

SMART COACHING

Guy Claxton, University of Bristol and John Allpress, The FA discuss Smart Coaching: Working with the Grain of the Brain.

Nobody was ever taught how to play football. No coach can make anyone into a great footballer. No amount of practice will work unless the will and the awareness are there. You can take a horse to water but you cannot make it drink; and you can take kids to training, but you cannot make them learn. Learning is something they do. Coaching is one of many support mechanisms for learning. Coaching is only smart when it is based on the best of what we know about learning.

TIME is of the essence for young footballers especially those hoping to become professional players. If teaching and coaching don't engage young footballers' learning energy, as coaches you are wasting your time and more

importantly theirs. It's no use saying 'Well, I taught them' or 'I've shown them a dozen times'. If they haven't learned it, it's not because they are lazy or stupid or inattentive. It's because you haven't found the 'clutch' that connects their learning brains to their feet.

The word 'brain' is crucial. Learning football is about programming the brain. And we now know a lot more about the brain than we did 20 years ago.

- We know that brute 'practice' is not enough.
- We know that brains are exquisite imitators, always ready to soak up useful habits and ideas from those around - if they are encouraged to.
- We know that imagination is a powerful learning tool, through which brains amplify their own 'learning power'.
- We know that thinking about what you are doing is sometimes helpful, and mostly counter-productive. Think at the wrong moment and you will stop your brain seizing the vital opportunity.

Smart coaches are continually updating their knowledge of how the brain learns, so they can adjust their work accordingly. Less enlightened coaches keep on doing what they've done for 30 years, because they think they already know all there is to know about coaching. They are not good learners themselves. They never stop and take a long hard look at their own effectiveness. Ultimately, the quality of their players may reflect the willingness of the coaches to keep on learning.

There is a new subject that is growing in universities. It is called 'the learning sciences'. It combines brain science, psychology, and the study of how people learn in groups. One of the foundations of the learning sciences is the realisation that learning itself is learnable. How effectively you learn does not depend on some hypothetical dollop of 'ability' they gave you when you are born. People learn to be good or bad at learning. And, as learning has many aspects and components to it, people grow up with a rather chequered portfolio of learning skills and attitudes. Young or old, student or





teacher, player or coach, we have all picked up a mixed bag of learning strategies that is always capable of improvement. Most of us don't even know what our 'learning profile' looks like. And we don't understand that developing our 'learning power' is possible. Smart coaches see that turbo-charging the learning power of their young players is one of the smartest things they can do. They want to be a clued-up part of the Learning Game, as well as the beautiful game.

WHAT DOES LEARNING FOOTBALL INVOLVE?

Observing. The brain learns a tremendous amount not just from doing but from watching (and listening too). Seeing clearly how the ball curves. Hearing the sound that different kicks make. Noticing where more experienced players are running off the ball. You don't have to think. Just being attentive is enough to get the brain fine-tuning itself. Time spent watching not just games and goals, but how older players practise, for example, is time well spent.

The brain is built to suck up useful information by itself. Too much self-talk gets in the way. Anxiety and self-consciousness can close down

observation all together. Pressure tends to narrow the 'cone of attention'. We stop seeing what is going on out of the corner of our eye - and so miss opportunities. Gradually learning to keep all your senses wide open under increasing pressure - to keep feeding the brain with the information it needs - is vital. Smart coaches have a programme that strengthens this resilience. They help players develop their powers of observation.

Practising vs. experimenting. The brain can do two competing kinds of physical learning. One is aimed at precision, efficiency and reliability. That kind of learning is called practising. Repetition leads to smooth, effortless, automated expertise. The other kind of learning is called experimenting (or sometimes just 'playing'). After you have practised for a bit, try something different. You mess about and see what happens. You try it with the left foot instead of the right. Experimenting develops flexibility - the ability to be unpredictable - and the perception to see that tiny differences in an opponent's body movement can make you do it one way rather than another.

The learning brain needs both, because



expertise requires both reliability and flexibility. But it needs to know whether it is doing practising or experimenting, or it gets confused. For example, in practising, the goal is to minimise mistakes, while in experimenting, the goal is to create interesting 'mistakes', and learn from them. Smart coaches need to have this flexible attitude towards mistakes, and to telling their players clearly when mistakes are welcome and when they are not. But more than that, they to make sure that players are developing their own pleasure in making and learning from interesting kinds of mistakes - and not assuming that all mistakes are bad. Fear of making mistakes is a powerful inhibitor of creativity and inventiveness - both hallmarks of the most effective footballers.

Imagining. Recent research shows that the brain tunes itself powerfully through mental practising and mental experimentation. We can learn the knack of running the brain circuits that are involved in skilled action, while suppressing the actual physical movements to which they would normally give rise. And when we do so, the brain learns. Mental rehearsal is a powerful adjunct to running around. And mental experimentation supports the development of flexibility and creativity. Not every 11 year old, say, is equally adept at these two kinds of imagination - but they can all get better at it, over time, just as they can get better at marking or dribbling. Smart coaches help them systematically build up their powers of imagination, and in return for this investment, their players get an extra half-hour's learning as they lie in bed before they fall asleep.

There are many more examples we could give of how the Learning Sciences can help coaches become more effective - but you get the idea. By understanding more about how the brain learns, they can help their players become more powerful learners.

10 years or 10000 hours of practice to become an expert! Turbo-charged learners can get three hours of learning out of every hour of training. Who wouldn't want that?