# External Attention for Teaching Sport Skills

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Teaching basic sport skills to students lays the foundation for future success in physical education, sports, and fitness. The teaching of these skills typically follows this pattern: the teacher introduces the skill and demonstrates it, and then the students practice the skill while the teacher provides feedback. Feedback is perhaps the most important component in this skill acquisition process. The type of feedback, the frequency of feedback, and the length of feedback all contribute to the learning of sport skills.

In recent years, evidence regarding the best practice for providing feedback, specifically as it relates to the focus of attention when executing motor skills, has emerged (Wulf & Prinz, 2001). Should the feedback focus on the movement itself (internal focus) or on movement effects (external focus)? Physical education teachers have usually put the focus more on the internal aspect of skills. Feedback statements such as "keep your elbows locked," "bend your knees," and "reach high and snap" have been the standard cues for basic sport-skill instruction. The focus is on the movement action rather than on the effects of the movement. In light of recent research, physical education teachers should explore the effectiveness of using a more external focus of attention when instructing students. The evidence is clear that an external focus has a positive effect on skill acquisition. The purpose of this article is to challenge physical education teachers at all levels to begin providing more instructional feedback within external focus.

Several research studies exploring the effectiveness of focusing on movement effects versus movement itself have demonstrated the benefits of the former (Wulf, McConnel, Gartner, & Schwarz, 2002). Some of the studies have looked at specific sport skills such as those for golf (Wulf, & Jiang, 2007; Wulf, Lauterbach, & Toole, 1999), basketball (Al-Abood, Bennett, Hernandez, Ashford, & Davids, 2002), soccer, and volleyball (Wulf et al., 2002), demonstrating support for using an external focus of attention rather than only an internal one.

An external focus appears to free the student from concentrating too much on the actual movement, and allows him or her to focus more on the effects of the movement. Overcoming what we often refer to as "analysis paralysis," participants focus on the effects of their actions. The movement pattern becomes more "automatic," demonstrating a smooth, coordinated response (Wulf, McNevin, & Shea, 2001). It is also interesting to note that although the emphasis of an external focus is not on technique, players "do not need direct references to their body movements in order to acquire the correct technique" (Wulf et al., 2002, p. 176).

For teachers, emphasizing the effect of the movement rather than the movement itself will require using different types of feedback statements. For example, when being taught the overhand serve in volleyball, students typically hear "toss the ball in front of your hitting arm; step forward with the opposite foot, and reach to make contact." If the focus of attention shifts to the external effects, cues might include "toss the ball up, and see the ball to the serving zone." In soccer, when teaching how to kick the ball, the teacher can suggest making the leg like a pendulum going all the way back and forward. For shooting in basketball the feedback would focus on the ball trajectory relative to the basket, and feedback statements might include "arch the ball into the hoop" or "see the rainbow." In golf, an instructor might suggest to take the club face to the flag. In all these feedback statements, the external focus shifts away from the student's own body movements and instead concentrates on the desired effect of the movement. Rather than the performer nervously trying to focus on the specific sport-skill technique, the focus is on the desired effect.

The results of using this type of feedback are encouraging. Practicing with this external perspective allows students to explore and discover the best movement to achieve the desired effect. This "discovery learning" approach makes the learning more meaningful to the learner and enables him or her to transfer the basic skill to many different situations

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and settings (Wulf et al., 2001). This transfer of learning is exactly what teachers want their students in physical education to be able to do, as this will encourage them to be lifelong learners.

While placing the emphasis on the external effects of the movement rather than the movement dynamic may be different than the way physical educators have traditionally taught sport skills, it has merit and should be explored. Perhaps educators have too long overloaded students with too much feedback focusing on the internal cues. Perhaps they are not allowing students to develop their own motor patterns. While it is not necessary to totally abandon references to a player's movement (internal focus), physical educators do need to encourage a more external focus of attention. The end result will be students who will experience freedom to explore and learn sport skills from the external effects of their movements. This is learning from the outside, in.

## References


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