



Child Development for Coaches:

Why children do what they do and what to do about it



Why did they do that?

As coaches, we have all been in situations where all we could do was scratch our head and look pensively towards the horizon, waiting for an answer that never came. The children we coach experience that feeling in our sessions a lot more than we do.

More often than not, these moments of despair are down to a few facts: a mismatch between the needs and wants of the children taking part; the level of challenge in the sessions; and the way the coaches coach.

An awareness of how children learn and develop physically, mentally, emotionally and socially, and the implications for coaching, will certainly guarantee any coach that those instances when hopelessness takes over become less and less frequent for both the children and coach.

One big truth: Children are not mini adults

Children are not pocket-sized versions of adults. A lot of the time, though, the level of expectation placed upon children to perform, the way we structure the sporting activities they are involved in, and the way in which they are coached is simply trying to replicate what would be expected in the adult version of the game - a recipe for disaster.

Remember three things:

- Children are not mini adults.
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Richard Bailey PhD Foreword to Foreman and Bradshaw (2009)

Truth number two: Children develop in due course

Children are not only different to adults, they are very different to other children too. This could be due to age or the stage of development of the children (maturation). In other words, one seven year old could be completely different physically, mentally and emotionally to another seven year old, based on their stage of maturation and genetic endowment, and will certainly be poles apart from a 12 year old who is just months away from puberty. They experience the world and learn in completely different ways and have totally dissimilar levels of skill. What they can do, and what they need to continue to develop, is as different as chalk and cheese. This means it is much harder to meet the needs of the child through a one-size-fits-all approach and even harder to spot potential.

Nobody would expect a one-year-old baby to score a free kick from outside the box. However, as children grow, the boundaries between what they can and cannot do, and what they need to do in order to develop, become very blurred by, in most cases, the application of scaled-down versions of adult methods and practices. Children require child-specific coaching.

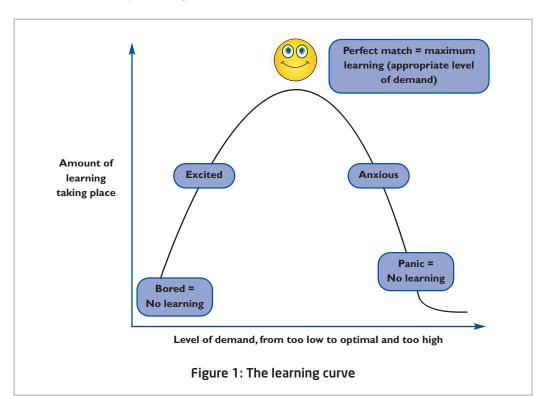
How do children learn? It's child's play

It is a well-known fact that **when we are enjoying something, we learn better**. Try to remember the list of all the English kings and queens, and chances are you will mix your Williams up with your Richards and your Tudors with your Stuarts. Cast your mind back now to dissecting that frog in the science lab. You are bound to remember it more.

Learning in sport is no different. Children who enjoy themselves are more likely to stick to an activity, be receptive to the task at hand and apply themselves with such dedication that learning and improvement almost invariably follow.

Fun and enjoyment are a key part of successful children's coaching, but they are not the be-all and end-all. Other things to take into account include the following:

- Children learn by doing, through watching others and also listening to instructions. The balance between these three ways of learning is critical for coaching success. This balance changes from child to child and through the different stages of development.
- Children need to experience a certain level of achievement to stick to an activity and, in turn, give themselves a chance to develop a skill further.
- Children learn best in an environment where they feel it is OK to try...and fail.
- Children live in the present. As they mature, they will be able to understand more about the future and about 'delayed gratification' and 'cause and effect'.
- Even the most exciting toy, 'all bells and whistles', gets sidelined very quickly when the new toy in town arrives. Children crave variety. They get bored really quickly, and finding different ways to do the same thing is crucial. Unnoticeable repetition is the key to skill development with children.
- Emotional and cognitive (thoughts and feelings), social (enjoyment and fun) and physical ('I can do it') development go hand in hand. Drop one and you drop the others. Children need to be challenged on all fronts for maximum effect.
- Everything children do is aimed at preparing them to become independent adults. Overdependence on the coach is not a good sign.
- Learning takes place along a bell-shaped curve: matching the level of demand with the current capabilities of the child is the key to learning.



What does all this mean for coaching?

Think of examples of ways in which you currently apply these learning principles to your coaching and new ways you could try next time you coach.

For instance, you could:

- make sure you allow enough time for children to practise the activities and that you reduce the amount of talking you do
- challenge yourself to ensure all the drills you run are fun and enjoyable
- cut to a minimum the time children have to wait between each period of activity (no long lines, and quick transitions)
- find ways to modify your activities so every child feels some degree of success
- look for or create new drills and activities to give your sessions a fresh look.



Let us now look at specific areas of development.

Physical development

Growth pattern

While the basic pattern of physical growth is similar for everyone, there can be a great deal of difference between individuals in terms of the rate (how quickly) and timing (when) of growth, hence knowing how old children are is not always a good marker to help plan activities that are developmentally appropriate for them. Some 12-year-old boys and girls will be fully mature, resembling a young man or woman, while others will still be pretty much a child.

Try this

At your next session, spend some time observing how different the children you coach are. What are the key differences?

28 26 Fast growth 0-1 years 24 22 20 Stature 18 (cm/year) 16 14 **Growth slows Growth spurt** 12 12-14 years down I-6 years 10 **Growth slows** 2 4 8 down until it 3 6 stops 15-18 years 4 5 Steady growth 6-12 years 2 0 2 4 6 8 10 12 14 16 18 20 Age (years) Figure 2: A typical velocity growth curve for an individual moving from infancy to adulthood (Adapted from page 8 of Balyi and Williams [2009])

The basic pattern of physical growth from birth, through puberty and into adulthood is something like this:

I A rapid gain in infancy up to one year old (infancy is defined from birth to one year).

- 2 A deceleration of growth in early childhood (1–6 years of age).
- 3 A steady rate during middle childhood (6-12 years of age).
- **4** A rapid growth during the growth spurt (12–14 years of age).

 ${f 5}$ A slow increase until growth ceases, with the attainment of adulthood.

Attention: girls rule

Girls normally enter puberty up to two years earlier than boys, and consequently, their growth spurt finishes earlier.

Proportion matters

As children grow, the proportions of their bodies are changing as well.

- In younger children, the head is very large compared to the rest of the body.
- As they grow and mature, their body becomes more 'bottom heavy' and, therefore, children become more stable as the centre of gravity is lower.
- With any rapid growth spurt, proportions change so quickly that children need time to readjust and relearn skills that were performed easily before they 'shot up'.

Skill development is a matter of 'timing'

Some researchers believe that periods of slow growth are more 'sensitive' to learning motor skills rapidly and 'effortlessly'. On the other hand, some researchers do not believe this to be the case. It is useful, however, to be aware that this could be the case and modify your sessions accordingly.

What this means for you

Up to the age of seven, children should be developing generic movement skills like:

- **stability:** bending; stretching; twisting; turning and stopping
- **object control:** holding; throwing; kicking; catching and rolling
- **locomotion:** running; walking; leaping; jumping; skipping.

All the skills above are underpinned by the FUNdamentals of Movement: **Balance**, **Coordination and Agility**.

Highly technical and specific instruction is usually inappropriate during this rapid growth period as children should be developing generic skills that will in turn provide a solid foundation for the specific skills later in life. Between the age of seven and the onset of puberty, children are ready to develop more specialised skills for more specific situations.

They do this by combining and refining the generic skills they learnt at a younger age in new and challenging situations.

Children are now ready for more structured activities with progressively more complex rules and a greater variety of roles and interactions.

In these 'skill-hungry' years, motivation is rarely an issue as children are very eager to extend their range of skills. It is also useful to know that children develop along a number of different paths.

- From general to specific: the development of movement skills follows a path from basic and generic to increasingly specific and specialised; for example, from being able to kick a ball to kicking aiming at someone and putting the right weight into it.
- Children develop movement skills from the centre of their body outwards. Their head and trunk develop before the arms and legs, and the arms and legs before the fingers and toes. Children will not be able to perform complex, fine movement involving their hands and feet until they have managed good control of their trunk, arms and legs.
- Children will progress from being able to use one arm or leg (unilateral movement) to being able to control both limbs together (bilateral movement), and from there to being able to use one arm in unison with the opposite leg (contralateral movement).

What does it mean for you as a coach?

In order to be effective, our coaching practice must be **child-centred**, meaning that what we do has to be closely linked to how children grow and develop.

- Adult methods and drills are unlikely to be suitable for children. All activities should relate to the ages and stages of the children being coached.
- 2 Not all activities will be appropriate for every child, even those of the same age. You should plan tasks that are adaptable and open-ended so differentiation between participants is possible and smooth (ie split the groups and offer variety).
- 3 Patience on your part, as the coach, is essential:
 - Different children develop at different rates.
 - Children's levels of motivation may vary as they grow.
 - Skilled performance may take a blow during growth spurts. A child will need time to readjust to his/her new body.
- 4 Talent identification and child development go hand in hand:
 - Comparing children who are at different stages of development is like comparing apples and oranges. Don't let talent slip through the net because a child is developmentally younger (measuring potential is especially difficult in children, and there are no absolute truths).
 - Children's coaches need to match activities with need, and there are no absolute truths.

Developing movement skills is only one concern of the children's coach. As coaches working with children, we also have a duty to support their personal and social development (see the *Coaching the Whole Child* Quick Guide).

This a two-way street though, and as well as supporting this development through sport, the way in which children develop personally and socially has a great impact on how they perceive and receive coaching. Some examples include children being:

- naturally inquisitive let's not coach this out of them
- unable to understand why they cannot do something even if they are trying hard
- unable to fully grasp the concept of time
- unsure about the idea of winning and losing, and cause and effect
- · incapable of concentrating for long periods
- able to cooperate with others as they develop, but not initially
- extremely keen to be with their friends
- drawn to coaches and adults who make things fun
- prone to emotional tantrums that they learn to control over time.

Our coaching has to take all this into account to maximise the chances of getting the best out of the children we coach.

Children's coaches need to match activities with the needs of the children and their stage of development. If we don't, learning will not take place, and it is quite possible that some of those children will choose not to continue their involvement in sport.

Child development and task progression - summary

Having this mental picture of the developing child in mind helps you as a coach to analyse how your activities match children's needs and whether you are either asking too much or too little of them based on their stage of development.

Next steps: A call to action

Can you work out where the children you coach are at in their stage of development?

- Are they in a period of rapid but steady growth?
- Are they going through a growth spurt?
- Have they reached maturity?

Could you easily put them in three groups of beginner, intermediate and advanced in relation to their physical and skill level and design an inclusive, differentiated session that caters for all of them?

Why not look at your last session plan and try to pick out those activities that are a good match to your participants' stage of development and tweak those that aren't?

- Is a full-on 11-a-side game good for six year olds?
- Will eight year olds enjoy waiting in long queues to have a go at batting?
- Is your 400m sprinting drill a good tool to develop movement skills in your 11 year olds?



References

Balyi, I. and Williams, C. (2009) *Coaching the Young Developing Performer*. Leeds: Coachwise Business Solutions/The National Coaching Foundation. ISBN: 978-1-905540-37-2.

Foreman, G. and Bradshaw, A. (2009) An Introduction to the FUNdamentals of Movement. Leeds: Coachwise Business Solutions/The National Coaching Foundation. ISBN: 978-1-905540-70-9.

Stafford, I. (2005) *Coaching for Long-term Athlete Development*. Leeds: Coachwise Business Solutions/The National Coaching Foundation. ISBN: 978-1-902523-70-9.