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Planning your Coaching: A focus on Youth Participant Development

Andy Abraham, Sergio Lorenzo Jimenez Saiz, Steve Mckeown, Gareth Morgan, Bob Muir, Julian North, Kevin Till

1. Overview

There is very little in life that doesn't need some sort of plan to facilitate the achievement of a goal, be it writing a shopping list, looking at a map to plan a route, or even putting a post code into a satellite navigation system! In essence planning is our attempt to predict the future so that when the future arrives we are prepared for it. At its simplest planning is waking up and deciding what to have for breakfast at its most complex planning is preparing the allocation of resources to look after an aging population in 30 years time. Planning in coaching sits somewhere between these two time frames, but even in coaching there are varying time frames. The plan could be for a single coaching session, it could be for a 10 week programme or it could be a 4 – 8 year talent development programme. What is known though is that the planning becomes more complex based on two factors: the number of variables that have to be accounted for and how far into the future that planning is required to predict.

Unfortunately, experience and research would tell us that planning is something that people either don't readily engage in, or if they do, they don't do it particularly well. This lack of planning is not altogether surprising for two reasons. Firstly, evidence examining human learning and development suggests that humans have a preference to 'do' first and 'think' later or if at all (Kahneman & Klein, 2009). Secondly, planning is difficult, time consuming, inefficient (at least in the short term) and often unrewarded/unrecognised in the allocation of time and effort for either paid or unpaid coaches. For both reasons planning often has little cultural value. Yet, despite this lack of value, research has consistently shown that the capacity to plan and rationalise through coaching practice is a determining factor of coaching expertise and effectiveness (Abraham, Collins, & Martindale, 2006; Jones, Housner, & Kornspan, 1995; Lyle, 2010; Martindale & Collins, 2005; Schempp, McCullick, & Sannen Mason, 2006). Indeed, engaging in planning is crucial in the development of a coach since it encourages deep thinking, raises expectations of both coach and player and provides a template from which thoughtful reflection can occur post delivery (Abraham & Collins, 2011). Given such importance the goal for this chapter is to offer ideas as to why coaches should engage in planning and (given the comment about doing first thinking later) perhaps more importantly what they can plan for and how they can do it.

Because planning is so complex however, one chapter cannot do the whole process justice. In order to overcome this issue, at least to some extent the focus of the chapter will be planning for the development of young people. Young people represent the population that the majority of coaches will work with, yet is the population that has received least planning attention in academic books. Furthermore, the term 'participant' will be used as the catch all term that might otherwise be; athlete, child, player etc.

2. The Jargon Of Planning and Its Relevance.

As identified, the importance of planning has been acknowledged for a good number of years. Much of this work has been completed in the area of the physical preparation of athletes, particularly in physical sports such as athletics (see Bompa & Haff, 2009). This work introduced many ideas and jargon into the realm of planning some of which will be used in this chapter. Because there is so much jargon it is useful to spend some time identifying it and exploring its meaning as shown in table 1:

Term	Meaning
Stress Response Cylce	A conceptual basis to physical and psychological system development dependent on placing the 'system' under stress. The key idea is that stress will unbalance the 'system' but that the system will then compensation and super-compensate, however if this super-compensation isn't built on then the system will return to its old state. See Fig 1.
Macro Cycle	Planning ideas for the achievement of goals are put in place for extended periods of time. The longest time frame is know as the macro cycle. The length

	of a macro cycle is often dependent on the sport, the frequency and importance of competition goals or stage of athlete development. Olympic sports will often have 4 year cycles (or even longer). Elite sport teams may only have annual or bi annual cycles. Talent development programmes may have up to 6 year plans.	
Meso Cycle	Macro cycles are often broken into meso cycles. These cycles will represent meaningful planning stages (or phases – see below) with aligned goals in the achievement of the overall goal of the Macro cycle	
Micro Cycle	In a similar fashion, meso cycles are broken into micro cycles	
General Preparatory Phase	This phase provides balanced, all round physical conditioning incorporating strength, endurance, speed, flexibility and other factors of fitness.	
Specific Preparatory Phase	This phase concentrates on sport specific fitness and exercises, which are more specific to the demands of the sport.	
Competition Phase	This phase may contain one, a few or a season worth of competitions. The main aim is to prepare for competition and maintain fitness.	
Transition Phase	This phase is used to facilitate biological regeneration, psychological rest and relaxation as well as to maintain an acceptable level of general physical preparation.	
Volume of Training	The amount of time devoted to training on a certain aspect of performance. A term that is derived from physical conditioning literature but can be applied to all types of training.	These three terms are often employed within the same planning literature as they are seen as being co-varying. I.e. a certain part of a plan may have high volume, intensity and frequency. However, this training may be too much 'stress' over an extended period so one of more of them may drop, i.e. high volume, medium intensity, low frequency. Decisions as to which is done and when is based on knowing the participant and goals being worked towards.
Intensity of Training	The amount of effort applied to training a certain aspect of performance. Again a term is derived from physical conditioning but can be applied to all types of training	
Frequency of Training	How often training on a certain aspect of performance occurs. Also a term is derived from physical conditioning but can be applied to all types of training.	

Table 1: A glossary of common planning jargon.

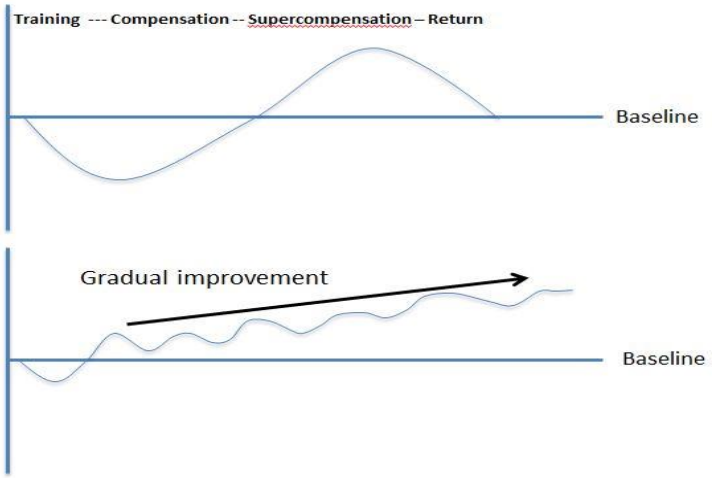

Figure 1. Stress Response model. The top figure represents a single stress response cycle. The lower figure represents the 'ideal' outcome of continuous stress response cycles over a longer period of time. Over time, as stress responses build on top of progress made from previous responses performance should show an improvement – especially if the stressor (as it should be!) linked to the performance improvement required.

Since this chapter has a focus on the development of young participants, particular attention will be placed on the use of Macro Meso and Micro and not the different 'phases' or 'training loads' identified. This is not to downplay the importance of these phases and loads, they have been used with good effect in planning for Olympic athletes. However, given the focus of this chapter the 'phase' and 'training' terminology and aligned methodology lack relevance for the majority of young participants for two reasons. Firstly, consideration of training load becomes a major issue when participants are engaged in large amounts of training, i.e. 20 hours plus a week. Most (but not all, e.g. swimming) young participants, even those engaged in talent programmes are unlikely to be engaged in this level of training. Secondly, competition often has different priorities at youth level than at elite level. Later in this chapter the role of competition is discussed when planning for young participants, however the overriding philosophy is one of using competition for the sake of development and not winning[1]. The methodology of phases is aligned with 'peaking' for competition (Bompa & Haff, 2009) and has more to do with elite and emerging elite athletes than it does with young developing participants. Such a 'philosophy' could be classed in the 'that's ok in principle but doesn't happen in practice' bracket. Culturally, youth sport is often very strongly judged through who has the most 'winningnest' team or athlete. However, and as is suggested later, in order to have the impact that they desire coaches need to be able to develop the culture that they believe is required in order to achieve their goals. Planning for changing mindsets is often as important as planning for performance change.

A disclaimer here is that winning does become important for some at early stages of their athletic careers. Coaches who find themselves in these situations should therefore extend their reading to account for this. Furthermore, young participants do have additional mental and physical load through school, social life and playing other sports. Peak loads in these other areas of life should be considered in planning.

Further jargon will be introduced in the rest of this chapter, this is inevitable simply because jargon is developed to summarise complex ideas – and planning is complex. However, this jargon will always be accompanied with explanatory notes.

3. Thinking, Thinking Tools and Planning

It was mentioned earlier that people have a preference to do first and (maybe) think later. There are actually sound biological/evolutionary reasons for this phenomenon. Much of life requires people to make quick decisions to the extent that slow thoughtful decisions may not be useful in achieving immediate moment to moment goals. In effect, quick and intuitive decisions are useful because they are efficient in getting on with life. Issues arise however when people continue to make intuitive decisions when in fact slower more deliberative decisions should have been made, as summarised by Myers (2010) and then Halpern (2014)

> Intuition is adaptive. It enables us to drive on automatic. It feeds our creativity. But sometimes it leads us into ill-fated investments, fuels overconfident predictions, and even takes us into war. Awareness that intuition's vision could use some correction in realms from sports to business, commends disciplined training of the mind. (p.376)
>
> Planning seems to be an important component for changing many behaviours….. it is useful to plan how you will think and act. Plans are prescriptive descriptions about what to do and they prevent habitual responses that may not work. (p.21)

The coaching connection is that coaching sessions often require coaches to be intuitive in their practice, the question is what is driving this intuitive practice? Coaches will often refer to the importance of experience in being able to make good decisions – but this statement actually lacks some crucial definition. Lots of people can have experience but only some seem to have expertise (Nash, Martindale, Collins, &

[1] This is not to say that winning is a 'bad thing'. Learning how to win may well be a valid goal to work on. It is when winning is at the expense of development that problems will occur.

Martindale, 2012). One defining factor is the deliberateness of that experience, "the disciplined training of the mind" and it is this deliberateness that planning (and reflecting for that matter) can offer.

However, saying deliberate planning is important is one thing, engaging in deliberate planning is another. Deliberate planning requires coaches to think, but think about what? Schempp et al. (2006) identify that novice coaches plan around simple heuristics such as maintain control and fill time. Alternatively, more expert coaches plan around thoroughly understanding the nature of the performance and development problems facing them before progressing into developing a plan of action to solve the problems. But even this explanation is quite nebulous and lacking in definition. Planning is a complex process that does require a lot of thinking but knowing what to think about is crucial. In order to facilitate this thinking nine thinking tools and 5 planning templates are offered in the rest of this chapter to facilitate the planning process.

3.1. Nested Goals and Planning

The Macro, Meso and Micro terms introduced earlier identify that short term cycles of development should be connected to medium term cycles which are in turn connected to longer term cycles of development. In coaching terms this would mean that a single coaching session should always have a connection to the longer term goal being worked towards. This sort of approach should prevent irrelevant fire fighting of micro issues that can distract coaches away from the longer term goal[2]. Abraham and Collins (2011) termed this approach as *Nested Goal Setting and Planning* where short term goals should be nested within medium and then long term goals. Subsequently planning should also follow this route. However, they expanded beyond the usual approach of performance goals setting to examine what sort of goals should be set and how the plans would then reflect the type decision that would then be taken.

They identified that goal setting and planning decisions at the Macro are typically strategic and political in nature. That is they are more likely to be about achieving long term targets, typically with long timeframes attached to them, often impacted on by internal and external key stakeholders.

Meso goal setting and planning then becomes socio-motivational and tactical in nature, that is, this level focuses on creating optimal environments for the achievement of goals. As such annual planning with in-built meso cycles for participant development would be a typical Meso goal setting and planning activity to engage in. However, planning for the engagement of those who will impact on motivational and learning environment such as parents or other coaches may also be useful.

Finally at the micro level, goals and planning would be far more pedagogical and session (or sessions) based in nature. Often with greater focus on individual development or performance improvement, this level of goal setting and planning very much becomes about the public face coaching.

One further distinction was made by Abraham and Collins (2011), the type of thinking also changes with the stage of planning. They argue that the Macro and Meso level of goal setting should predominantly be where deliberate thinking and problem solving should occur. Completing this level of thought, they argue, should set coaches up for engaging both efficient and accurate intuitive decision making in micro situations. Furthermore, well thought through macro and meso plans also offer a template against which reflections on progress and development can be made. This should allow for meaningful as opposed to knee jerk adaptations to plans to be made when, inevitably, progress doesn't occur as expected. An exemplar nested diagram is shown in Figure 2.

[2] This does not mean that plans should be cast in stone and be inflexible – this is addressed later in the chapter.

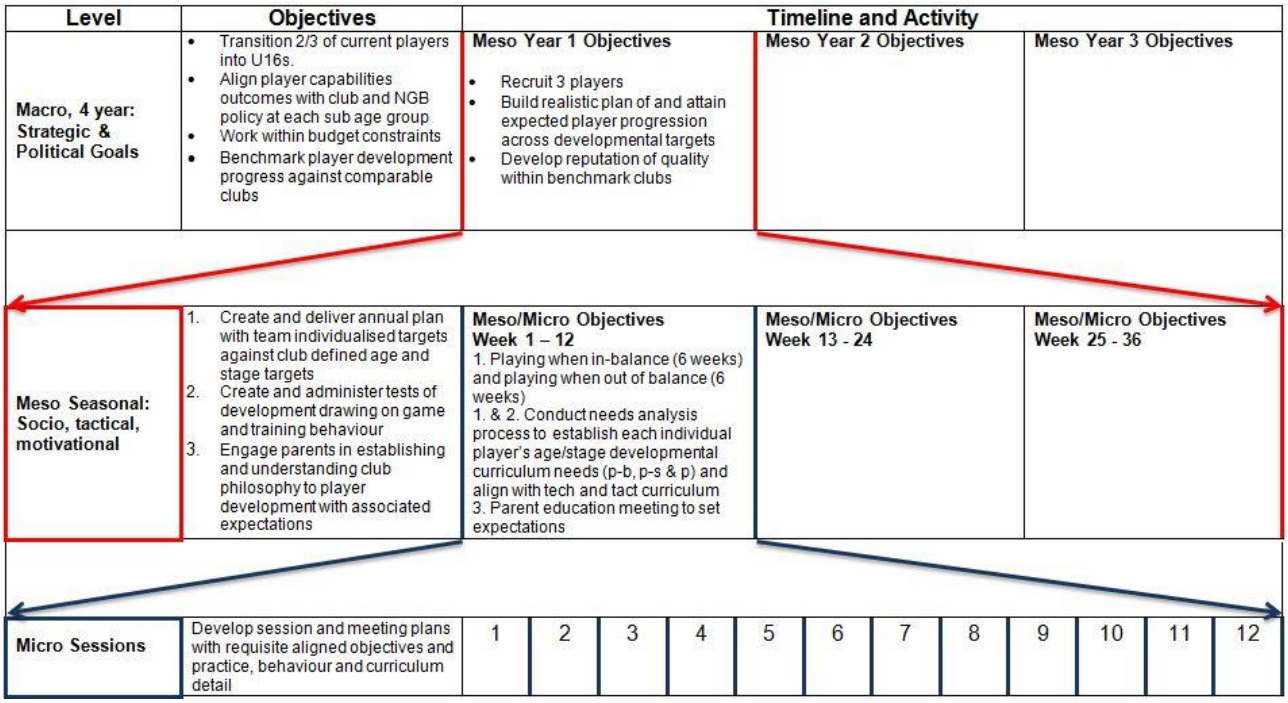

Figure 2. An exemplar nested plan for a U12 academy football team. NB some boxes have deliberately been left empty to encourage the reader to think how they might continue (or start) the process for themselves.

3.2. Constructive Alignment

Educational psychologist, John Biggs (2003) developed the concept of constructive alignment as a method to develop and achieve specific learning objectives in adult education. This process offers greater pedagogical insight (as opposed to strategic and political) to the development of learning programmes. The process of constructive alignment begins with the question 'what d0 coaches want their participants to be able to know and do as a result of coaching?'. The intended learning objectives that arise from an analysis of participants' needs relative to the sporting context become the basis for designing long-, medium-, and short-term plans that will enable these objectives to be achieved and provide a key reference point from which coaches can monitor and adjust the effectiveness of their plans, delivery and reflections. While Biggs developed the concept for adult learners the concept is transferable to the development of young people.

As a planning tool constructive alignment can be used to develop programmes from both a macro/meso level or from a sessional micro/meso level. For example figure 3 displays an approach to think through and create programme level development outcomes and what the aligned required support will need to be.

The principle of constructive alignment from figure 3 focuses firstly on creating development outcomes (box 2) that

- are meaningful to the participant, typically defined by their own developmental needs.
- meet important standards relative to the programme that they are in
- meet the level of learning required to be evidenced in order to be recognised by key stakeholders external to the immediate coaching environment (i.e. funders, managers, parents).

Secondly, constructive alignment relies on there being a learning environment that allows the learner to construct their learning in order to achieve learning outcomes. This second requirement is reflected in boxes 3 – 6.

Finally, as displayed in Box 1, coach decisions about learning outcomes and learning environments should be made against a set of external standards in order to quality assure the course development process.

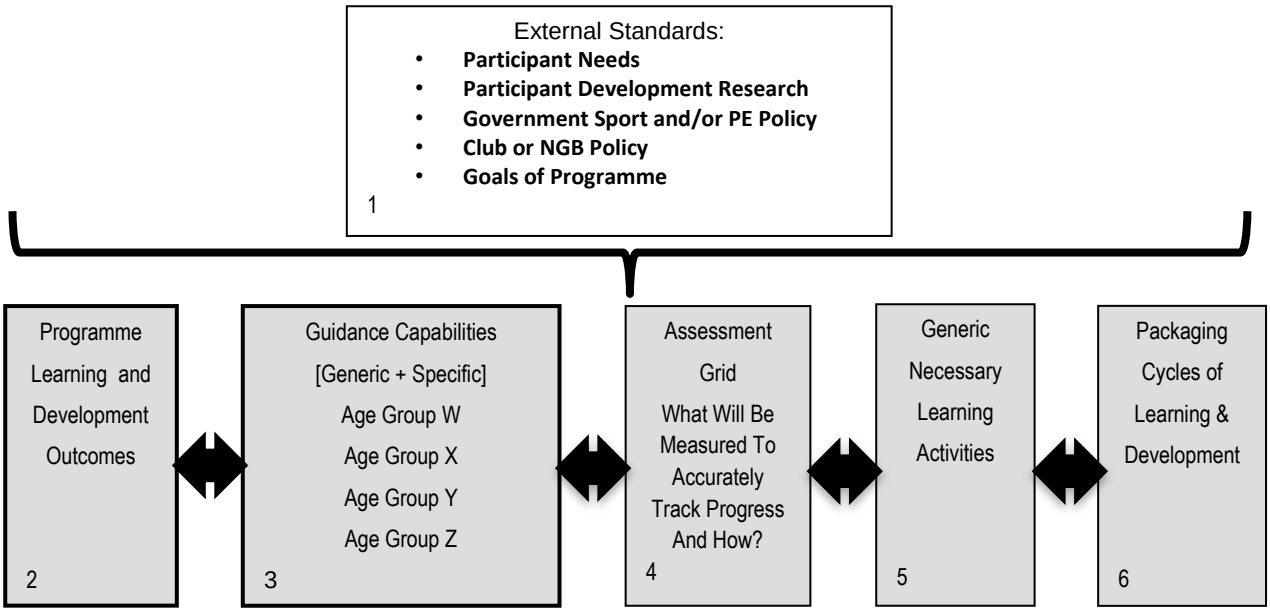

Figure 3. A schematic process to develop a Constructively Aligned Programme.

Whereas figure 3 looks at constructive alignment from a top down Macro perspective, the principle can also be used from a bottom up micro sessional perspective in order to inform practice. Understanding of how each coaching interaction is nested within the long-, medium- and short-term objectives enables coaches' to make more informed adjustments from predetermined plans based on observations, evaluations and reactions to 'goings on' (Abraham & Collins, 2011; Jones and Wallace, 2006). At the micro level of constructive alignment (see figure 4) the coach's primary task is to engage participants in practices that facilitate their progress towards the objectives of a session that align with the goals of the Meso cycle We therefore suggest that good coaches deliberately plan manipulate and 'align'

- *practice structure* (i.e. focus on single or multiple skills; opposed or unopposed practice; blocked, variable or random practice; drill, conditioned or small sided game, etc.),
- *coach behavioural* strategies (i.e. timing and type of feedback; open or closed questioning; demonstrations; and hustles and instructional prompts, etc.)

to maximise the opportunities for

- *participants to engage*, learn and achieve the
- *objectives* of the session and progress towards achieving the meso and ultimately macro goals of the programme

(Biggs & Tang, 2011; B Muir, Morgan, Abraham, & Morley, 2011).

Figure 4. A summary the required alignment to consistently achieve session objectives that align with micro, meso and ultimately macro cycle objectives (Bob Muir, 2012).

The concept of constructive alignment at this more micro provides a useful framework of questions to consider when planning delivery programmes:

- What are the long-, medium-, short-term learning objectives and how can they be broken down into macro-, meso-, and micro-cycles?
- What will participant engagement look like when the objectives have been achieved (e.g. different components of performance relating to technical/tactical, movement, physical, psychological, and social capabilities)?
- What methods of assessment can be used to generate feedback and measure progress against the objectives?
- How will feedback be used to make decisions regarding the focus of the programme and prioritization of time, space, and resources in relation to the different components of performance?
- How will each micro-cycle (e.g. training session, competition, review session) contribute to the objectives of the meso-cycle?

The overall concept of constructive alignment provides a framework to guide coaches' planning and promote connections between factors that impact on the development of macro and micro goals and their achievement. Indeed, coaches who spend time considering these factors are more likely to be attentive to participants' and stakeholders' needs and clearer with programme development, delivery and refinement through more deliberate planning and reflecting leading to better informed intuitive practice.

3.3. Who, What, How and Why

While the concepts of nested planning and constructive alignment offer mechanisms to support thinking about planning, they don't necessarily help with what coaches should think about. This is filled with concept of *who*, *what* and *how* as identified in figure 5. Focusing more explicitly on the meso and micro elements of nested planning the who what how model identifies that coaches can structure their coaching decisions by considering what the needs and wants are of the participant (who), what the sport specific demands are for that participant (what) and what coaching behaviours, practice and task designs should be employed in order to facilitate the development of the participant.

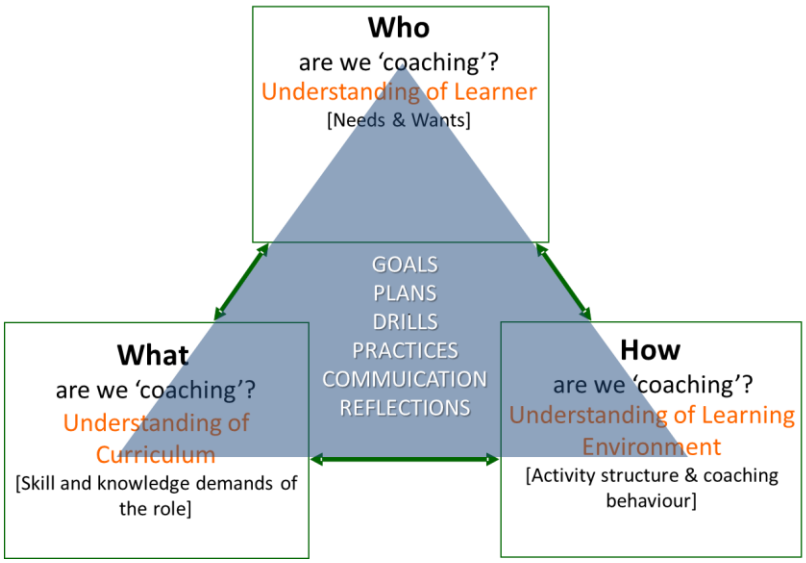

Figure 5. Summary model of the interaction between Who What and How when making goal and planning decisions. Adapted from Abraham and Collins (2011) and Muir et al. (2011)

There are too many theories and research that could be unpacked from each of these boxes for one chapter – in fact the majority of the content of this book could be tied to one or more of these concepts. Consequently, and in keeping with the longer term planning focus of this chapter so far, the focus will be on the *what* and *who* elements, and how these might be unpacked to structure thinking about setting goals and planning. In so doing we draw on the major review of participant development completed by (Bailey et al., 2010) and the subsequent papers that have come from this review, i.e. (Collins et al., 2012; MacNamara et al., 2011). This work offers three broad conceptual views that usefully tie in with the *what* and *who* of coaching and can therefore offer structure to the planning process. These broad concepts are captured in figure 6.

3.3.1. The Who

The first and broadest basis of this work suggests that the development of all people is a bio-psycho-social process. Furthermore, that during the development of young people the influence of these three areas will vary with development. For example within the bio, the neuromuscular skeletal system develops at different rates and this impinges on the child's all- round development. During adolescence there are major shifts in *social* influencers on children from parents to peers. During peak learning and pressure moments children's capacity to cope and even excel will draw heavily on their *psycho*-behavioural and *psycho*-social skills (Bailey et al., 2010; Collins et al., 2012; MacNamara, Button, & Collins, 2010). As such this conceptual overview provides a structure that can guide thinking about, understanding of and planning for the *who* – especially if this thinking is guided by appropriate background reading in these areas.

The second core concept offered by Collins et al. (2012) offers an overview understanding about why people (the *who*) may choose to take part in sport. The importance of this understanding is crucial in allowing coaches to recognise motivation of their participants and match their coaching accordingly. Indeed, it allows coaches make judgements about whether there is sufficient alignment of participant motivation to their own reasons for coaching.

Figure 6. An integrated view to support thinking about Who and What when developing coaching curriculum. Adapted from Bailey et al. (2010) and Collins et al. (2012)

Within their model they identify that initial involvement in sport is about developing a baseline of skills built around getting a sense of ownership and connection with not just one sport but a number of sports. From a motivation point of view this has been described as children engaging with a situational motivation and progressing to an ownership based on improved knowledge and understanding developed through play and/or structured play (Chen & Hancock, 2006; Côté, Baker, & Abernethy, 2003). Progressing from this stage, Collins et al. (2012) argue that if participants engage in sport they do so for one of three broad reasons; Participation for Personal Wellbeing (PPW), Personal Referenced Excellence (PRE) and Elite Referenced Excellence (ERE). There is of course a fourth group, those who have no motivation to take part in sport at all. This chapter only focuses on PPW, PRE and ERE. Collins et al. (2012) define these different motivation states as follows:

> …we suggest that excellence can be usefully considered in terms of a continuum across three different 'worlds'. The first two worlds lie mainly in competitive sport, from club competitor to world class performer. These are as follows:
> (1) Elite Referenced Excellence (ERE) Excellence in the form of high-level sporting performance where achievement is measured against others with the ultimate goal of winning at the highest level possible,
> (2) Personal Referenced Excellence (PRE) Excellence in the form of participation and personal performance, where achievement is more personally referenced by, say, completing a marathon or improving one's personal best.
> …..
> (3) Participation for Personal Well-being (PPW) Taking part in physical activity to satisfy needs other than personal progression. Typical motivations for PPW might include the improvement of one's social life (e.g. making and keeping friends), the enhancement of one's social identity (by being a member of a high status group or club), personal renewal (through activity which is fulfilling) and the maintenance of aspects of self-concept (staying in good shape). (p. 228-229)

There are two points of clarification offered within model however, firstly that motivation is context dependent. In other words a participant could have a PPW approach to one sport, a PRE to another and an ERE to yet another. Furthermore, motivation can change over time, that is, a participant may start with a PPW motivation in a sport but finds a connection with the sport and thus changes their approach to a PRE and maybe even an ERE and eventually return to a PPW approach. In other words there is a fluidity within participant's motivation, perhaps even within the same sport. Finally, all three broad reasons fit with Deci

and Ryan's (2008) view that people have three fundamental needs; for autonomy, for relatedness and for competence since all three can (should) be met in each world.

The third core concept refers more broadly to the *what* i.e. the content that can actually be taught to/learned by the participant (who). Five broad areas of what could be taught to participants are suggested; Technical/Tactical skills, Movement Skills, Physical Skills, Psycho-behavioural skills, Lifestyle and Social Skills. In essence these five areas offer a starting point from which annual learning and performance goals can evolve and curriculum be developed. Interestingly, despite each area having a substantial research and applied knowledge base aligned with them, developing coaching content and/or filling time are often some of the biggest problems faced by coaches, especially novice coaches. Despite often having played the sport that they coach for many years, coaches can often struggle to develop a coherent curriculum for their participants. The source of this problem goes back to the preference of humans to work on intuition rather than well thought out plans. Coaches often prefer to intuitively recreate drills they have been exposed to rather than critically considering *who* they are coaching *what* they want to coach and *how* to most effectively do that. As such coaches often have poorly developed performance models of what their sport requires and how that changes across years of development. Just as 10 year old children wouldn't be expected to be taught maths designed for 15 year old and vice versa, the same is also true for sport. Consequently, for many coaches developing a greater understanding of the demands of their sport and how these relate to and change with developing participants is crucial in developing long terms plans.

3.3.2. Understanding the What

There isn't enough scope within this chapter to unpack the 'what' of every sport for every participant at every stage of their development. However, there are a number of conceptual ideas that can guide thinking and further exploration of content by coaches in each of the five areas.

Movement Skills

The most common terminology used with movement skills is Fundamental Movement Skills (FMS). FMS have been described as the 'building blocks' that enable young and more mature participants to successfully take part in the vast majority of sports and games (Payne and Issacs, 1995). Stodden et al. (2008) argues that without this repertoire of movement competences, a child's opportunity to engage in a wide range of physical activities throughout their life is limited. Therefore, a young person's coach needs to ensure that children are given sufficient opportunity to acquire and develop these movement competences such that they can then be transferred and applied to a range of sporting activities and contexts.

Recognised motor development models, such as those devised by Gallahue and Ozmun (2006) and Haywood and Getchell (2005) classify FMS in to *Stability*, *Object control* and *Locomotor* skills (SOL).

- Stability skills involve axial movements (i.e. movements around the x, y and z axis that create three dimensional movements) where some degree of gaining and maintaining equilibrium is required in relation to the external forces such as gravity or being pushed/pulled. Typical skills would encompass twisting, turning, pivoting, stretching, bending, pulling and pushing.
- Object controls skills involve fine and gross motor manipulation and include throwing, catching, bouncing, kicking, volleying and striking.
- Locomotor skills refers to a movement that transfers the body from one fixed point to another and covers walking, running, jumping, hopping, skipping and jumping.

Both models, and others like them, describe when these SOL skills should be acquired, linked, then applied, to enable progression from fundamental into more specialised and sport specific functional skills. In theory a person should be able to refine and perform more complex movement skills as one progresses from early, to intermediate and then in to the later stages of movement development. For example, Burton and Millar (1998) identify that basic skills such as running, throwing, twisting could be practiced in isolation for early learners, in simple combination such as a zig zag run, running and pick up a ball etc, to more complex specialized and functional combinations such as one player supporting another rugby player running with a ball, taking a pass and running again.

The decision a coach needs to make is how does SOL relate to their sport and how can the development of fundamental movement skills fits with their sport? How these movement skills can facilitate the development of participants who have a full repertoire of skill?

Physical Skills

An aligned view on skill development comes from those who have an integrated view on the role of strength and fitness. The first part of this aligned view is recognising that improving the physical development of children and adolescents is an important factor in increasing sport participation and performance. However, recent research in youth strength and conditioning (Faigenbaum, Lloyd, & Myer, 2013; Lloyd et al., 2013) has highlighted the importance of not treating children like 'miniature adults' in the development of such skills.

To support coaches in making appropriate judgements about developing physical skills in a developmentally appropriate manner a new model has recently been developed. Termed the Youth Physical Development (YPD) model (see Lloyd & Oliver, 2012 for more information), it was developed to be used by strength and conditioning coaches and sports coaches to support a long term approach for improving physical development between the ages of 2 to 21 years. The YPD model focuses on the qualities of fundamental movement skills, sport-specific skills, mobility, agility, speed, power, strength, hypertrophy, endurance and metabolic conditioning with an emphasis placed on certain qualities at particular ages and stages of development. For example, between 5 and 11 years of age, it is recommended boys work on Fundamental Movement Skills, Mobility, Power, Agility, Speed and Strength; whereas between 12 and 15 years of age, Sport Specific Skills, Agility, Speed, Power, Strength and Hypertrophy are the focus for physical development. For example, simply asking children to hop on one leg will create overload and therefore some physical adaptation. Equally, the capacity of a 12 year old girl to complete a 20 metre lofted pass in football is dependent on her capacity to generate the force through the kick to complete the outcome. Engaging in relevant strength, power, and mobility development can all facilitate the successful execution of a skill that is being developed.

While there are obvious links therefore between physical development and movement and or technical skills, it remains essential to consider the individual(s) a coach is working with when planning accordingly. A number of factors, such as maturation status, gender, training age and the ability of youth participants all need to be considered in the 'who' aspect of coaching, with the ability of an individual or group ultimately determining what is planned and programmed. For example, adolescent athletes that cannot demonstrate the fundamental movement skills required to further develop physical characteristics should not proceed with this process until competency is demonstrated (e.g., the ability to perform a body weight squat prior to weight training to develop lower body strength). This approach is illustrated in Figure 1, which outlines the physical performance pyramid. Athletes must be able to demonstrate prerequisites in the fundamental movement skills of stability (e.g., balance, landing mechanics, stability based exercises), locomotor (e.g., running and jumping technique) and mobility (where range of motion is required for sports and activities) before proceeding to more advanced physical development training. Therefore, this should be the focus for coaches working with young people, regardless of age and stage. Once these skills have been demonstrated athletes can then concentrate to more strength based work due to its relationship with all other physical variables such as speed, power, agility and work capacity. For example, if an adolescent athlete has missed the FMS development stage (in which the body weight squat squat should form part of this phase as a lower body stability exercise), or has failed to continue to undertake FMS activities into adolescence (and has decreased mobility and stability due to growth and maturational processes) then this athlete should focus on mastering technical competency and mobility in the body weight squat prior to loading the movement for strength development. This is therefore where a coach must plan and focus the attentions according to the individual(s) they are working with to optimise long term physical development.

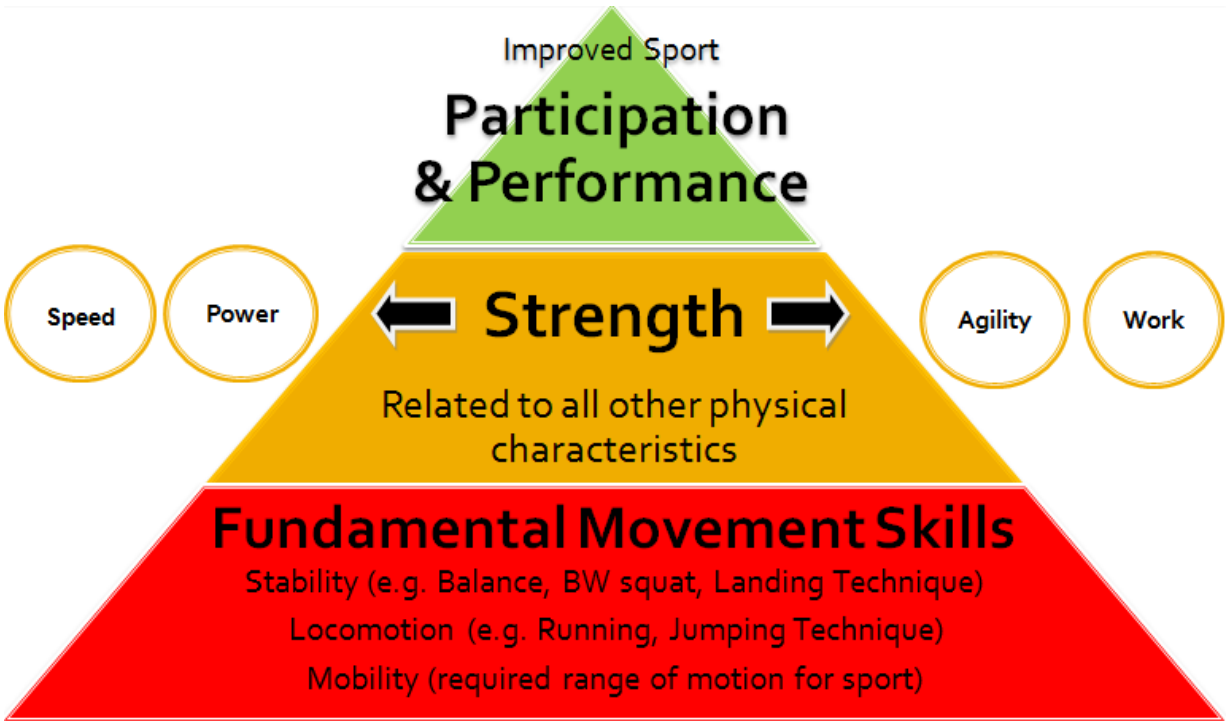

Figure 7. Physical Performance Pyramid

Technical/Tactical Skills

There is some irony that for most coaches this is the most important knowledge base required for creating ideas that can be used to create goals and curriculum, yet is often the knowledge base that coaches lack the most (Abraham et al., 2006; Schempp et al., 2006). It is equally ironic therefore that is the section that this chapter can least deal with, simply because there are just too many sports to examine. There are, however some generic ideas that can be used to help coaches think about the problem.

Drawing on the work presented related to FMS, coaches can examine the demands of their sport by considering what the requisite Stability, Object Control and Locomoter skills actually are, and how these change over time as young people get better. The SOL concept with the associated change from basic to linked, to complex and specialised skills can either be used to critique ideas offered in sport specific text books or even in creating an checklist against which young participants can observed. Beyond this there is a growing range of sport specific research, typically within the biomechanics and motor control domain, that can offer more in depth views on technical requirements.

In a similar fashion, the tactical elements of sport are also difficult to unpack simply because they are so diverse in nature. But again there are some generic concepts that can be used to encourage critical thinking. The first step is to consider what tactics even are. Typically, many will see this as simple ideas such as formations or strategies, however, there is a more fundamental point to tactics if they are viewed through a decision making lens. In short they are the structure that guide decisions taken to achieve the goal of the sport. Consequently, a key question that all coaches need to ask themselves is what is the goal of my sport? The next questions would be what are the things that will help participants achieve that goal and what are the things that will hinder the participants achieving that goal. Finally, all of these questions should be put into the context of the age and stage of the participants being coached.

In keeping with this approach, research has consistently shown that sport intelligence is one of the defining differences between expert, sub expert and competent and novice performers (MacMahon & McPherson, 2009). Returning to the earlier comment regarding not teaching maths for 15 years olds to 12 year olds, the same is also true in sport. Too often young participants are treated like young adults when tactics are

taught. Sports, can be incredibly complex and dynamic environments. Coping with this level of complexity is, unsurprisingly, difficult for young participants unless the problems that they are trying to solve become easier and are adhered too (i.e. coaches don't try to fire fight every small problem that comes along). There is a trend in team sports to move to smaller sided games, since this not only reduces the number of problems that have to be solved, it also increases the opportunity to solve them. Therefore, progressing from the 'what is the goal of my sport' questions coaches need to decide what the problems are that face the young participants need to overcome, in what order to present them to their young participants and the knowledge that they will require to solve the problems. Furthermore, they need to question whether all of their participants share the same ideas about how to solve the problems and have the same capacity to answer them (i.e. consider the who!). In other words, do they have a shared mental model of what they are trying to achieve and how they are trying to achieve it (Richards, Collins, & Mascarenhas, 2012)?

Finally, the intrinsically linked skill of accurate perception should be considered. While, tactics offer guidance to the way sport based problems can be addressed, participant capacity to use tactics is fundamentally tied to their ability to perceive the correct information. Perceptual skills are the essential first stage of decision making, so while teaching participants to see, hear, feel etc the correct information is unusual, having clear ideas about what should be perceived is important and should be planned for.

Psycho-Behavioural Skills.

Psycho-behavioural development can be taken to reflect the operationalisation of psychological skills (such as goal setting, focus and distraction control etc.) to self-regulate observable learning and performance behaviours. As such, it relates to people exhibiting psychological skills through behavioural outcomes. The importance of psycho-behavioural development can probably be traced back to the work of Orlick (1988), with Collins and colleagues (Abbott & Collins, 2004; Martindale, Collins & Abraham, 2007; MacNamara, Button & Collins, 2010a, b) amongst those that have subsequently identified the essential role that psycho-behavioural skills play in participants learning and performance in sport, music and education settings

Typically 'psychology'-based work has been seen as something that should be done within a classroom environment, away from the practice context but this does little to facilitate the improvement of psychological skills in practice. Indeed, while coaches are often quick to command their players to "relax!", "focus!", and "talk!" during practice and competitive situations, the 'teaching' of such skills is rarely conducted within realistic contexts (if done at all). Indeed many coaches simply hope that their participants are made of tougher stuff while bemoaning them as being 'weak' or lacking focus when they don't handle challenging moments well. This situation is perhaps best summarized by Pain and Harwood (2004) who found that coaches did not want time spent on developing participants' psychological attributes to impinge upon 'coaching time' (perceiving them to be separate areas).

In contrast we contest that psycho-behavioural content must be embedded into a coaching programme/curriculum. The fulfilment of a participant's potential is so dependent on the acquisition and implementation of a broad set of psychological skills, anything less than embedding puts that fulfilment at risk. The deliberate integration of psycho-behavioural skills into and across a core coaching programme provides a basis for the development of these skills throughout the year and therefore increasing the likelihood of them being practised. For example, introducing and consistently promoting the requirement for participants to 'think through and mentally practice' how a drill will work and to ask questions on anything that needs clarity could usefully promote imagery, focus, goal setting, quality practice skills. Furthermore, it also gives greater meaning to the skills when they are practiced, thereby enhancing transfer of these skills across sessions and into competitive settings (Holliday et al., 2008; Weinberg & Williams, 2006). The alternative, doing this work in isolation, only promotes the suggestion that it is surplus to the sport itself.

The actual psycho-behavioural skills that we suggest here are drawn from the work of MacNamara, Button, & Collins (2010b). Reflecting their work with a range of elite performers who described their talent journey and the role of psycho-behavioural skills in their journey ten core skills, with aligned sub skills were identified. Table 2 offers real world application of these skills within a professional club academy setting.

Broadly, the red skills are introduced at U9s, the green skills are introduced at U12s and the blues skills are introduced at U16s level. Once introduced however they should continue to be developed even once age transitions have been made.

Core Psycho-Behavioural Skill	Aligned Attributes And Skills	Operationalised Skill
Commitment to the performance domain	Motivation to succeed	Motivated to gain recognition and praise from others Continually striving to improve Desire to fulfill potential as a driving force
	Determination	Willing to work outside of comfort zone to achieve excellence Not willing to accept second best Not willing to accept failure 100% committed to the pursuit of excellence
	Perseverance	Persevered in the face of obstacles Showed a robustness during difficult times Takes responsibility for own development
	Pursuit of excellence as a priority	Decisions made taking the pursuit of excellence into account Willing to give up other activities to achieve in chosen domain Works independently without the supervision of others Willing to make sacrifices to achieve goals
	Self- determination	Ability to adhere to performance plans Self-disciplined
Vision of what it takes to develop	Willing to push oneself	Understood the importance of working hard in the activity Step out of comfort zone
	Recognized the importance of looking beyond physical components of talent	Understand that bigger does not mean better
Goal setting	Goal setting for training / practice and competition	Realistic goals set for competition Process and outcome goals set for competition Engages in goal setting process with coach Ability to independently set goals for training / practice Ability to modify goals when needed
Focus and distraction control	Focus on task relevant cues	Ability to focus on task relevant cues
	Distraction control	Ability to block out distracters in the environment Ability to organize appropriate training environments
Belief can excel	Confidence	Confident in ability to succeed Confident to seek out performance and development opportunities
	Self-belief	Maintains self-belief even during difficult periods
Quality practice	Quality practice	Engaged in requisite amounts of quality practice Understands the importance of quality practice Understands the importance of rest and recuperation Ability to organize practice / training appropriately
Coping with pressure	Ability to prioritize	Ability to recognize what has to be accomplished within certain timeframes Ability to balance competing commitments
	Ability to regulate arousal	Ability to cope with frustration Ability to stay confident in pressure situations Ability to regulate arousal in pressure situations Ability to cope with the expectations of others
	Planning skills	Organizational skills Plans in advance
	Adaptability	Able to adapt to the demands of the situation Willing to change plans if necessary
Realistic Performance evaluations	Realistic Performance evaluations	Ability to accurately recognize weaknesses and work on them Understanding of the underlying factors affecting good and bad performances Is self-critical regardless of performance outcomes Ability to maintain realistic expectations
Social and Communication skills	Social Skills	Ability to interact with fellow performers and support staff Ability to fit into new environments
Imagery	Imagery for skill development	Imagery used for skill development

	Imagery for performance preparation	Imagery used to prepare for performances Imagery used as a source of confidence during performance preparation
	Imagery to review performance	Imagery used to review practice Imagery used to correct errors

Table 2. Psycho- Behavioural Skills and Subskills. Red skills introduced and developed 9-12 years. Green Skills introduced and developed 12-14 years. Blue skills introduced and developed 14 onwards. Adapted from MacNamara et al. (2010b, p82-85)

Selecting psycho-behavioural attributes

The selection of relevant psychological attributes to focus upon should consider two things:

(1) the *psychological demands* of various aspects of the sport being played
(2) the *players' age and stage of development*.

As with all of the 5 areas, in order to identify the *psychological demands*, coaches must first of all establish the philosophy of their sport that best suits their beliefs and clarify their understanding of their club/ngb/school's views on this. Doing so facilitates the completion of a comprehensive review of the psychological skills required to optimally develop in and through the sport. Such knowledge is crucial so as to establish the psycho-behavioural skill work to be done is work that is

(i) Introducing psycho-behavioural skill development to the learner for the first time,
(ii) Developing and building upon some initial foundations, or
(iii) Refining some psycho-behavioural skill work that has been relatively well developed beforehand.

For example, if seeking to do some goal setting with a group of individuals who have never been exposed to goal setting before, it will be necessary to educate the participants on the benefits of setting targets, and perhaps initiating the setting of a small number of targets, before proceeding onto more sophisticated levels of goal setting. Progressing this further towards the 'refinement' stage, it might be more appropriate for coaches to create mechanisms that simply support the participants' autonomous selection, monitoring and evaluation of their own goals, relative to their short-, medium-, and long-term objectives.

Social and Life Skills

Improved social skills are often a goal for coaches, but equally often improved social skills lack any distinct definition and their development is left to chance. At their best, social skills are those that allow us to engage with and flourish in everyday society. They are the attitudes and beliefs that either prevent us from or cause us to engage in anti-social behaviour. There are some coaches who are employed to use sport for broader social good, i.e. working with children who are at risk of offending or working with children who have suffered emotional trauma. However, going to this level of depth regarding social skills is beyond the scope of this chapter. However, there are good reasons for coaches to develop the social skills of their participant. From a purely selfish point of view, young participants who 'behave' within coaching sessions allow sessions to retain focus on learning objectives rather than behaviour management. Indeed effective teachers will often spend the first few weeks working with a new class setting the expectations of good classroom behaviour (Fink & Siedentop, 1989). Beyond this initial need for compliance however, there are many tangible and positive reasons for working on social skills. The main one is that young participants are more able to engage in everyday life and are therefore more likely to be happy. As such within coaching environments young participants are more likely to engage well together, support each other and solve their own problems and cooperate.

There is no obvious agreed set of social skills within the research literature, however there are a number of views from various authors that allow for an overview. For example within the UK national curriculum the Department for Education identifies; Personal identities, Healthy lifestyles, Risk, Relationships and Diversity as being key social domains for learning and development (Education, 2014a). Further definition can be garnered from both research and applied articles however (Jones & Harcourt, 2013; Jurevičienė[1], Kaffemanienė[1], & Ruškus, 2012; Shapiro, 2004; Weinberg & Gould, 2003). This definition has been captured in table 3. In contrast to the work of Macnamara et al referred to earlier, the information included in table

3 is a summary of the work of others. This is no obvious indication as to what should be done and when. Some guidance is offered in the national curriculum work from the UK department of education (Education, 2014b) but even here there is no direct evidence referred to. Consequently, when it comes to planning for the social development of participants coaches will need to decide how much emphasis they place on explicit planning of social skills (given that there is some crossover between social skills and psycho behavioural skills) and which skills are chosen to focus on.

Main Social Skill Themes	Core Skills	Operationalised Skill
Ability to Adapt To Contextual Situations	Skills of Social Cognition Moral reasoning	Independence
		Social problem solving
		Managing conflict
		Compromising
		Being able to function in non-familial social contexts
		Thinking beyond selfish needs - what is best for all involved?
Ability to Regulate Emotions	Emotional Skills	Social sensitivity
		Emotional literacy
		Empathy perspective taking
		Being able to persist with challenging tasks
		Self-control
		Recognising own strengths and weaknesses
Effective Language Skills	Participation Skills Being Part of Group	Friendship building
		Successful play entry behaviours
		Engagement in complex play
		Being able to develop positive relationships with peers and adults
		Developing trust
		Awareness of differences
		Cooperation
	Interaction Skills	Verbal assertiveness
		Being able to listen and be attentive to learning experiences
		Making eye contact
		Tone of voice
	Communication Skills	Apologising
		Common courtesy
		Giving and accepting compliments
		Offering constructive opinion
Understanding Social Values	Moral Behaviour Sportspersonship	Recognising difference between aggression and assertiveness
		Developing respect
		Fair play
		Compassion
		Playing to the rules
		Responsibility

Table 3. A tabulated summary of the work concerning social skills and their development by Jones and Harcourt (2013), Jurevičienė[1] et al. (2012), Shapiro (2004) and Weinberg and Gould (2003)

Spiral Curriculum – Learning Takes Time, There No Rush

Rome wasn't built in a day and neither was a great or even an average athlete. Anderson (1982) estimates that it takes 100 hours of learning activity to create a significant shift in cognitive knowledge and understanding. Ericsson et al. (1993) originally estimated that about a decade of deliberate practice and learning was required to achieve expert performing status. In short, learning and development takes a long time. Unfortunately a combination of treating young participants like mini adults, and coaches feeling the need to show quick results means this issue gets lost. The point of unpacking the 5 broad areas of Movement, Physical, Technical/Tactical, Psycho-behaviorual and Social skills is to show just how much content there is that could be delivered and taught to young participants.

As was stated in both the ideas about nested planning and constructive alignment creating a clear understanding of what the goals of coaching programmes are is crucial to developing a curriculum and assessments for that curriculum. Further to these ideas, therefore, is understanding that achieving these goals will require the participants to go through an extended period of learning and it is understanding how

learning works that can support the development of curriculum. Constructivist researchers such as Biggs and Tang (2011) talk about how learning is cumulative, that learning is best when it builds on what is already known. Similarly, cognitive researchers such as Hambrick (2003) would suggest that one of the best predictors of what makes someone more knowledgeable than someone else is prior knowledge. In other words both theorists suggest that knowledge and understanding begets knowledge and understanding. Two further learning ideas fall out of this theoretical insight, firstly learners are unlikely to exhaust all the learning opportunities from a coaching session or series of sessions at the first attempt. Secondly, that if learning ideas are revisited, then the participant may well be in a better position to take more from the learning opportunity second or even third time around simply because they know more.

The core conclusion from this work is that coaching curriculum should be revisited on an on-going and planned for basis, but with additional expectations being placed on the learner when the revisiting occurs. This approach has been termed spiral curriculum by Bruner (1963) who stated that

> The way you get ahead with learning is to translate an idea into those non-rigrous forms that can be understood. Then one can, with their (participants) aid, become more precise and powerful… This is most of what is meant when we speak of "spiral curriculum". (p.530)

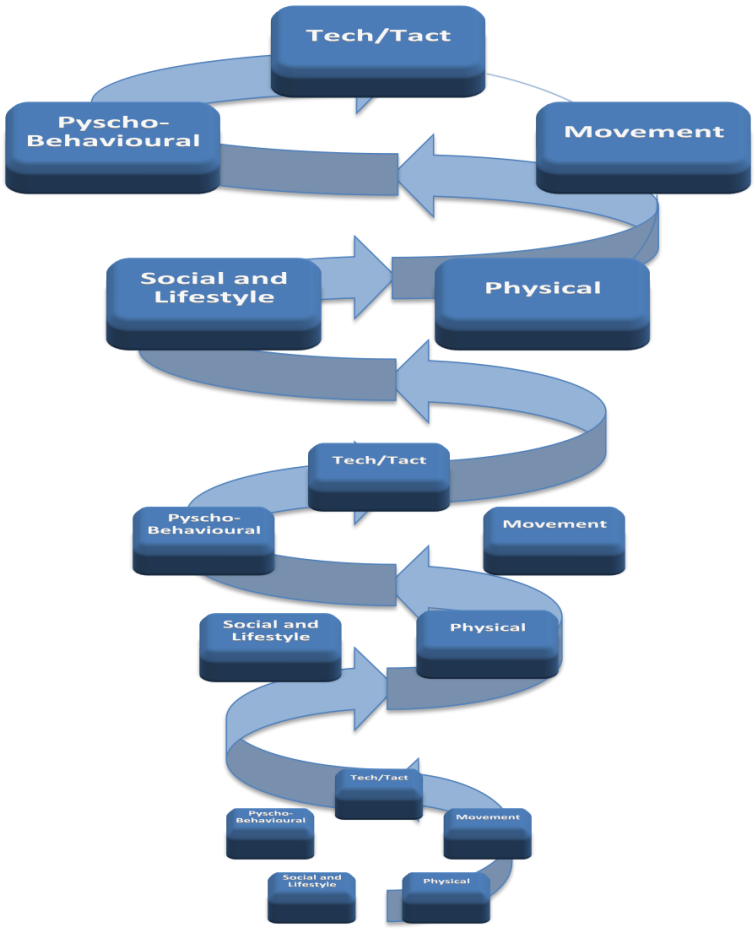

Figure 8. Schematic view of spiral curriculum.

Against this definition, figure 8, indeed all of the figures and the sections of this whole chapter, are designed in the spirit of spiral curriculum. Figure 8 is a concept deigned to offer a way in to thinking about planning. There are even probably enough ideas included in this chapter to have a decent stab at planning a long term programme or a number of linked coaching sessions. However, they will work far better if coaches become more precise and powerful with their understanding through further reading, critical conversations with other coaches, observations of other practice etc.

3.4. The Who Revisited

As described earlier, a participant's development will be fundamentally underpinned by Bio-Psycho-Social developments. While each of the 5 areas described within the 'what' offer useful insight and structure for thinking about the goals and curriculum for any plan, coaches must avoid the mistake of treating all of their participants as being the same with curriculum being equally relevant to each participant. Our experience is that most coaches will immediately agree with this challenge, since it is 'obvious' and 'common sense'. However, as stated earlier intuition generally takes people down the road of treating participants as being the same way until participants stop being the same. At this point blame is often attached to those who veer away from engaging in or developing through the curriculum being delivered. Obviously, it is impossible to totally individualise curriculum with bigger groups, nor is it actually useful to try and do so since it would take too much time and lose focus. However, some attempt should be made to match the curriculum designed to individual bio-psycho-social needs of the participant. Monitoring growth, maturation (psychological and biological), motivation, achievement, curiosity, prior learning, what creates meaning for the participant, response to training and competition, social happenings – i.e. exams, point in school calendar, relationships etc. should allow all coaches to adapt plans to meet the need of individual participants. Furthermore, where there are more extreme changes for some individuals, the bio-psycho-social view can be used as a starting point for understanding what is going on. The constant challenge for the practising coach therefore, is how to plan for a mixed ability group where participants can be of roughly the same age but are significantly different in their stage of development.

4. Creating the Right Environment and Making Best Use of Competition

Thus far this chapter has focused a lot on aligning goals and planning around the *who* and *what*. However, as emphasised in discussing figure 4 and 5, coaches should also consider and plan for *How* they are choosing to engage their participants from a behaviour and task/practice design point of view. This is crucial, for the development of;

- relationships with their participants (see chapter:)
- the expectations/perceptions that those participants enter the coaching environment with (see chapter:)
- an effective skill acquisition environment (see chapter:)

Clearly no coach can be in total control of these issues (it takes two to tango and often there are more than 2 dancers!) but some thoughtful consideration and planning can help. Given the scope of this chapter none of these issues can be unpacked in detail, furthermore these topics are considered in more depth in other chapters of this book. In keeping with this chapter however, there are some useful concepts that can guide thinking.

For example, in planning for meaningful relationships coaches can consider how they are letting their participants (or parents, other coaches) know that they care for, respect and trust them (Abraham, Manley, & Morgan, 2012; Sagar & Jowett, 2012). People's willingness to respect another person is based on their perception of the personal attributes of that person, specifically how trustworthy, hard working and knowledgeable they are. Consequently a coach that displays these attributes as well as being caring, displaying equality in their behaviour (Langdon, 2007) and having shared goals[3] are more likely to form quality relationships.

In more depth, being trustworthy is dependent on being predictable, as stated by Dirks (2000) trust is "an expectation or belief that one can rely on another person's actions or words" (page 1004). As long as participants can trust something then they will form expectations that will influence their behaviour. Coaches who want their programmes to reflect the needs of participants who have a PPW approach then the programmes and coach behaviour needs to reflect this. Similarly if coaches want to have a programme based around a growth and excellence (i.e. PRE and ERE) mind-set (Collins et al., 2012; Olson & Dweck, 2008) then that is the preach that needs to be practiced and therefore planned for.

[3] Taking on board the ideas in the 3 worlds continuum that if coaches don't share the same goals they may want to consider if they are in the right coaching environment.

One area where a coach's capacity to be predictable is in competition, since this is where a coach's capability is most on public show (Leary & Kowalski, 1990). It is therefore worth considering the options that competition offers so that a clear view can be taken and focused on by the coach. Competition plays some role in most young participant's lives and has been identified as being crucial in the development of sport expertise (Baker et al., 2003, Holt & Dunn, 2004). Recently, through improvements of our understanding of learning and development the role of competition in development has become more obvious. From understanding how competition provides a template for understanding the requirements of training, i.e. requisite mental skills (Birrer & Morgan, 2010; MacNamara et al., 2010b), to recognizing how the naturalistic setting of competition should influence pedagogical approaches in practice (Passos, Araújo, Davids, & Shuttleworth, 2008; Richards, Collins, & Mascarenhas, 2012b). As such understanding the role of competition in a young participant's development becomes crucial, not least since today, children as young as five or six years old can find themselves engaged in competition. Furthermore, at 17 (or even younger for 'early specialization' sports), a player may already be engaged in international competition.

Rather than assuming that competition is simply about winning the critically aware coaches recognize that competition offers up numerous opportunities (Abraham, Collins, & Martindale, 2006; Grecic & Collins, 2013). Competition may be an ideal time to assess; check ranking, the development of an athlete, the effectiveness of a particular part of your coaching and training through evidence of retention and transfer. It can be used as a motivational tool; the prize for the participant who is training and developing well, the time for the participant to demonstrate competence and ownership of their development, the opportunity for the participant to evaluate their own progress against other competitors. It can be used a focusing tool; children will often focus more when there is greater meaning to what they are doing (Moylett & Stewart, 2012). Competition can often offer this meaning, as defined through self-determination and situational motivation theory (Chen & Hancock, 2006), for numerous reasons, such as

- less intervention from a coach (greater ownership)
- more game like (opportunity to test competence)
- actually feel part of a team (relatedness)
- more interesting/different challenge simply because there are different players (situational motivation)

Finally, and encompassing all of the previous ideas, competition may simply be seen as learning and development tool; it is a task or practice to be undertaken by the participant just like any other practice or task used in a training session. Indeed, in examining the development of expert performance Baker, Côté, and Abernethy (2003) demonstrated that in addition to deliberate practice, the best athletes accumulated more hours of competition.

In short, competition offers numerous opportunities to coaches to enhance the development of their athletes. However, the skill is capturing this opportunity within a coherent programme of development, and this requires planning. Too often this big picture is missed and competition becomes the focus for setting week to week or session to session goals – otherwise known as firefighting. Typically this simply results in an unfocused programme where quick changes in performance are taken as evidence for learning and little true development actually occurs (Abraham & Collins, 2011; Schmidt & Bjork, 1992).

While it is important to think philosophically about what role competition will play within a coaching plan, it is also important to think operationally and logistically. When are the competitions, how many of them are there, can they be ranked in terms of importance or amount of challenge that they pose? The key point here that coaches should carefully consider how they can most effective use of competition time by returning to the question of; what are the nested goals of the programme and plan.

5. Summarising Key Points So Far

Up to this point we have talk largely about the importance of planning and offered some tools to guide thinking about goal setting and planning;

- Considered thoughtful planning can overcome and then guide intuitive practice in the moment of coaching responses.
- There is a lot of jargon used within the field of planning, some of which is useful to coaches of young participants, some of which isn't. However an awareness of all jargon will probably be useful to aid communication.
- Planning requires thinking but thinking is difficult in complex environments such as coaching. Consequently a range of thinking tools has been offered.
- Nested Planning identifies the need for coaches to be aware of macro long term strategic and political goals within their setting. They should try to contribute to these goals. They should use these goals to then map out how a meso time frame (a year, for example) of this long term plan which in can be use to map out how a micro set of session would be developed.
- Constructive Alignment identifies that well defined goals/learning outcomes should be developed for both long term macro/meso programmes, with aligned ideas for measuring progress and methods of delivery. This alignment should then be carried through into more meso/micro programmes of session delivery.
- The Bio-Psycho-Social model offers a way of thinking about and understanding the behaviour and development of participants (the who).
- 3 Worlds offers a view on why participants may be engaging in a given sport at a given moment. These reasons are PPW, PRE or ERE. Participants' reasons for engaging are fluid meaning that reasons for engagement can change over time, within a sport and from sport to sport.
- 5 Skill Domains offers a view that skill development demands, goals and curriculum (the what) can be drawn from any of Movement, Physical, Tech/Tact, Psycho-behavioural, Social and Life skills. The precise nature of the goals and curriculum should be based on the goals identified in nested and constructively aligned planning and be relevant to the needs of the participant
- Spiral Curriculum recognises that learning is not linear but, rather, is cumulative, interconnected and evolving. Simply because a topic has been taught it does not mean that it has been learned. Indeed even if there is a comprehension and effective performance of a skill or idea, it does not mean that this skill has been integrated within a participant's other skills. As such, in planning for skill development should revisit and build from previous ideas.
- Careful thought is required about creating the best coaching environment, from the development of strong and respectful relationships to the optimal use of competition. Typically for young participants, competition will not necessarily be about winning but about what can be learned, even if that means learning how to win or learn from defeat.

6. The Mechanics of Planning

Ssshhhh, say it quietly, but there is no golden goose that lays the perfect planning template. In our time working with coaches and being coaches we have seen plans that range from extremely detailed multi page booklets to a piece of A4 paper with a table drawn in pen. The reason why there isn't a perfect template is in keeping with the rest of this chapter, a plan committed to paper or computer programme is an output, it is the planning process of thinking and decision making that defines the quality of goals and plans. Indeed from this point of view the paper copy or computer file is little more than an aide memoire to help coaches remember what they were thinking when they engaged in a planning process. However, there can be more to a template than acting simply as an aide memoire. As identified in previous summary section, there are a number of key concepts that can drive thinking about goal setting and planning, and a strong template can act as much as a aide memoire for what coaches should think about as much as what they were thinking about. As such the remainder of this chapter will focus on offering some templates and supporting ideas to help coaches plan drawing on the major concepts presented in this chapter.

Just to be clear though, these are templates developed for a largely unspecified context and coaching is fundamentally driven by the context that it is situated in (Jones & Wallace, 2006). As such our preference would be that coaches use the templates presented as a starting point to develop their own templates to match the demand of their own context.

Nested Goal Setting and Constructively Aligned Programme Outcomes for a 4 year Programme:

Strategic/Political and Theoretical Expectations and Benchmarks					
Programme Outcomes (suggest no more than 6)		1. 2. 3. 4. 5. 6.			
Year:		1	2	3	4
Expected Key Performance Indicators (KPI) to Feedback to stakeholders (e.g. Programme funders, managers, parents)					
Major Bio-Psycho-Social Maturational Considerations					
Expected athlete and/or team capabilities to be shared with participants (language subject to change)	Tech/Tact				
	Movement				
	Physical				
	Psycho-Behavioural				
	Social/Lifestyle				

This template is designed to encourage coaches to think about the broad picture of what they are trying to achieve in the long term using the terminology of programme outcomes. The first box strongly recognises that there will be strategic and political imperative that have to be worked to. However, coaches should also have a strong view on this and this should come from theory. Such views would be informed by the likely motivations and capabilities of the participants in the programme drawing on evidence bio-psycho-social and/or the three worlds theoretical ideas.

The suggested aligned six programme outcomes is rather arbitrary and there is relatively little evidence to support this suggestion. However, the best assumption is twofold. Firstly it encourages people to formulate

a coherent view on what a coaching programme is trying to do, thus allowing for structured and coherent thinking about how to best achieve these outcomes. The second reason is probably more strategic, fewer programme outcomes allows for an easier and concise 'sell' when presenting them to key stakeholders such as parents, participants and/or managers. The creation of well-defined programme outcomes sets platform from which aligned expected KPIs and developments in participant capabilities can be mapped. This table strongly aligns with the need for nested thinking and constructive alignment presented in figures 2 and 3.

Assessing Status and Measuring Progress

	Assessment Method(s)	Data Collected, Collection Method, Environment and Time of Collection	Output and Link to Programme Outcomes
KPIs			
Bio-Psycho-Social Maturational Status			
Tech/Tact			
Movement			
Physical			
Psycho-Behavioural			
Social/Lifestyle			

Following the constructive alignment concept, coaches will need to monitor progress through the use of some form/s of assessment system. This provides both information about progress and, if the systems have meaning for the participant, crucial motivation to the participant about where to direct their efforts and how well they are developing. As such this will not be a quick process, planning to develop valid and meaningful assessments will require critical and innovative thought.

Annual Goal Setting For Team and/or Individual with aligned

	Meso Cycle 1			Meso Cycle 2			Meso Cycle 3			Meso Cycle 4		
	% Allocation of effort	Goal (Spiral Connection)	Required learning activities & Assessment Points	% Allocation of effort	Goal (Spiral Connection)	Required learning activities & Assessment Points	% Allocation of effort	Goal (Spiral Connection)	Required learning activities & Assessment Points	% Allocation of effort	Goal (Spiral Connection)	Required learning activities & Assessment Points
Tech/Tact												
Movement												
Physical												
Psycho-Behavioural												
Social/Lifestyle												

Continuing with the flow of constructive alignment presented in figure 3, this template meso cycles of goals with the need to plan aligned required learning activities and allocate effort. The allocation of effort is designed to encourage coaches to think about where the emphasis of development (and probably competition) for that meso cycle lies. It may be evenly spread across the five areas or more focused in just one or two – the answer to this will come from considerations about how the coaching curriculum and participant development interact in order to achieve the programme outcomes. As such the 'Goal' box is designed to encourage coaches to accurately define the goals that are being worked towards while also considering how these will link to past and future goals in a spiral curriculum. Finally, the required learning activities box encourages coaches to think about what type task or practice and coach behaviour is going to be required to facilitate the required participant engagement in keeping with figure 4. Clearly only a limited amount of detail can be added here but this can encourage coaches to consider that learning activities do not just have to be used once and there should be some level of continuation in practice design. This

consideration should also account for when any of the previously considered assessment/analysis methods will be used to monitor progress.

Meso – Micro Planning Template

Meso Cycle 1		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Objectives (Integrative statement(s) from 5 goals)									
Resources	Training Time Available								
	Facilities Available								
	Competition Focus								
	Suggested Homework								
	Support available/required								

This planning template provides a further level of detail at a meso – micro level. We suggest here that the explicit goals of the meso plan maybe better served as being recorded as weekly objectives here. There would be no reason why the same objective may even cross more than one week – especially in recognition of our earlier comment about learning taking a long time. This is the first time that resources have been explicitly added. Consideration of resource can be a reality check on the level of development expected against the resources available to support that development [4]. Note that 'Homework' is an explicit resource available to all coaches but, in our experience, infrequently used by coaches. Competition focus in included in keeping with the idea that coaches should actively consider how they can make best use of upcoming competitions in meeting short term objectives and longer term goals. Finally, there is a reminder that coaches may want to consider how they can make use of any support available, for example asking a parent to film a competition for use at a later debrief.

The final planning template is an individual session planner. This represents the final template in a constructively aligned, nested planning approach. Here team and individual objectives are aligned with meso goals. These goals should then lead to the formulation of practice and task designs, alongside suggested coaching approaches and even the vocabulary that may be chosen.

[4] there would be nothing to stop coaches considering how resources could be planned for earlier in the cycle if this was thought useful

Session Planner

Coach		Date		Meso Block		Week	

Meso Block Goals	Tech/Tact	Psycho-behav	Physical	Movement	Social/Lifestyle

TEAM Session Objectives		
Technical/Tactical	Physical	Psychological/Social

INDIVIDUAL PARTCIPANT Session Objectives		
Player Name	Learning Objective	Progress Review & Action Plan

Session Structure & Organisation

Key Coaching Methods & Vocab
Coaching Methods: Vocab:

7. Health Warning And Conclusions

Planning is not an exact science, nor is this chapter anywhere near a complete source of planning ideas. In fact many of the ideas offer only a conceptual level of insight to the how, what and why of planning (in fact the rest of this books offers ideas that could be considered within any planning activity). When thinking about the use of planning to enable and inform participant and performer development and coaching, it is important for coaches to be aware of a range of participant and performer possibilities which impact on its

coverage and efficacy. For example, it is useful to draw on two typical yet contrasting images of talent development. One is of a naturally gifted athlete who would succeed in their chosen sport regardless of the effort put in and resources made available to them. For example, pundits often make comments such as 'Messi's a natural talent' implying that with these natural gifts Lionel Messi's performance success was inevitable. The other is of the master coach working miracles with individuals and teams whom no-one else gave a chance, or who have been deprived of success for many years. In the first image, the coach has a limited role, accompanying the athlete on his/her path to glory. Success is inevitable - so why bother too much with planning? In the second image, the coach's knowledge and expertise reigns supreme. Planning is used as a means of structuring and implementing this knowledge, providing a kind of formalised guarantor of long term performer success.

The problem with these images is that they have very little basis in reality, or research for that matter! Instead, the research suggests that talent development is a more complex set of interactions between genetics, time devoted to training and practice, psychological enablers, and access to social resources such as coaching and support from the family. Many ingredients come together to produce the high performing athlete or indeed the poorly performing participant. These ingredients may be different for different participants, and come together in different times and places. In this complex interaction there are influences, not determinates; there are possibilities, not guarantees (North, 2013).

There are no easy answers but the following seems important. By simply having knowledge of the complex and multidimensional qualities of participant development and coaching, coaches can recognise that their role is important whilst repositioning themselves from 'controllers' to 'guiders/influencers' working with the resources available to them and doing the best they can. Planning should be seen as one means of assimilating information, guiding action, and minimising risk in these complex coaching environments. It should also be seen as a means of focusing self-reflection. Why didn't the planning work? What could be done better next time? There are no guarantees in participant development and coaching but effective planning could be seen as one tool to structure coaching, minimise risks, and encourage reflection on what worked and what did not.

8. Some Comment From Coaches

In the process of putting this chapter together we sent it to a number of experienced coaches and coach educators to get their feedback on the chapter. Where possible we used their feedback in editing this chapter. However, many of their comments deserve some stand alone reproduction as critical comment that may help other coaches engage in some critical thinking about the contents of this chapter:

> Motivation can change over time, we've had some success with allowing kids to temporarily drop out of ERE/PRE groups into PPW group at times when 'life has got tough', for example at exam time. So instead of having to 'perform' they can just enjoy sport for a period of time and then switch back into Performance when other commitments subside. Coaches should consider how their planning and competition impacts on parents' capacity to support their kids through the sport. I don't see many, if any, kids in Triathlon whose parents aren't professional services or 'middle class', can coaches plan for those kind of barriers? Coaches should draw on the contents of this book to consider why and how they plan for talent selection, hopefully coaches would see that this doc helps propose there is a much wider issue than current Personal Best. Also coaches should consider how to plan for talent selection issues when they don't have control over the selection process / criteria.
> *Tony Jolly, Head Coach Manchester Triathlon, Coach Educator for British Triathlon.*

> One observation I have made of many coaches and especially coaches of 12 to 18 year olds is they often don't take the big picture into account. Considering the physical and mental stress loads in general life, from something as simple as walking to school, engaging in other sports and staying up late to understanding academic and social stressors, these are all crucial in monitoring and adapting coaching plans.

Coaches should be wary of planning for and introducing mental skills, wherever possible recognize the skills that children already possess and develop in other areas of life. Children and teenagers often struggle to put things into perspective. If a coach suddenly starts to focus on mental skills in a way that the child doesn't recognize then the consequence could be that the child internalizes this to be a bigger problem that it actually is.

I would emphasise that in general most teenagers that are not in academies are still choosing what they are good at in sport and therefore planning for flexibility is key for this type of teenager. Their long term goal is more likely to be what sports or sports could I do.
Sue Jolly (No relation to Tony Jolly). Sport Learning Consultant, Mountain Bike Coach

I really enjoyed reading this chapter as unlike most books I have read it is clearly understandable and written in common sense plain English. The issue of experience and expertise is an interesting issue, people with expertise are those who are deliberate planners but coaches' expertise also depends on the quality and versatility of their experiences. I think you need both assets to be able to plan training/development programmes/career paths successfully – you need the experience of going a down a variety of roads in your own career with an athlete and then you need expertise to make sense of what you have experienced. Therefore experience and expertise must work together as Ericsson et al (1993) said it take many hours of learning and deliberate practice (experience) to achieve expert status.
Sue Ringrose, Head Coach, New Farm Equestrian; Coach Educator British Eventing.

I think the chapter highlights key considerations and brings to life the requirement for alignment between planning processes in order to influence real-world coaching practice. From experience this is especially important within Talent Development Environments, but equally with younger groups of children in multi-skill activities where 'ages and stages' of participants are wide-ranging.

Also, youth participant development, across any 'performance level' and regardless of the intended outcomes of a coaching programme (participation/talent development), at some stage the focus turns to the needs of individuals within a group. This requires in-depth planning i.e. not only broad consideration of the way general-outcomes can be supported but also how associated learning opportunities can be afforded to individuals in the group. This individualization may either differentiate complexity of intended-outcomes and/or address different aspects of participant development across bio-psycho-social domains for participants. Planning can accelerate participant development, as well as preparing coaches for what may come within coaching practice so that they are equipped to deal with emerging needs of the performer.
Andy Rock, AASE Scheme Manager and Academy Coach, Leeds Rugby and Otley Grammar School

Some ideas I would offer in addition to those included in the chapter are:

- Booking facilities and building resources require planning since both play a large part while working with young people.
- Don't assume that movement skills are completed when participants get beyond the FMS stage. Working on advanced SOL skills is important for participants to facilitate the development of sport specific techniques.
- There are major benefits in planning for subtle challenges (even losing) to create speed-bumps that are specific to a mental strength area for the athletes developing within a sport. However, developing a meaningful speed bump for an athlete requires a lot of preparation and cooperation
- Offering formative feedback on current coaching topics within a meso cycle help you identify with current learning outcomes as opposed to what you want it to look like at the end of the plan.

- Identify what athletes arrive at your programme knowing and looking like while considering what they need to know about in the next environment on their journey.

Stewart Wilkinson, England Rugby League Performance Coach; Lecturer in Sport Coaching and Performance, University of Central Lancashire

I enjoyed reading the chapter, you have incorporated certain areas into the planning process that often get overlooked. Of course, mainly that '*the participant comes first' or decides what happens next.* It is delivered in a nice 'humanistic' and honest manner which coaches will find engaging too. LTAD is analysed in a balanced manner which takes into account early, mid and late specialisation and the main issue of competition structure. I would also encourage coaches to consider the issues of windows of bio-psycho social issues of trainability when planning for individuals as they mature (Balyi, Way, & Higgs, 2013), and shift from sampling a number of sports to specializing in a few to investing in one or two (Côté et al., 2003).

Ian Freeman, High Performing Coach Research and Long Term Athlete Development Specialist, British Swimming

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