminology and apply feedback from instructors to understand the movement concepts and improve performance.

Video would be critically important in recording for both a *Diagnostic* and an *Improvement Analysis* assessment.

Providing different styles of kayakers and different length paddles will be necessary for students to experience and compare the effect on their paddling.

Students need to record their paddling, comment on how it feels, measure effectiveness, and reflect / analyse changes. This could be done while paddling with a Go Pro and/or writing on water proof paper with a pencil or video from the bank. Additional recording at lunch time and immediately after the end of the day would be useful too.

If students complete these activities they may achieve the Paddle Australia Basic Skills certificate, a nationally recognised certificate.

Day 1

Activity	What usually happens	Teaching points
Set up	Instructors help students select an appropriate paddle and set foot-pegs in the kayakers. Outline course and day's activities. Safety briefing. Buddy up students for videoing / recording	Start with reasonable foot-pegs and paddle grip.
Buddy to video paddle across the lake and back. Swap roles.	Students usually <ul style="list-style-type: none"> • turn circles • use stopping style stroke to change direction 	This is the base line data to show improvement. Instructors use Paddle Australia 1-5 score to inform students of their ability.

	<ul style="list-style-type: none"> • paddle on one side to change direction • paddle too deep when trying to turn • little or no body rotation • capsize while attempting to turn 	<p>Students could also record the time takes to compare with distance paddle on Day 3.</p> <p>Students reflect on their performance. (check distance for km/hr calculation)</p>
Everyone paddle across the lake and back after direct instruction	<p>Students now</p> <ul style="list-style-type: none"> • engage whole body • show some directional improvement 	<p>Teach effective paddling.</p> <ul style="list-style-type: none"> • Entry and exit point • Body rotation • Grip • Posture • Use of foot pegs
Buddy to video students turning their kayak on the spot. Swap roles	<p>Students usually</p> <ul style="list-style-type: none"> • Paddle in a small circle when turning • Use a bent elbow • Paddle too deep / not wide enough • Little or no body rotation • Poor grip technique 	<p>Instructors use Paddle Australia 1-5 score to inform students of their ability.</p>
Everyone does sweep stroke after instruction.	<p>Improved technique Pivot on the spot</p>	<p>Teach sweep strokes</p> <ul style="list-style-type: none"> • Paddle out wide • Elbow straight • Rotate to follow the blade • Grip • Posture <p>Students reflect / record their improvement and the biomechanics involved.</p>
10 min recess break		
Paddle down the lake to the line of buoys	Improved efficiency	using sweep strokes to correct direction if needed
Weaving between the buoys	Students incorporate forward paddling and sweep strokes to negotiate their path.	
Deliberate paddling ineffectively to beach on western side of the lake.		<p>Poor posture puts emphasis on arms only. Get students to move the foot pegs out of reach.</p> <p>Paddle across the lake in a slouched position.</p> <p>Reflect/record on the biomechanics.</p>
Readjust		Readjust foot pegs, stretch back and arms.
Peer review forward paddling. Paddle to buoy reviewer following their buddy. Give feedback. Reverse roles, paddling towards Paddle SA.	Students critically analyses the points required in forward paddling.	Revise points in forward paddling.

Teacher or instructor to Video students joining a raft.	Students usually <ul style="list-style-type: none"> Require help by being pulled in using their paddle Miss and need to circle around again 	
Teach draw stroke	Students initially <ul style="list-style-type: none"> Don't track sideways but turn Lift paddle out instead of feathering Little or no body rotation Poor grip 	Reflect on feedback improving technique. Reflect on biomechanics and technique of moving sideways.
Return to Paddle SA for lunch, thinking about forward paddling technique. Reflect on effort compared with the initial paddle across the lake.		
Teach capsize, swimming kayak Deep water rescue as rescuer and rescurer. Students cooperate in videoing first attempts	Rescues are generally a new skill – 100% improvement.	Get out some kayaks with bulk heads and some without. Try different methods of getting back into the kayak. Which is easier for the rescuers, which is easier for the rescue? Explain referring to the centre of gravity, stability and kayak design / buoyancy. Suggested research on traditional use of kayaks and canoes such as Aboriginal carved log or bark; NZ Waka; Indonesian long boats; Pacific Island outriggers; Inuit Greenland kayaks. Consider safety/rescues/design in relation to use and materials available.
Stern rudder		Teach as an extra stroke to assist in correcting direction.
Game of 'tail chasey' to practice paddling, sweep strokes and stern rudder.		

Day 2

Activity	What usually happens	Teaching points
Set up	Outline day's activities. Safety briefing given by students.	
Warm up paddle across the lake and back.	Greatly improved directional control.	
Revision of the strokes. Peer data recording and assessment.	Students concentrate on correct paddling technique to inform peers of areas of strength and areas for improvement.	Paddle to buoy, give feedback. Swap observer and paddle to a different buoy, give feedback. Use the line of buoys to practice sweep strokes and draw strokes.
Get students to video / record buddy stopping in an emergency (whistle). No instruction given.	Students usually will <ul style="list-style-type: none"> • Not stop completely • turn while stopping 	Instructors use Paddle Australia 1-5 score to inform students of their ability.
Correct stopping method. Students have time to practice.	Greatly improved, stopping completely, little turning.	Teach correct method. Practice and then re-record performance.
Paddle and stop on whistle as we go to the beach by the toilets. Buddy re-recording performance. Swap roles		
Morning tea break at the beach near toilets on western side of the lake.		
Support strokes Buddy to video.	Students usually <ul style="list-style-type: none"> • Get little tip • Do a stroke instead of a 'slap' to support • Don't reach out far 	Demonstrate then teach preliminary steps, hip flick, push off bottom with hands and then elbow. Do both sides then move into deeper water. Use buddy to tip each other. Instructors use Paddle Australia 1-5 score to inform students of their ability. Students to video again after some practice.
Game of 'keep the ball away' or 'gang up brandy' to practice strokes.		
Return to Paddle SA for lunch, thinking about forward paddling technique. Reflect on effort compared with the initial paddle across the lake.		
Teach assisted rescue. Record efforts.	New skill - 100% improvement. Students are hesitant at first but get a real buzz when they succeed.	Teach importance of leaning back before sitting up. (Centre of gravity, engaging whole body especially hips.) Reflect on ability, concerns, success, and ease of doing rescue once practiced. Discuss barriers and enablers to participation, para-kayaking, kayaking with disabilities
Game to finish up.		

Day 3

Activity	What usually happens	Teaching points
Set up	Outline day's activities. Safety briefing given by students.	
Long paddle around island	Reflect on paddling accuracy, good technique, coping with wind and waves.	Leadership, looking after a group.
Return to Paddle SA for lunch, thinking about forward paddling technique. Reflect on effort compared with the initial paddle across the lake.		
Use the afternoon for students to film their best effort at strokes and rescues. Instructors use Paddle Australia 1-5 score to inform students of their improved ability. Try different length paddles. Select one or more focus points (suggestions below) to research, illustrate and analyse.		

Reflecting on paddling and using subject-specific terminology

How do *posture*, *body rotation* and *grip* affect each stroke?

How does reach affect the biomechanics and efficiency of a

- draw stroke
- sweep stroke
- support stroke

How is the efficiency of forward paddling improved by incorporating sweep strokes and stern rudder strokes?

How does using the foot-pegs assist in posture, body rotation and engagement of the core muscles and hence affect the efficiency of paddling?

Compare kayak design / specialisation using terms such as keel, rocker and bulkhead to explain the appropriate use of the design.

Research traditional use of kayaks and canoes. Compare Aboriginal carved log or bark; NZ Waka; Indonesian long boats; Pacific Island outriggers; and/or Inuit Greenland kayaks with modern kayaks. Consider safety/rescues/design/efficiency of paddling, in relation to use and materials available.

Explain how keeping one's centre of gravity low assists in rescues.

Discuss leadership issues for recreational paddling, including the effect of wind, safe exit points, setting front and back markers and their responsibilities, potential hazards and appropriate kayaks for the trip.

Know the safe limits for paddling with respect to wind speed and direction using km/h and knots and be able to find this information for a location and apply it when planning a trip.

Compare initial paddling speed with final effort around the lake. Explain which key factors were involved with the improvement.

Consider barriers and enablers to participation in kayaking.