

Follow Through and Other Lesson Myths

sional 5A, and the Head of Tennis Canada Coaching Development & Approach and its application to all levels. He has written coaching artiaccessed on his website www.acecoach.com

Just for the record, let me start by saying that every player requires a good follow through. This article is not about saying there is no such thing as a follow through but, that this critical tennis movement (and others) are used as inefficient teaching points by mistakenly connecting false results to them.

It is easy to see numerous teaching materials where the follow through is said to give more power, better depth, more spin, and add height to the ball. It is even believed to control direction (if one follows through in the direction they want to send the ball). In other words, the follow through is touted as a key problem solving element for players. Even in the 21st century, these misconceptions are still spread by coaches in lessons, tennis publications and videos.

Ball Control & Problem Solving

Ball control is the #1 way players solve problems on court. For example, if an opponent comes to the net (a problem, since they have a positioning advantage), you can solve the problem by controlling the ball's height (send a lob) and make them give up the net. If you need to make an opponent move, you can control the ball's direction and send it away from the opponent, etc. To successfully play tennis, players need to know what makes the ball do what they want.

Direct vs Indirect

The follow through (and other movements) while helpful, don't directly determine what the ball does. Manipulating the ball is determined by what the racquet does to the ball at impact. The racquet's Path, Angle and Speed (called the P.A.S. Principles) are all determining factors for ball control. The characteristics of the ball the player receives also determines what a ball does, however, for this article, we will limit our discussion to projection (rather than reception) elements.

The follow through is simply a byproduct, a result, of the PAS elements. For example, if one has a moderately low to high swing path and good speed, a 'traditional' follow through will be the result (unless a player makes an additional effort to stop the racquet).

Follow though is simply a byproduct, a result of the PAS elements (Path, Angle, Speed of racquet through Impact)

So, what's the harm in using something like the follow through as a ball control teaching point? Imagine a typical lesson. The player wants to learn to hit the ball crosscourt. The coach tells her to line up her feet and shoulders in the direction she wants to hit, impact earlier, and follow through in the direction of the shot. While it is true all of these elements are helpful, a student can do all of them and still not have the appropriate racquet face angle at impact (the true determining factor of direction).

The result, a frustrated player who did what the coach said and still didn't have good results. For many players this is the reason they drop tennis. ("What an impossible game. I did what the coach said and it still doesn't work. This is too tough, I think I will try brain surgery.")

Since these movements really don't control what the ball does, trying to use them to control the ball leads to dissatisfaction. What is so misleading is that, while it is true having the right PAS at impact will give you a follow through, the reverse, (controlling the follow through to somehow control the PAS), will not. The ball control problems players encounter on the court are only **indirectly** influenced by stroke movements.

A student should get more information about how to make the ball do what they want in a lesson than how their technique is supposed to 'look'.

Here are some other 'coaching myths' (indirect instructions) out there and the real truth behind the techniques.

MYTHS	TRUTH
Turn your hips for more power. Bend your knees on the serve for more power.	One can do both those movements and not hit any harder. Racquet velocity is the true determining factor for power. If movements don't add up to more velocity, no power results.
Step into the ball for more power on volleys and groundstrokes.	This is related to the point above. One can step into the ball and still not send it hard. Transferring one's weight is not a major contributor to racquet speed (although it helps). Using rotational force (called angular momentum) is more effective for creating speed, and top players use a combination of turning and transferring weight (angular and linear force). But again, no velocity = no power.
Use topspin to get more power.	Adding spin decreases the forward velocity of the ball. The direction of the racquet speed is the important point. For example, a 50 mph flat swing will have more forward power than a 50 mph low to high swing. The resulting topspin will decrease the forward power of the ball.
Bend your knees for more height.	It is totally possible to fully bend one's knees and still hit the net. What a coach is really trying to say is, "If you start your racquet below the level of the ball and rise through the impact, this will send the ball higher. Lowering your body will help to get the racquet lower than the impact." Great coach, so why do you think telling someone to, "bend your knees" will automatically do all that?
	The racquet angle and low to high racquet path through the impact is the determining factor for height.
Stop to be balanced for your shot. (groundstrokes and volleys)	Being balanced is a crucial aspect of any shot, however, balanced and 'stopped' are not the same thing. Stopping will often 'put on the brakes' for all the movements required in a stroke. One can be in 'dynamic balance' and still have movement (just watch the pros groundstrokes and volleys).
Take your racquet back. (on groundstrokes)	This common misconception separates racquet from body movement and leads to overusing the arm inefficiently in the stroke. It is the body turn (especially the shoulder preparation) that prepares the racquet more than 'independent' arm movements. A coach should look for the body preparing correctly to set the racquet.
Roll over the ball for topspin, under for underspin and 'around' the ball for serve slice.	Fortunately, this myth was put to rest a long time ago, but it bears repeating. Spin results from the path of the racquet and the angle of the racquet being different (e.g. topspin results with a vertical racquet face and a low to high path).
	An impact is only milliseconds long, not enough time to 'roll' the ball. On a topspin groundstroke, the racquet will often roll <i>after</i> a heavy spin shot, but only as the result of the racquet path and rotation of the forearm. The ball is long gone by the time the racquet rolls. Trying to roll the racquet will not produce the spin.

(continued on Page 28)

Follow Through and Other Myths

It is all too easy to fall into the trap of 'indirect coaching'. It is a false connection between style and results (look a certain way to project the ball a certain way). Pro players reverse that. They project the ball where they want and that's why they look a certain way. This also accounts for the big variation in the styles of top players. They all get the physics of striking the ball right, otherwise it wouldn't go where they wanted. For example, Andy Roddick used to have a more 'classical' preparation on his serve. He basically went out one day and tried to find a way to hit it harder and came up with what is now called the 'abbreviated preparation'.

One can also see these style variations in the way top players prepare their body and racquet on forehand groundstrokes. They all prepare at the optimal time, however, some prepare their racquet in a big loop, some prepare straight back, and some take it down then up.

So what does this mean for coaches and players?

Coaches need to coach technique based on principles rather than conforming people to the 'look' of a stroke. As long as the principles are adhered to, each individual will work out their own unique style. Coaches should only make changes when the principles are not working, not when a student doesn't look a certain way.

The key principles that govern technical stroke development are the three Es:

Effective

The technique must allow the player to make the ball go the direction, height, distance, speed and spin it should to perform the tactic the player selects

• Efficient

The technique must not stress the body or joints in a way that promotes injury

Economical

The technique must not waste movement or energy



Pros don't try to look a certain way to send the ball, they send the ball and as a result, look a certain way.

Most coaches know about these principles, and will agree that technique should be individualized for the player, however, the reality is, they coach everybody the same way and conform them to the same style. By using technical principles rather than technical myths, coaches can develop technically strong players within their individual styles.

