BUILDING LEARNING POWER:
THE KEY TO GREAT COACHING

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'Champions aren't made in gyms. Champions are made from something they have deep inside them, a desire, a vision, a dream. They have to have the skill and the will. But the will must be stronger than the skill.'

Muhammad Ali

If you want to produce good, creative footballers, don't act like a know-it-all. The best coaches are the most humble: the ones who know they aren't perfect, and are always keen to learn more. As they get better and better at coaching, so their young players get better and better at football. Being around a coach who is keen to learn, open to new ideas, willing to try something fresh, young players pick up the learning spirit. It rubs off – just as being cocky, dogmatic or impatient rubs off. A good coach wants to become a great coach, for two reasons: because knowledge is changing fast and they need to keep up, and because their attitudes influence, for better or worse, the developing learning attitudes and skills of the players.

Learn more about what? About the game of football, obviously. About the youngsters they are coaching. And about learning itself. This article is mainly about the last one of these. Coaches need to understand how people learn, because coaching and teaching are only effective if they engage learning. If you think that all you have to do is warm them up, tell them, show them and correct them, you won't be very effective. Learning is more complicated – and more interesting – than that. Our intention is to make you a better coach, because you will be better able to engage youngsters' learning intelligence and learning enthusiasm.

All our suggestions and principles come from science. Underlying them all is one idea that scientists have proven beyond doubt: people can not only be helped to learn better; they can be helped to become more powerful and independent learners in their own right. A powerful learner can get three times as much learning out of a two-hour training session as a weak learner. Great coaches know how to turbo-charge their youngsters' learning, so they get better faster. We want to tell you about this new science, and how to put it into practice. It shows how the coach can encourage the development of powerful learning habits of mind and give players the confidence to learn how to learn. Before we get into the details of these learning habits of mind, here are four suggestions about learning, to get you warmed up.

Good coaches know when to shut up

Good learning involves a mixture of watching, listening, thinking, imagining, talking and trying things out. To be a good coach, the first thing is to get these

ingredients in the right balance and in the right order. For example, it's good to be thinking about what you are doing – but not if it makes you self-conscious, especially in the big game. Research has found that the more people are trying to remember what they have been told, when under pressure, the more their performance gets rigid or falls to bits. So a good coach's job is to nudge and guide learning, not to try to force it. The best they can do is know how to do that skilfully. They can't *make* learning happen, however much they show and tell and correct, or however loud they shout. Great coaches know that less is often more, when it comes to learning.

So a good coach needs to be sparing with their good advice. Not many people make mayonnaise these days. If you do, you will know there is one cardinal rule. You put the egg yolks and a bit of vinegar in a bowl, and then you add one drop of oil, and beat it like hell. When that drop is worked in, you add another drop, and beat again. Only after you have added a lot of drops one by one can you start to add the oil faster. If you don't follow this rule, your mayonnaise curdles and it is no good. Good coaching is like making mayonnaise. With young players especially, you add instruction very slowly, and allow them lots of time to incorporate it through practice. If you teach them too much too quickly, their minds will curdle, and in a game they will be trying to *remember* what you have told them, rather than having had the time to blend it into the way their feet and their eyes are working. Time to consolidate is usually time well spent.

Learning is 90% about what is going on at the learners' end and 10% about what the coach is doing. The learner is responsible for their mistakes and their success. There are good coaches who understand this principle and other coaches who are very busy, noisy and even domineering but who do not create much learning; simply because they do not know what learning involves and how their actions can help or hinder it. Any coach in any sport who believes an understanding of how their players learn is irrelevant is just plain wrong. They are wilfully making themselves less effective.

Good coaches understand and explain learning
Learners often get frustrated and fed up, and stop trying, simply because they have got the wrong idea about how learning progresses. They think they ought to be able to do everything right first time, and get rattled when they seem not to be making progress. They think if they are uncertain or confused, that means they weren't listening properly, or aren't very bright. They think that asking for help is a sign of weakness.

If you have players in your squad who have picked up ideas like this, they need to be tackled head on. This is the second warm-up suggestion: talk to your players about learning. Learning is *always* confusing, uncertain and erratic, and sometimes slow. Mistakes are *essential*. It is part and parcel of being a good learner that you can tolerate set-backs. The more time you spend being upset about a mistake and feeling stupid, the less time you are spending on learning from it. People who are afraid to ask for help, or who always take feedback personally, are cutting themselves off from one of the most powerful drivers of learning there is. A team that is terrified of making a mistake is a team that plays like 11 anxious robots. And over the long run it will be a losing team, because it isn't getting any better, and other teams, with more learning-savvy coaches, are overtaking them.

Much learning involves exhilarating spurts, frustrating plateaus and upsetting setbacks. It rarely proceeds on a smooth upwards curve. To expect it to is a recipe for unnecessary frustration. So the coach needs to help people get a realistic picture of what learning involves and how long it takes. You should do this is two ways. Firstly, you should directly talk to players about learning, and challenge any unhelpful ideas they may have picked up, Secondly, you need to embed your

understanding of the need for mistakes and the erratic nature of learning in how you respond to successes and failures as they come along. If young footballers are encouraged by their coaches to tolerate the uncertainty that learning involves, the more adventurous they will be, the quicker they will learn and the more creative they will become.

Learning is an emotional business

Good coaches need to understand something about the relationship between learning and people's emotions. You don't need to turn into a counsellor, but it is smart to understand that learning is an inherently emotional business. Being a learner means: not being able to do it right yet – but being willing to have a go and flounder and keep at it till you've got it. And in that floundering stage people feel insecure and vulnerable. Learning means daring to let go of doing it the way you are used to, and trying it a different way, in the hope that the new way will be better. So you feel out of control for a while. That's just the way it is. So accepting a bit of anxiety, and letting the kids know that it's OK to be a bit anxious, is not a bad idea. True failure is not being willing to try, rather than making a mistake while striving to conquer a new skill or take on board new ideas. It is good to lead by example, and tell a few of your own war stories about the times you were willing to look a fool (and how it all turned out all right in the end!)

So smart learners don't try to pretend they don't have any feelings. Trying to look calm and in control all the time isn't cool, it's stupid, because it stifles learning That's why the resilience to tolerate the emotions is so important. Feelings are absolutely integral to learning. They are the vital indicators of learning and how it's going, and we ignore them at our peril. The third warm-up suggestion is: don't be frightened of players' emotions, and don't stigmatise them. They are mostly natural and can be helpful, if treated rightly.

Football is a really complicated game. It's not like darts, where everything stays still except you, and you can throw in your own time. Football is a game of uncertainty, where nothing ever happens exactly the same twice but similar things happen a lot of the time. What does this mean for the coach? It means that drilling young players in how to do X and Y is not as helpful as building in them the courage and ball sense to think fast on their feet. Because learning is sometimes stressful, a good coach also knows when to lighten up and have a laugh. Football, as they say, matters more than life and death. And it is also just a game.

Good coaches know their players' learning strengths and weaknesses

Zac and Josh are both fourteen. They play for the same club and are friends and rivals; both boys play in similar positions and are regarded as good 'prospects' by the coach. Zac and Josh are very different. Although the boys are only born a month apart Zac is physically more developed and would pass for sixteen; Josh is smaller with a lot of catching up to in the physical domain but is well balanced and agile whereas Zac can be cumbersome.

Zac dominates matches through his physicality and can easily be identified as an 'effective' player. While Josh sometimes struggles to make an impact in matches he has very advanced football skills which he can use to good effect if given the opportunity. On the face of it Zac has few problems whereas Josh often appears 'flat to the boards' just to keep up.

At training both boys are working their way through a technical practice which both for different reasons find relatively easy; but then the coach asks the players to rise to another challenge and Zac finds that he is beginning to struggle.

He watches Josh to see how he is coping and then whispers to him as he finishes a turn 'this practice is stupid'. Josh meanwhile has been giving it his best shot;

slowing down a bit, trying out different ways to finish the challenge and completing the task regularly while Zac is struggling to finish at all.

When they move onto another exercise that Zac can normally complete easily he is still upset and struggles at that too.

Resilience is a key element to effective learning and the experience of staying engaged with something that has not yet been mastered or understood demands stick ability of a high order and a positive attitude towards the task in hand.

Both Zac and Josh are good players, but Zac may have a lower tolerance to deal with frustration and quickly gets upset if things are not going well. Instead of focussing on trying to solve his problems, his priority seemed to be to save face by criticising the coach and blaming the practice.

Josh experiences his difficulties as a challenge; Zac perceives his failure as a threat and is ashamed of his difficulty. When Josh encounters difficulty he is not only more resilient but also more resourceful; he ingeniously seeks out new ways to beat the challenge set by the coach. He has more strings to his bow, and if his first attempt is unsuccessful he is not stumped. When he doesn't know exactly what to do, he has things he can try. He has more tools in his learning tool box: a greater range and variety of learning and problem solving strategies that he can call on. His resilience and resourcefulness positively reinforce one another.

Because he has a greater learning capacity he feels more confident when things get difficult, he tries harder and with more ingenuity than Zac who is not used to things going wrong for him that often. Therefore Josh may be more likely to discover new ways to crack the problems that the game gives him.

It is therefore vital that the boys' coach learns how to challenge and support both of them. They are both talented though plainly have different needs and if exposed to one dimensional 'one size fits all' coaching these needs will probably not be recognised or met and their development will be slower as a result. We said at the beginning that coaches need to be continually learning about three things – and the second one was the individual differences of the players they are working with. A great coach, like a great captain, knows that to get the best out of some players you have to goad and push them, while others need more support and reassurance. So players have different strengths and weaknesses *as learners*, and the coach needs to find out what they are, and work accordingly.

Josh is already a resilient and resourceful learner. And a good learner can adapt to whatever the world of football decides to throw at them; be it a rule change, a pitch surface change, a change in strategy, circumstance or whatever, being a good learner will undoubtedly help solve the problems and meet the challenges. Zac may need more support in this regard. Zac can be helped to develop a more positive attitude to learning. If he doesn't he won't fulfil his early promise, and Josh will get in the first team ahead of him. As an American Olympic athletics coach put it, 'Smart learning trumps talent – unless talent starts to learn smart'.

Good coaches know their players. To suppose that there is one 'right way' to teach football, regardless of how old, how talented, how tired or how timid your learners are, is not smart. It is lazy. It is not good coaching to push young players too far or too fast, whilst remaining oblivious to their signals of distress or confusion.

The growth mindset: a learner's most precious asset

That was the warm-up. Now we are getting closer to the heart of what our approach is about: what makes players good at learning, and what stops some of them learning as fast as they could?

The American researcher Carol Dweck has discovered something vitally important that every coach needs to know. It is this. Deep down, even by the age of four or five, many people have decided whether their top priority in life is to Look Good (like Zac), or to Get Better (like Josh). Look Good people believe that they possess a fixed amount of 'talent', and their job is to keep convincing people that they are, indeed, 'talented'. Get Better people are not so bothered about impressing others or getting a constant stream of good reviews. They are busier learning and practising. They think that their 'talent' is not fixed but expandable – and tackling hard stuff is the way to grow their talent even more.

Dweck calls these two attitudes the 'growth mindset' and the 'fixed mindset'. They are not some kind of abstruse psychological hocus-pocus; far from it. The two belief systems have direct, practical impact on how people go about learning, and thus on how easily and how fast they develop. Josh will put in the effort and learn the strategies that will help him become the best footballer he can be. Zac may well give up as soon as the going gets tough – and that would be a shame for him, and a loss to his club. The table below spells out some of the traits and behaviours that go along with the two different views. Look at the table and see if you can recognise Zac and Josh among the players you know. Ask yourself as their coach how best you could try to meet their developmental needs. Ask yourself also who, in the long run, is more likely to succeed and therefore what learning traits a coach should support.

Fixed mindset	Growth mindset
Worry about how much ability they have but must look good at all costs.	Believe that ability to perform isn't a fixed trait that they possess but something that can be developed through learning.
Achieving successes should be easy and not require much effort to out-perform other players.	Acknowledges that learning requires hard work, practice, commitment and character.
When faced with effort, set-backs, failure or more able peers they tend to question their ability.	Recognise that effort, difficulties, failure and mistakes are an inevitable and often essential part of the learning process.
Avoid challenges that risk exposing inadequacies or mistakes.	Takes risks and thrives on challenges and views mistakes as starting points for improvement.
Experience of failure can lead to self-doubt, self-criticism and feeling inadequate, which in turn reduces motivation.	Experience of failure motivates inquiry; individual tends to seek help from more experienced sources.
Tends to rely on external rewards and praise for motivation.	Tends to be intrinsically motivated and is not reliant on external rewards or praise.
Goals tend to focus on achievement and performance that secure positive judgments and reward and avoid critical or negative ones.	Goals tend to focus on continuous personal improvement and encourage reflection on the learning process. When things go wrong has a willingness to accept feedback from knowledgeable and experienced others.
Tend not to achieve their full or expected potential and don't value effort and persistence.	Surprise people with their achievements and exceed assumed potential attributed to skilful learning and sustained effort.
Tend to quickly judge and label self and others from what they see and perceive.	Is not ego driven and tends to learn from others rather than compete and judge self and others performance.
Is emotionally fragile; tends to blame, shirk or cheat in order to preserve self-esteem	Is emotionally resilient; tends to be more generous and cooperative with team-mates

Though they might be different elsewhere – in school or at home, say – when it comes to football, Josh already has what Dweck calls the 'growth mindset', while Zac has picked up the 'fixed mindset' that is now holding him back. The good news is Dweck's second discovery: *these mindsets can be changed*. When you looked at the table, is that what you thought? Or did you just see these as personality differences you would just have to live with? Dweck has found that coaches who attribute their teams' success and failure to effort and effective practising develop the growth mindset, even in people like Zac. It takes time, and you have to be consistent, but it works for most players. Through your attitude, you can help players derive their pride and their motivation from seeing their own improvement, as much as from success itself.

The learning habits of mind

The growth mindset is the springboard that allows young players' potential to flourish and develop. Out of that mindset flow the energy, the commitment and the curiosity that turn children into great footballers. If you believe in learning, then you can develop the habits of mind that will make that learning a reality.

Thanks to his growth mindset, Wayne Rooney had the courage, the conviction, the self-awareness and the sheer bloody-mindedness to put in the hours that were needed to develop the superb football skills and awareness that he has. And his attitudes towards learning and hard work were no more God-given than his football skills are. He learned them – from his Dad, from some of his teachers, from older boys he admired, from heroes he only ever saw on television. He watched how they trapped and passed the ball, and where they ran to; and he also watched how they talked and persisted and thought about what they were doing. Those habits of mind are the tools that enabled him to get where he is today.

We now have a pretty good idea what those key habits of mind are. And we also know something about how we can encourage young people to develop them. It is from this realisation that the next generation of coaching strategies has to begin. Here are the habits of the learning mind that coaches need to know about.

Persisting

Powerful learners are determined enough to put in the long hours of training. It is estimated that it takes 10,000 hours of quality learning to get really good at any skilled activity. Champions are people who did the hard work, and who did it intelligently. By praising effort and resilience, rather than talent, or even 'success', coaches can train young players to feel pride in their own commitment. It is in small 'asides' expressing such appreciation that players pick up the values of this coach and make them their own. It also helps if coaches model persistence and resilience in their own work with players, and if they create a team spirit of mutual appreciation for effort. Not wanting to 'let the others down' is a powerful motivator, as is a degree of healthy competition.

What elite coaches call 'mental toughness' is especially important in the face of difficulty or disappointment. Resilience is the eagerness and enthusiasm to stay engaged despite confusion, uncertainty or lack of control. Without mental toughness, players easily feel threatened by setbacks. And, like all of us, when they feel threatened footballers tend to regress to their comfort zone and fall back into doing things they already know well and can do reliably. This attitude protects their self-esteem, but fails to increase their mastery of new skills and knowledge of the game.

Youngsters have to learn to become more resilient if they are to give themselves the chance to become better footballers. That means their coaches will have to be open and matter-of-fact about the feelings of frustration, disappointment, inadequacy or anxiety. It helps if they tell stories from their own experience about

their own career downs, as well as the ups, and about the self-doubt experienced by even the most illustrious players past and present. Self-doubt feels much worse if you think you are the only person in the side, or in football, who ever felt that way.

Coaches can help their teams learn the kinds of positive self-talk that helps to overcome – rather than wallow in – setbacks. We all have a critical voice in our heads that threatens to undermine us when we make mistakes; but coaches can easily model a different voice, one that is more supportive and which renews determination rather than saps it.

Good learners know about their emotional habits, and how to deal with them. One player, for example, may have a tendency to turn frustration into aggression, which may result in a red card. A good coach will help them develop that self-awareness, and also a range of counter-habits they can employ, such as counting to ten, removing themselves from the situation or taking a few deep breaths before acting. It is also useful to develop the habit of not letting your attention collapse inwards when things are going wrong, but staying fixed on the job in hand: remembering to keep marking up or remembering where you have to stand at set plays for and against.

Concentrating
Being able to control their attention is one of the biggest assets a footballer can have. Learning to stay focused despite all the incidental sensory stimulation that is going on is really useful. Coaches can get their players to practise under differing levels of distraction – and talk about it afterwards. Players should be encouraged to notice what it is that routinely distracts them, and to arm themselves with mental strategies for blanking distractions out. Involving young players in thinking about this, and devising strategies for themselves that can be effective, is very helpful.

Footballers also have to develop a *spilt screen* quality of attention where they may be simultaneously concentrating on the precise trajectory of the ball they are going to head, kick or control; while retaining the broad awareness of the positions and runs of their team mate and noticing and exploiting the potential vulnerabilities of their opponents. This requires a flexible quality of awareness unique to team sports like football, rugby and hockey, and it is a quality that top players have developed. There is no reason why younger players cannot be given exercises that develop this split-screen ability, help them to sharpen their peripheral vision, and so on.

Watching
Babies learn a huge amount simply by watching how other people do things, and trying to copy them. We now know that the human brain is designed for imitation. Learning by imitation is not just for children; it is a powerful habit of mind that serves us well throughout our lives. Nicking other people's good ideas, the tricks and techniques they have devised for themselves, is really useful. A squad should be encouraged to share their own discoveries and experiments with each other, and to swap what they have noticed about the way their opponents operate in a talk after the game. Having footballing heroes is a great way of learning, missing no opportunity to try out for yourself the things you have seen them do. Within an academy, for example, it is useful sometimes to mix up more and less experienced, and older and young players, and see what the 'juniors' are able to learn from the experience – even though they were beaten 7-0.

Practising
Great players don't just put in the hours – they put in quality hours. They don't just practice mindlessly; they practice intelligently. What does that mean? It helps to distinguish five kinds of practice.

First, there is ‘getting the feel’. Every time you try something new, you feel awkward. Your first forward roll, first dive, first time on ice-skates, first go at keepy-uppy: they were all clumsy. Your body simply didn’t know how to put its muscles together in the right way. And it didn’t yet have a template for how it *ought* to feel when it was done well. These take time to develop through practice, and *you can’t be told how to do it or what it should feel like*. You have to ‘get the hang of it’. And one day, you will, more by luck than judgement, do it well, and then your body begins to get that template that it can use to guide its own development. This is the most uncontrollable stage of practice, and people will begin to ‘get it’ at different times. Feeling safe to watch and have a go when you feel ready will speed learning up. Being laughed at or made to feel stupid slows it down.

Second, there is practice that is aimed at ‘automating’. Having got the feel of something, it takes a lot longer to get to the point where the move comes so reliably and smoothly that you don’t have to think about it. Psychologists talk about the kind of learning that turns ‘conscious competence’ into ‘unconscious competence’, and it is the latter that footballers need. The learning needs to get into your brain and your feet, so you do the right thing even when there is not time to think. There is no substitute here for just doing it over and over again. The vital ingredients are time, determination and attention.

Third, there may be a phase of practice called ‘picking out the hard parts’. You are playing a game, or working on two-against-one, and you keep getting something wrong, or keep getting caught in possession. In this kind of practice, you need to identify what it is that needs work, unpick it and work on it. It’s helpful if your coach helps you learn how to do this identifying for yourself, and doesn’t always tell you what it is you need to do. Then you build up the habit of mind called ‘self-evaluating’, which we talk more about below.

It’s a crucial part of ‘practising the hard parts’ that, once you have worked on them in isolation, you put them back into context, and practise them against real opposition, so they become part of the bigger picture. Putting those isolated skills you have been practising back into the context of a real game is vitally important. No coach should make the mistake of saying ‘grumpily’ ‘Well, they were all right in training’, as if somehow the transfer back into the hurley-burley of a real game is something that ‘ought’ to happen automatically and instantaneously, if they have ‘learned it properly’. This process of ‘re-embedding’ takes time and experience. It doesn’t just happen by itself. It is false psychology to think it should. Young players need regular experience of playing real matches, so this essential kind of learning – re-embedding – can happen. Many of them don’t get enough of it, as we shall see later on.

The fourth kind of practice is called ‘variegating’, and it can often be woven in to the earlier kinds. If all your practice is aimed at becoming more efficient and automated, it shouldn’t surprise you if your squad starts to perform like robots – very smooth in carrying out well-practised routines, but no creativity, and unable to adjust when things get trickier. So variegated practice brings back in the creativity and playfulness. You say: ‘I know you can now do it pretty well…now I want you to mess it up and see what happens if you do it a bit differently. Don’t worry if your control dips for a while – you’ll soon get it back. But making practice more variegated will build in the flexibility to respond to new situations, and your skill will therefore be more adaptable and robust’. Interspersing the hard work and competitiveness with this kind of licensed playfulness is good for motivation too.

The last kind of practice is ‘competing’. Playing real matches is not just about doing your best to win; it is ‘hardening off’ the skills you have been practising in

training, in the heat of competition. Even when skills are really well learned, it is all too easy for them to fall to pieces when the pressure is on, and, again, there is no substitute for the first-hand experience of seeing how your skills stand up when they are being tested 'for real'. If your team freezes on the big day, you can tell them that this is normal, that scientist know that anxiety and pressure make people regress and go rigid, and that they will get better at handling the pressure over time. Developing 'big match temperament' is a learning process like everything else. Playing competitive matches is a kind of practice too, and the debrief after the match should focus as much on 'what can we learn' as on 'how did we do'.

Good coaches take the long view. And that means interweaving these different kinds of practice – and explaining to the young players what you are doing, and why. They need to understand why 'variegating' is just as important as 'automating', and why they need to balance learning under pressure with trying things out in more relaxed conditions.

Imagining
Skilful use of imagination and mental rehearsal is one of the hallmarks of elite athletes and top sportsmen and women. Everyone can visualise things in their mind's eye, and everyone can get better at knowing when and how to make best use of that faculty. Imagining yourself evading tackles or scoring goals with a degree of skill you do not yet possess 'for real' is proven to give learning an effective boost. Real practice plus mental rehearsal improves skill faster than just practice on its own. So provided that a young squad understands that this is not just 'kids' stuff', they can be helped to learn how to make their visualisations more effective. Imagining yourself 'from the inside', for example, is more effective than seeing yourself through someone else's eyes. You need to activate the muscular and feeling parts of the brain during mental rehearsal as well as the visual parts for it to be most effective.

Another way to use imagination for learning is looking at the world through other people's eyes. If you are able to imagine what a defender is thinking, as you run towards him, you stand a better chance of outwitting him. The best generals always try to put themselves in their enemy's shoes, so they can wrong-foot them, and so do the best footballers. The better able you are to feel what their habits and preferences are, the more you can behave in a way that they don't like – and that gives you the edge. As we keep saying, empathy is not a God-given gift; it is a habit of mind that anyone can practice and improve, given a bit of guidance and encouragement. Depending on the age and maturity of your players, you can start by doing it as a game just for a couple of minutes, and then build up - always remembering to explain what you are doing and why.

Questioning
Powerful learners think about what they are learning and ask questions. So good coaches encourage their players to be thoughtful and inquisitive. In practice a learning footballer needs to be critical and curious about moves and tactics. He might ask

- how does a 'give and go' work?
- when do I have to inject pace and play quickly?
- when do I mark players or when can I afford to let them go?

To get them going, if young players are not used to asking questions, or if they feel embarrassed to do so, a coach may need to structure this to begin with, maybe having a few minutes 'Question Time', and picking on players at random to ask a question. They should also encourage players to ask questions of each other, and learn how to listen respectfully to what they have to say. Watching better players

and wondering ‘How did he do that?’ or ‘Why did he run there?’ is a good way of stimulating thoughtful learning. Young players need to understand that football is played with the mind as well as the feet, and, if they have not learned to think very well before, football is an ideal place to build their confidence and their ability to ask good questions.

Self-evaluating
Learning involves self knowledge and self awareness and this is where reflection and self-evaluation come to the fore. Reflection involves the habits of taking stock of your own performance, mulling over the successes and failures, and coming up with possible counters and improvements. Powerful learners need to develop the habit of being honest and accurate in their assessment of their own performance and progress. As their growth mindset gets stronger, so they can stand more criticism, from themselves as well as from other people. They understand more deeply that the goal of Getting Better trumps the goal of Looking Good in the long run. Elite competitors become very good at evaluating their own performance without getting upset. But to get there they needed the support of a coach who was willing to teach them how to do it for themselves.

High achievers also get very good at setting their own goals and targets. They know how much stretch and challenge is good for their learning and set the bar accordingly. Young learners may not yet be so expert at goal-setting. They may coast along too easily, or alternative try to bite off more than they can chew. They will need some help from the coach in getting the feel of this – but the coach’s job is not to keep telling them, but systematically to help them get better at setting the right kinds of targets for themselves.

In general, it is the coach’s job to help young players develop their ability to coach themselves – to design their own learning activities, to assess their own progress, to set their own targets, to help to build the spirit of whatever team they find themselves in. As they are doing their training, so they are building a model of their own ‘inner coach’ inside their heads. Your voice, and the way you encourage, criticise and comment, gets installed in their own minds. The actual voice you use when giving feedback gives the players a model of the internalised voice that they will use when you are not there. So think about the kind of voice you know is most helpful to learning, and then use that voice as much as you can. Make sure that voice is honest, respectful, perceptive, supportive and precise – not subversive, mocking, sarcastic or full of generalised negative judgements.

The coach can easily start to help the players learn these strategies by getting even the youngest players to give their performances a quality mark. For example, you can say:

> ‘Give yourself a mark out of ten for that ‘piece of work’ (technique/ skill etcetera). Don’t tell me the mark. Now take a minute to think how you can make it one mark better. If you’ve given yourself seven how can you make it eight?’

In this way young players can start to think about their performances and how they can improve them. It’s a positive and simple strategy the coach can use to help the players to become better learners. This is an essential learning tool for the coach to encourage; as it helps the players build on their past experiences and learn to make better decisions more often and become more effective footballers.

Collaborating
In a team sport the quality of relationships is crucial. Learning the skills to be able to make the most of these relationships is something the coach should encourage as much as possible, if they want individuals and the team to be as effective as

possible. The coach has a powerful influence on the way a squad works, plays and learns together.

- Do you create opportunities for your players to think and design activities collaboratively?
- Do you model respect and interest in what they have to say?
- Do you help them practice giving and receiving feedback?
- Do you teach them – as many schools now do – how to say some appreciative things, and then to phrase their feedback as a gentle suggestion for 'Even better if…'?

It is easy to design a training session that cumulatively boost these vital qualities of support and camaraderie. It is equally easy to kill them by always acting like the Big I Am.

Taking responsibility

It's never to early to start treating kids more like intelligent partners in their training, and less like people who have to be bossed around all the time. By and large, children will give you back what you expect. If you expect them to be responsible and thoughtful, most of them will rise to the challenge. Some will rise immediately; others may take a little time to get used to taking some of the responsibility. That's why it is important for the coach not just to try something once and say 'It didn't work', but to keep it up over time, so players get used to a slightly different way of doing things.

Years ago if young players wanted to play football they had to organise it themselves and take responsibility for getting everything sorted out. It is still like that in many countries around the world. In other countries, like ours, though, today's adults (coaches and parents) seem to organise everything - and then wonder why young players cannot sort things out for themselves.

There are many practical examples of the effects of giving responsibility to students in education which can easily be replicated in football. For example, in one study, elementary school teachers found that children's reading improved significantly when they were given a degree of responsibility for selecting and planning their own learning activities. The improvements were greatest in the groups where the teachers had been most successful in putting the new procedures into effect. Reading is a learned activity. So is football.

If the coach can shift their thinking in this regard, the possibilities are endless. But that shift can be quite difficult for a coach who is used to making all the decisions. The journey from 'coach centred' to 'player directed' can be a long one, and it needs to be undertaken gradually, but with commitment. You can start by making small changes – giving the players just a little bit more control – and see how it goes. But, as we said before, don't give up just because one or two of the Zacs don't immediately take to it.

Some coaches might worry that they are going to become redundant if they let the players have more control, but that worry is unfounded. Their role will be just as important as it always was. It will just be a bit more subtle – and all the more effective for that. It takes more skill to nudge and stand back, and to judge what kind of nudge is needed for different players, than to keep barking orders. Taking all the responsibility upon yourself is not helpful. It denies players a vital learning tool and so disadvantages them. Make sure your ego, and a few old habits, are not getting in the way of your being the best coach you can be.

The coach can't go on the pitch and play the game for the players. Out there in the heat of the moment the players have to take total responsibility for their actions. What we are suggesting is that a coach will be more effective – they will get better results and have a happier squad – if they put more energy into helping players

build their ability to be responsible and think for themselves. So plan it into the work. Ask yourself what can the players take responsibility for and make a list. Then get them to take responsibility for some of the things (significantly not everything) during every training session and on every match day. Here is a list of some of the possibilities in no particular order. Many of these you undoubtedly already do, but home in on one or two areas where you could do more, and start to think about the small changes you could experiment with.

- *Picking partners*
- *Picking teams*
- *Marking out areas*
- *Getting out and putting away the equipment*
- *Deciding what it is they wish to work on and learn*
- *Evaluating their performances*
- *Setting up 'arrival' activities*
- *Deciding rules and conditions for games*
- *Managing the warm up and cool down*
- *Their behaviourtowards each other*

You have to introduce changes at the right speed for the squad, and, as with Josh and Zac, that means you have to know them not just as footballers but as people. It is important for the players to be introduced to these greater degrees of responsibility in small stages. Change can be difficult to manage. Replacing long-standing routines and methods can be perplexing for the players, but if taken slowly, bit by bit this approach will have a massive learning benefit and they may not even have noticed the changes enough to baulk at them.

In our view all of these habits of mind are highly desirable traits for young people whether they wish to pursue a professional career in football or not. And all of them can themselves be learned. Many youngsters will not fulfil their dream of playing in the Championship, and academies and clubs have a responsibility to help them develop qualities that will enable them to succeed, whatever they end up doing. The best coach will want to develop the whole person, not just the footballer. They will mean it when they say it. They will explain what they are doing to the young players. And they will miss no opportunity to put their philosophy into practice.

Good coaches provide plenty of match experience

Much of what we have been talking about seems to us just plain common sense. But not everyone seems to agree with us. To illustrate, let's take a closer look at one of the points we made earlier, when we were talking about the different kinds of practising. You remember we said it was really important to keep embedding what has been learned in practice in the experience of playing proper matches. We said this is a vital stage of learning that should not be skipped or stinted. But are young players getting the match experience they need?

If you analyse the hours of competitive play that young players in academies and centres of excellence in England are getting, you are in for a shock. Many of our most talented players are only playing competitive football for between *12 and 18 hours per year*. Per Year! This is hardly a firm foundation for a possible career in one of the most competitive professional sports on the planet.

John Moores University in Liverpool recently produced a breakdown of the kinds of training youngsters were getting in a number of academies across England. Their results are shown in the table below. You'll see that the youngest players are spending over half of their training time in warm up, cool down, conditioning, stretching or practising techniques in isolation from the game either as individuals

or as a group. For 57% of their precious training time, they are getting no experience of decision making or problem solving whatsoever. Seeing as this is how players actually learn how to play and execute their skills within the game, this is frankly a bit worrying. Someone, somewhere, doesn't understand enough about learning!

Table 1: Percentage Time of various football specific training activities

Activity	Percentage Time of various football specific training activities.		
	Under 9	Under 13	Under 16
Physiological	31%	28%	27%
Technical Practice	26%	16%	19%
Skills Practice	2%	2%	7%
Functional Practice	3%	9%	10%
Phase of Play	0%	6%	5%
Possession Game	21%	16%	14%
Conditioned Game	8%	9%	4%
Small Sided game	9%	14%	14%
Percentage of session that provides no opportunity to decision make	57%	44%	46%

The fact that young players should be gradually building up match experience does not imply that we should simply cut them loose and remove all support, protection and advice. Many young players are exposed to the adult game with its mature strategies, expectations, dilemmas and behaviours too early in their football careers. If they have not already developed the tools to deal with such a big challenge, they will feel overwhelmed and frightened. Nobody learns well when they are feeling like that. There is a vast difference between encouraging young players to venture forth progressively, gradually pushing further out from the shores of their known skills set, and taking them far out into the choppy sea of the adult game, pushing them overboard and saying 'Now deal with that'.

Summary: the rules of great coaching
There is a lot in what we have written that has strong implications for how coaches go about their job. Some of it will probably be very familiar to you. Some of it might sound quite strange to begin with. Let us summarise the key principles of our approach.

1. Get to know your players. Players are not all alike. Some can take more pushing than others. Some like to get the hang of a new move in private

before they engage with others. Learn the ways they signal when they are confused, anxious or switched off. If in doubt, ask them. Use that information to adjust what you are doing. Be flexible. Be prepared to treat players differently.

2. Focus on their learning. Mix praise for achievement with praise for effort and 'smart learning'. Show them, by your own reactions, that winning is not the be all and end all of football. Focus on improvement as well as success.
3. Never make fun of a player for making a mistake, being timid, or asking a question, and don't let anyone else do so either. Being afraid of being laughed at is the biggest blocker to learning there is. It is your job to set the tone.
4. Have a broad overview of your players' development, and vary the contents of training sessions to focus on different sides of their learning in turn. Mix up the different kinds of practice, for example.
5. Talk to your players about learning. Tell them what you are up to. Invite their questions and suggestions. Encourage them to be curious, questioning and imaginative about their own learning.
6. Build up your players' ability and willingness to take on responsibility for planning and monitoring their own learning and progress. Take their ideas seriously. They might just be right.
7. Don't swamp them with information, ideas, feedback or experiences. Showing off how perceptive and knowledgeable *you* are may not be the best way to help them learn.
8. Encourage them to be creative about the ways they learn, to learn how to make use of mental rehearsal and visualisation and so on.
9. Build up a supportive team spirit. Make sure everyone shares ideas and tips they have worked out – about football and about learning.
10. Make sure that learning is fun, as well as sometimes being hard work. It's deep-down enjoyment that makes the hard work worthwhile. If they stop enjoying their football, they will stop learning.
11. And finally, remember you don't have to be the fount of all knowledge In fact it is sometimes better if you are not. Give the players a chance to show what *they* know. And take the opportunity, when it presents itself, to show that you are still a learner too.

And a final reminder. The skills and habits of learning we have talked about are not just good for football. They work, with only a small amount of adaptation, for other sports, and indeed for the rest of a young person's life. If they learn to be more powerful learners, their school-work gets better, and they feel better able to tackle difficulties that crop up in their lives, whatever and wherever they are. Young people live lives that are often complicated and uncertain – socially, emotionally and practically. Feeling equipped to cope, they feel less stress, and they behave more calmly and sensibly. The need for escapism and blaming are reduced. They also have the confidence to pursue their own dreams – even if it turns out that football is not going to be one of them. That has to be a gift worth having – and it is one that any footballing academy or foundation should feel proud to give.

Further reading

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