Teaching Tips for Simplification

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Designing developmentally appropriate learning experiences requires an understanding of an instructional strategy known as simplification. Simplification, as the term implies, reduces the level of difficulty of a task, or some aspect of a task, for the learner. What follows are ideas regarding implementation of this strategy to accommodate a variety of individual characteristics of learners in your charge, such as developmental status, skill level, and body size.

Modifying Equipment

According to Rink (2002), modifying equipment is "one of the most useful ways to reduce the difficulty or complexity of performance in learning skills" (p. 114). By manipulating size, length, and/or weight, objects can be more easily controlled. Larger balls increase the likelihood of a successful catch or kick. Oversize racket heads, lacrosse baskets, hockey blades, or bat barrels create a larger surface for more hitting success. Shorter and/or lighter striking implements are easier to swing.

To accommodate smaller hand sizes, use smaller balls, batons, and implements with smaller grips. Other objects may be more easily grasped due to composition (surface or softness). Softer balls not only increase the chance of gripping/hanging on, but provide for lower bounce heights and decrease chance of injury. Similarly, anti-slip grips improve grasp while cushioning impacts.

Reducing Coordination Requirements

Another approach to simplify a skill for a learner is to reduce its coordination requirements. For example, reduce or eliminate the need to change positions or locations when performing the skill. Initial learning of projectile skills such as dribbling, shooting, kicking, striking, or bumping a ball should occur from a stationary position. Likewise, when teaching to receive objects, toss, throw, or roll balls directly to the learner.

Other aspects of a skill that can be manipulated, provided the underlying dynamics of the skill remain intact, include balance, accuracy, force, and speed. Use training wheels on bicycles and inline skates to assist the student in maintaining good balance. Similarly, increase the size of targets or goal areas so less accuracy is needed to be successful. Reduce the force necessary to perform some movements by lowering baskets or serving from half-court rather than the baseline. Allow swimmers with weak kicks to use fins on occasion, generating enough propulsion that they can then focus on other aspects of the stroke. Finally, slow down the tempo at which a skill is performed, such as when juggling scarves are substituted for balls. Slower
Table 2—Strategies for Reducing the Coordination Requirements of a Skill

- Reduce or eliminate the need to change positions or locations
- Reduce balance requirement
- Decrease accuracy requirement
- Reduce speed or force at which the movement is performed

Moving objects give learners more time to perform required movements (Magill, 2004).

Decrease the Complexity of the Performance Environment

Skills can be classified on a continuum according to the predictability of the environment in which each skill is performed. Closed skills take place in environments that do not change. Because the environment is predictable, the performer has control over what the action is and when to begin it. In an open skill, on the other hand, the environment changes and is unpredictable. The consequence of having to conform actions to an ever-changing environment is that performers do not have control over when to begin a response. Understanding this distinction between closed and open tasks assists the practitioner in regulating task complexity (Coker, 2004).

When learning a new skill, students direct much conscious attention toward details within the movement itself. This means learners are then unable to focus on aspects of the environment, such as the positions of teammates or the movements of defensive players (Coker, Fischman, & Oxendine, 2006), traits inherent to open skills. Requiring learners to execute skills in an open environment too early in the learning process exceeds their attentional capacity. This not only leads to decrements in performance but increased levels of frustration.

Attentional demands can be reduced by eliminating defenders or even, at the earliest stages of learning, by working with stationary objects. To make the performance environment more predictable during the transition from closed to open skill applications, communicate to the performer in advance information about where the ball is going, who to send it to, and what defenders are likely to do. The challenge is to strategically simplify skills throughout the learning process.

Conclusion

When tasks are too difficult, learners become frustrated and eventually lose interest (Kovar, Combs, Campbell, Napper-Owen, & Worrell, 2004). Consequently, skills should be sequenced in a simple to complex progression. Effective development of progressions is dependent on the teacher’s ability to manipulate aspects of skills to facilitate acquisition. Tasks can be simplified via equipment modification, reducing the coordination requirements of the skill, and decreasing the complexity of the performance environment. This provides learners with an increased chance of success while still developing fundamental movement proficiency.

References