

# KTO: Teaching and Coaching Observation Tool

A practical tool by John Komar, Irfan Ismail & Jia Yi Chow, National Institute of Education, Singapore

The observation tool was designed to observe pedagogical activities performed by the teacher/coach within the three pedagogical channels – practice, instruction and feedback, following the teaching/coaching activities in Table 1.

Instructions to fill in the observation tool are as follows:



During the lesson, click [Here](#) to code the teaching/coaching activities: select all the teaching activities observed through all three pedagogical channels and click on “update” to record the information – one teacher intervention can therefore be a combination of multiple teaching behaviours. Thereafter, repeat the same process for every intervention from the teacher/coach

- Each observation represents a new content during the lesson, i.e., a new pedagogical activity. **Every time the students go and practice, you should click on “update” in the webApp.** Conversely, all the information provided by the teacher (i.e., about task organization, instruction or feedback) before the teacher sends the students to practice are captured as a single global “pedagogical activity”. This excludes activities like instructions for organization (e.g., get into pairs) or motivational feedbacks (e.g., praises).



At the end of the lesson: download the report in pdf and the coded data if necessary

- Each column in the file represents a teaching action. Each row in the file represents a global pedagogical intervention. Each pedagogical intervention can be coded and contain more than one teaching actions. For example, a prescriptive feedback that focuses on how to hit the shuttle should be classified under both “prescriptive” and “movement form”.



Table 1. Teaching Actions classification and definitions

Teaching Actions Classification	Definition
<b>Practice Organization</b>	
<b>Isolated technical skill practice</b>	Practice that focuses on one technique or skill in a de-contextualized environment (e.g., isolated dribbling drills, static passing drills, repetition of drills outside of context and without opponent, hitting a static ball on the tee).
<b>Game Representative practice</b>	Practice that has representative learning situations that mimic real game situations (e.g., practice drills that include opponent e.g., 1v1, 1v2...)
<b>Modified game</b>	Simulation of game with manipulation of task constraints like rules, equipment and task conditions (e.g., the use of scoring zones rather than goals, use 6 goals/baskets instead of 2, fencing with foam stick, different net heights).
<b>Small sided game</b>	Small sided game without conditions (e.g., 5v5 small-sided football game without other additional task conditions, 1v1 tennis on half court).
<b>Regular play</b>	Regular activity without specific rules/conditions (e.g., 5v5 basketball play, 11v11 football play, 1v1 or 2v2 tennis)
<b>Repetitive task</b>	Task includes repeating a movement continuously without any change (e.g., continuous passing and catching drill)
<b>Room for variability</b>	Practice allows for some variability in movement but this variability is not directly promoted by the teacher (e.g., allowing the ball to be kicked in different ways, allow to serve in multiple directions).
<b>Infusion of space variability</b>	Intentional variation of space in the practice within a single task or between successive tasks (e.g., using different sized courts that students can visit alternatively).
<b>Infusion of players variability</b>	Intentional variation of players in the practice within a single task or between successive tasks (e.g., playing with different number of opponents - 1v1, 2v1, 3v2).
<b>Infusion of equipment variability</b>	Variation of equipment used in the practice (e.g., using different sized balls, racquets).

Table 1. Teaching Actions classification and definitions (cont.)

Teaching Actions Classification	Definition
<b>Instruction</b>	
<b>Prescriptive instruction</b>	Instructions of optimal and recommended movement patterns based on biomechanical research (e.g., specific information on how to grip the racket, how to perform a swimming stroke).
<b>Use of analogy</b>	Using an analogy to describe rather than a prescribed movement form, drawing attention to the similarity from one movement to another (e.g., throw the ball so that it travels 'like a rainbow', glide like a torpedo in swimming).
<b>Movement form</b>	Specific instruction that focuses on a preferred movement pattern. (e.g., instructing students to lean the body back, inside foot to contact below the midpoint of the ball for a lofted pass)
<b>Movement outcomes/effect</b>	Instructions that require students to focus on outcome rather than specific instructions on technique (e.g., focus on the trajectory of the ball flight in golf, on the sound of the ball at impact, push the wall backwards when pushing in swimming).
<b>Verbal promotion of variability</b>	Encourage students to search and explore individualized movement solutions in the absence of prescriptive instructions (e.g., "try something else!", "explore other solutions!", "what other solutions can you imagine?").
<b>Feedback</b>	
<b>Prescriptive feedback</b>	Feedback that focuses on optimal and recommended movement patterns based on biomechanical research (e.g., you should angle your racket face towards the floor more).
<b>Use of analogy</b>	Using an analogy to describe rather than a prescribed movement form, drawing attention to the similarity from one movement to another (e.g., throw the ball so that it travels 'like a rainbow', move up the racket like you follow the hypotenuse in table tennis).
<b>Movement forms</b>	Feedback that focuses on parts of the body used in the action (e.g., focus on the arm swing, focus on how you manage your body when you glide in swimming).
<b>Movement outcomes/effect</b>	Feedback that focuses on the effect of the action performed on the environment (e.g., "what sound did the ball at impact?", "how much defenders did you attract?").
<b>Feedback on variability</b>	Questioning students on individualized movement solutions or multiple solutions they found (e.g., "think of other ways to get the ball over"; "explore different ways to get past the player")