



## A Neuro-physiological Basis for Developing Future Skilful Players

Why The Give Us Back Our Game approach is THE best way to produce Young Gifted Players.

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*The reason that most traditional football teaching techniques and commercial coaching programmes often fail to deliver is because they are based upon outdated models of how young children actually acquire new skills.*

The majority of methods used by coaches to develop football skills in our young children consist primarily of skill drills with lots of repetition of the skill to be learned. Approaches such as these are based upon the notion that as a child first attempts to learn a new football skill, the body begins to lay down a neuromuscular or motor 'pattern' of movement that the player can access whenever he or she plays football. The young player, in terms of skill acquisition, is viewed as a 'motor pattern learner' and, so the theory goes, by repeating or practising the movement or skill, the 'pattern' eventually becomes engrained into the player's neuromuscular football-related arsenal of skills. Possibly, the coach may have 'demonstrated' the technique to be learned.

There are several problems with this very common approach. The first problem arises when the player has to use the skill in the ever-changing environment of real football play. Techniques learned by the player on their own usually do not transfer into effectiveness in matchplay or games. Why? Because, essentially, the player has to 're-learn' the skill (almost from scratch) *within* the ever-changing context of playing the game. As a result, it makes you wonder whether the skill would have been better taught within the game context in the first place in order to save time. Secondly, this 'motor programme' approach grossly underestimates the abilities of children (and their neuromuscular systems) to learn highly complex movements quickly if given the correct environment and stimuli. Furthermore, by trying to duplicate the demonstrated movements of the

coach, the player-learner will be less likely to experiment and find his/her own ways of manipulating his/her body (and the ball) in order to be successful on the pitch. History shows that the best players developed their own way of playing and being skilful.

The Give Us Back Our Game approach to player development is different. The not-for-profit campaign views the player-learner as a whole child whose learning and skill acquisition comes not from repetition or mimicking a coach's demonstration, but from 'interacting' and playing within adapted matchplay and games (e.g. small-sided games). Instead of a theoretical basis that has the development of 'motor patterns' as its goal, Give Us Back Our Game draws upon 'constraint-led approaches' in skill acquisition and a 'dynamical systems' approach to learning new tasks. These relatively modern approaches to skill acquisition and player development view young player-learners as very highly developed, adaptable and responsive learners who are highly reactive to the changing environment and stimuli encountered during football. Real and lasting learning and skill development arises out of *interaction* with the game, the environment and the other players on the pitch.

As a result, these relatively modern approaches redirect the focus of player development back onto the use of play-based activities and adapted, small-sided games that most effectively and most quickly advance a player's football development. Real football learning and skill development arises not from repetition of one-dimensional movement patterns, but rather from an interaction and adaptation to the specific demands of the task or game being played. From a neurological perspective, the billions and billions of 'neural networks' in each young player help him or her to first analyse, and then develop, skilful solutions to the problems encountered during football play. If the boy or girl play enough small-sided games, the ability of the child to be a successful problem-solver on the pitch (that is, to be skilful) *within the context of the game* increases dramatically. Physiologically, performing successful skills in football is a highly complex task involving coordination, strength, spatial awareness, body control *in the context of the immediate challenge* facing the player. To young players, each of these

challenges is unique and children need as much gameplay as possible to decipher situations and find solutions using their new skills. Hence, the dicta...*let the game be the teacher and let the children play!* The coach's role is to *manipulate and adapt* the small-sided game so that particular skills and abilities are developed *in context* where players (and their neural networks) are provided with plentiful and varied opportunities to analyse, synthesise, act, react, make mistakes, try new things and have fun during football play. Several of the games and the abilities they develop can be found on [www.giveusbackourgame.co.uk](http://www.giveusbackourgame.co.uk). The results are a more matchplay-related, faster and more robust learning of the skills needed to successfully meet the challenges that playing football offers and that young players so enjoy.

But you won't get this by playing 7 v 7, 8 v 8 or 11 v 11 where players hardly touch the ball and play in set positions. You won't get it in the current system because the physical requirement for young players is too high and there are too many influences distracting children from learning, such as spectators and, too often, coaches. Furthermore, studies from our Department found that in terms of number of touches of the ball, number of passes, number of shots and number of 1 v 1 encounters, 7 v 7 and 8 v 8 were quite similar to 11-a-side football. We concluded that 3 v 3, 4 v 4 and 5 v 5 were the optimal small-sided games for the 5 - 12 age groups as they combined optimal number of touches without being too strenuous (as in 2 v 2 or 1 v 1 football). Certainly Rinus Michels and others had no knowledge of current learning theories; they simply used commonsense to decide that smaller-sided games, and 4 v 4 in particular, were most appropriate and effective for developing good young footballers. It is only now, from current theoretical data and what we see on the pitch, that we see that the approach has too many merits to ignore. Add to this the Give Us Back Our Game demand for more ethical playing environments and more child-centred approaches and you have a solid blueprint for developing young, gifted British players. But we are already playing catch-up with other countries!

Tips for coaches:

Use the GUBOG 80/20 rule for training and matchplay (if possible). 80% (or more) of the training time should be spent with the children playing adapted small-sided games. The remaining 20% can be used for warming-up, instruction and other fun non-football games that develop multilateral co-ordination. Small-sided games are a more effective and more matchplay-specific method for learning skills than drills. Drills are too far removed from actual play to be highly effective;

Mistakes are good! Praise the bravery that goes into trying. Studies show that children either take no notice of criticism or play worse as a result;

Evidence shows that the first coach a young player has is vital for instilling a love of the game by creating a safe, non-threatening and enjoyable environment in which children can learn. By giving some ownership of training to the boys and girls themselves and by letting them make some decisions, you foster independent learning;

Training should be variable so that learners can explore and discover their own solutions to football problems. Remember that history shows that the best players developed their own way of playing skilfully and achieving success on the pitch.

'Instruction' from coaches can be used - but this should be in the form of 'nuggets of information' that the player can quickly and repeatedly attempt in a small-sided game.

Demonstrate only briefly then let players experiment and try to find their own way of performing a movement or skill.

Use guided discovery and question-and-answer techniques rather than prescriptive coaching.

In the Give Us Back Our Game approach, coaches shape and guide rather than direct; and know that game intelligence and skill can be more quickly and more effectively developed by the use of adapted, game-related activities.

Let the Children Play!

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[www.giveusbackourgame.co.uk](http://www.giveusbackourgame.co.uk)

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