

Kayak — Tech Chek

Introduction

The kayak “tech” chek (KTC) is a tool for a coach to use in detecting and correcting technical deficiencies in an athlete’s performance. It has been developed as an appendix to the Kayak Technical Template. The KTC identifies the scope of the performance analysis and correction that is expected of a coach in the Comp Dev context.

It has identified the “key performance factors” of kayak technique using the Kayak Technical template as a guide. Each phase of the stroke has a number of key elements that represent the “ideal” for that component in the overall performance.

The coach “in observation” of an athlete paddling, rates each element within each phase of the stroke. This can be done while observing a video or in the field. The rating scale uses a range of zero, one or two.....0 – “Element is not observed”; 1 – “Element is observed but is not ideal”; 2 – “Element is observed consistently and is ideal”. The coach in utilizing the “tech chek” as a printout, gives the athlete a complete technical breakdown of the components that are ideal or at variance from the ideal.

The KTC also requires the coach to recognize *potential causes of performance errors*. These causes identify factors that could have an impact on performance and may include: **Equipment**; **Environment**; **Affective**; **Cognitive/Mental**; **Physical/Motor (Strength, Balance, Flexibility, and Fitness)**. The KTC steers the coach to reflect upon these potential causes based on the gap between the ideal performance outcome and what is actually observed — Bandwidth Principle.

Equipment - Examines kayak equipment that could be a limiting factor on the performance – length of paddle, type of boat (too advanced), height of seat, footrest position, clothing, etc.

Environment - Examines any environmental factors that could lead to performance deficiencies – direction of wind, force of wind, waves, temperature, sun, etc.

Affective - Examines internal factors that could be related to the performer’s perception of the task or activity - fear, anxiety, motivation, etc.

Cognitive/Mental - Examines factors that relates to the athlete’s thoughts or thought processes that are used to execute a given task or action - lack of understanding, confusion, concentration etc.

Physical/Motor - Examines the physical abilities that could have limiting affects on the performance - strength, balance, flexibility, fitness, etc.

The coach now reflects upon the potential causes of any variance, while deciding if the gap between the observed performance and the ideal performance requires an instruction intervention. If instruction is required, the coach must now decide what corrections will address the cause and how these corrections might be implemented.

For example, in the *catch section* of performance factors, the coach may apply a zero to the key element “*sequence of movements is evident*”. Under the potential causes of this variance from the ideal the coach may check the following columns – Environment – crosswind & waves; Equipment – seat is too high; style of boat is too advanced; Affective – afraid of paddling on lake; Cognitive – does not understand that at the catch hand stays at the catch and hip rotates followed by torso; Strength – not an issue; Balance – needs to develop; Flexibility – tight through shoulders; Fitness – not an issue.

The coach critically reflects on the information gathered and makes a decision on the priority of corrections that are required. Also the coach decides which activities, tasks and drills are to be implemented to affect the necessary move towards the ideal kayak stroke.

The coach is reminded to use the Canoe / Kayak Canada’s kayak technical template as a resource for appropriate drills.

NOTE: This tool can be modified to suit the level of the athletes in question....for example, by simplifying / reducing the number of elements within each phase or by reducing the number of variables in the potential causes section.

KAYAK "TECH" CHEK	COACH:			ATHLETE:								DATE:
Key Performance Factors	Rating			✓ Potential Causes								Corrections / Drills - See Kayak Template
Set up	0	1	2	E	E	A	C	S	B	F	F	
Hand positions approximately eye level												
Athlete is relaxed in shoulders and arms												
Rotation from end of pull phase is held – avoid overstretching / reaching.												
Avoid front arm crossing body to create an angle in elbow of less than 90 degrees												
Boat is level												
Both hands are directing / placing paddle in water												
Blade is completely in the water before any rotation is initiated												
Sequencing of movements is evident												
Boat is level												
Hip rotation – athlete rotates in cup of seat												
Bottom hand stays at catch area												
Leg works with hip to create a strong connection to the footrest, boat and water												
Torso rotation follows hip rotation												
All movements are directing boat forwards												
Sequencing of movements is evident												
Pressure with top hand is down versus forward												
Movement of top hand is straight versus looping as torso rotates through phase												
Hip movements are power for moving boat												
Bottom hand – palm open												
Top hand – fingers are relaxed												
Wrists are neutral												
Elbow bends in latter part of stroke to allow for proper hand and paddle movts.												
Blade exits at hip – accelerates thru exit												
Athlete finishes it off – connection throughout the stroke												
Paddle always in front of chest												
Hands always in front of hips												
Boat is level												