Every Second Counts

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I have coached rugby and S & C for 30 years. The most important things that I have learned is that I have been lucky in getting “breaks”, however if/when you are given a break you must grab it with both hands, that still does not mean you will succeed, sport is cruel and many good coaches are cast aside for no good reason. You will make many mistakes, some of them controllable, some uncontrollable, as you get more experienced you should make fewer of the former. Individual sessions will go badly, normally for one of three reasons 1. you 2. the material 3. the players. Trust your instincts and do what is “right”, and be honest with your players. There is always “another player”, players with great ability and poor attitude are “coach killers” they will always let you down, players with a limited ability and a good attitude will have the respect of other players, and will “hold the fort” until a player with similar attitude and more ability replaces them.

Things that have changed within rugby; players are much stronger, the talented player without the necessary level of physical development will not succeed. Analysis of training and the game is much more in depth, though this can be a two edged sword as coaching is an art and not just a bunch of figures. Training is much more game specific with more of an emphasis of “decision making in context”.

Any coach can set up the “perfect session” with lots of repetitive drilled activities with players making few mistakes. To the outsider this will look good, but it is likely that the players are learning very little.
This is part of your workbook. With the first group I carried this out as an exercise. The interesting thing was that over 90% of the responses did not relate to physical, technical or tactical issues. IMO this reflects two issues 1) there are key “off court” problems that are affecting the ability to put a team out and train/play consistently week in week out 2) the coaches are thinking as a “manager/organiser etc” rather than as a “coach”. I am not involved in VB therefore it is unfair to be critical, and I have coached lower grade rugby teams where player numbers/facilities etc are key problems, however I would say that one of the responses of the audience to “Strength” was key when he said “enjoyment”. If players enjoy sessions they are likely to come back, and evidence suggests that enjoyment includes learning new skills, having appropriate and challenging competition, playing games within training, having a friendly coach. Good coaching is essential to recruiting and retaining players. If a coach has enough players to work with they can then plan to develop these players.
The higher the level of sport the more in depth this is likely to be, BUT THE SAME PRINCIPLES APPLY.

One of the coaches said he needed to improve “central defence” (apologies if I misheard), another said “jumping” another “moving off the ball”. These are all clear, measurable technical and tactical components. The question then arises “how?”.

Jumping may be improved by strength training, plyometrics, “moving off the ball” may be improved by strength training, plyometrics, and also tactical awareness and decision making (there is an excellent study from Brisbane Broncos on the physical and tactical components of “agility”). These then should be further broken down into “when am I going to introduce these into my court sessions, how will I progress these and how will I measure the efficacy?”, at more “elite” levels the question will also how will improve these via my S & C programme.

I described the situation with the Australian Women’s team a few years ago and how jumping analysis on a “Force Platform” indicated that the players had too deep and slow a counter-movement prior to the concentric jump which meant that they were being beaten at the net; this information was then used to inform their strength and conditioning programme and their individual jump technique.

Pre habilitation and injury reduction: what exercises can I introduce that will improve my players’ resilience and how will I progress these? I talked especially about the situation some women’s sport with ACL injuries and the importance of simple tests such as “hop & stick” and how exercises such as these can be incorporated into the session.

The components of the plan are:

- Technical ability & tactical awareness
- “Fitness”:
- Pre-habilitation, injury prevention and rehabilitation
- Recovery and regeneration
- Psychological, nutritional and welfare needs.
Basically, choose 2 or 3 key elements and define how and when these can be achieved and measured.
This is important to know who will be having an effect on the players. Significant others are often other sport coaches, teachers, parents etc. In a school or club situation players may spend a lot of time with significant others and this can have a large influence on the players. For a local club an SO may be the manager of a sport centre, the caretaker of the school etc.
These relationships are sometimes ad hoc, like throwing all the ingredients of a cake into a mixer without considering the timing of the each ingredient, the beating of the egg, the mixing of the butter and flour etc and we do not know if the effect each component has on the athlete is Additive, Interactive, Negative etc. This state of affairs isn’t good enough.
These cannot exist in isolation. The sports coach needs to know enough about the other areas to have an informed opinion about the impact of these other disciplines. The coach in conjunction with the players needs to have set the philosophy of how we are going to play the game, and all disciplines must work toward this. The coach must also be aware of how changes to the laws of the game may have a knock on effect to other areas, e.g., in rugby union a couple of years ago the laws of scrum engagement were altered so that the opposing players are now together under the referee’s instruction as opposed to engaging from a distance; thus the physical action is isometric and then concentric-only hip and knee extension as opposed to a counter movement involving an eccentric action, and this would need to be reflected in the strength programme of those players. Similarly, if your philosophy is to be a big and physically dominant team then this would not work if your S & C department had a programme dominated by running not strength training.
ARGH!! There will be programmes that look like this but 90%+ of programmes will not need to look like this. Keep it simple.
I gave the example of how I would plan the year with my local (not very high standard) rugby club.

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**Competition Phase**

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Initial Annual Plan

Periodisation

The cycling of specificity, intensity, and volume of training to achieve peak levels of performance for the most important competitions.
Filling these tables in is explained in some detail in the “Planning & Periodisation” workbook. In simple terms it starts with filling in key dates.

It came across that most of the coaches have no contact with the players prior to the competitive phase. Therefore, if most technical and physical development takes place in sports during the preparation phases, it is very difficult to have a large influence on player improvement, and the coaches will always be playing catch up.

I suggested that if coaches did not have contact with players then there should possibly be other solutions should as web based programmes that players could access
As a yearly plan develops it will start to look like this. In the preparation period “blocks” (mesocycles), will normally be 4 then 3 weeks long which allows for a 3:1, and then a 2:1 hard:light ratio. In season this maybe 2:1 or 1:1 depending on circumstance. By working like this from a technical point it means that periods of work can follow on from each other and also that all areas of work are regularly addressed.

From an S & C perspective it also means that there is a progression in volume and intensity, e.g. in coaching hopping and landing drills. And this progression is mapped out in advance. However, if players are responding poorly, or if the programme is too basic it can be tweaked, BUT, if you do not have a Plan A you cannot have a Plan B.
Planning of “Running” & Fitness

1. Classic Model
2. Reverse Model
3. Hybrid model:
   • Identified blocks
   • Accumulation within block
   • Intensification through blocks
   • Linear or undulating?
   • Purpose of SSG

The Classic model works from high volume & low intensity to low volume and high intensity, e.g., Long Run > Intervals > Sprints, and this was popular in team sports in the 80s and 90s, but in my mind it is not applicable to team sports, and is based on single event sports. I also believe it produces slow players.
A Reverse Model is more applicable where players develop quality movement control and speed dynamics first and build volume and “fitness” later. We want players who can develop “quality” and then repeat this, rather than players who can maintain mediocre quality.
Within the aforementioned blocks in the general preparation phase there is likely to be an increase in both volume and intensity, as the competitive phase approaches the volume will be reduced.
Linear or undulating? Most young players or players with a low training base can benefit from linear accumulation, i.e. relatively constant addition of load so long as this is managed. With elite players this could lead to tiredness or plateaus and therefore increases in training loads tend to be undulated.
For the coach of novice and general players load can be measured as simply as 4 x 2 minute Small Sided Game > 6 x 2 > 5 x 3 etc, or 1 x 6 exercises in a circuit > 1 x 8 > 1 x 10 > 2 x 6.
There are a lot of books on periodisation. The Sports Coach book by Anne Pankhurst is a good introduction (But please ignore the bit about minutes of jogging to improve fitness for soccer players!! There are another couple of dubious bits but I shall let you make your own mind up). The text by Bompa and Haff is very comprehensive and covers a wide range of sports. But many of the books are poor, without wanting to name names, some are just unrealistic in team sports, and others try to impose a classic model on team sports and appear to have been written by sport science students!

Planning Blocks

- Base these on natural breaks, not text books, e.g., Xmas, school exams etc.
- Most periodization texts are unrealistic and very difficult to apply to British team sport
This further highlights the importance of goal setting and planning with clear time lines, e.g., you may give your players 2 x 4 week blocks to improve two components, e.g., acceleration and vertical jump. Therefore your strength programme should be designed to match these needs, your warm ups and physical court training should also aim to improve these. Try to keep negative interference to a minimum i.e. in this case do not have an unduly high volume of “on feet” aerobic activity, but remember team sports athletes are not weightlifters, and it is important to plan the technical and tactical elements.
Pre Season Planning, Example 1

- Not always as easy as this!

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What do you do with one or two sessions a week. What do your players do on the other 5 days? If this is the case then I think that it is a good idea, if time allows, to sit down with players and fill in what they do now. Try to categorise this in terms of intensity, energy system and physical quality e.g., a friendly knockabout game of VB is probably low intensity aerobic, a X country run is high intensity aerobic, gymnastics is strength and flexibility etc. Work out when your players have time for additional S & C, e.g. this could be 2 x 20' home circuit.
This is an example from a “part time professional” but may apply to some of your higher end players. You need to weigh up the advantages and disadvantages of combining gym and court work on the same day, same evening etc. A sport that is probably closer in terms of this is netball. A player may play for Leeds in the Super League and her court practice time may be e.g., late on a Wednesday night, but then she may go for Regional training to Manchester early the following morning, she may then have to get back to Leeds for 10am for lectures. The logistics of all this are a nightmare. From an S & C perspective evidence suggests that players make more progress when supervised (no surprise there!)
This is an example of a full time programme from the late specific preparation phase (pre season). When planning this number of units into a week the sequence must be logical, speed, power and maximal strength should be when players are fresh. Energy system training should be alternated e.g., hard lactate work (intervals) on one day, lower intensity aerobic training on another.

Physiologically it might be best to train 3 days on 1 day off etc, however this interferes with weekends. Sometimes there is then a trade off between this and family life, as players in team sports are often away for over 30 weekend per year, it maybe better to train 5 on 2 off. This depends on your philosophy and team culture, can the players be trusted to do a session on Saturday morning on their own, thereby leaving the weekend free?
This is In Season (Competitive Phase), Principles. A coach pointed out that his team played on a Sunday and trained on a Monday. My suggestions would be, depending how long the session was, to have a long but low intensity skill based warm up interspersed with a lot of mobility work. To do some low intensity technical coaching and then use games that did not involve a lot of explosive landing, jumping and stopping. Ideally in this scenario the players would do S & C on Tuesday &/or Thursday to develop the game specific components.

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In Season Weekly Planning Principles
These are real examples from Premiership Rugby in season with weights and double sessions, i.e., team session in the morning and weights and unit skills in the afternoon. The next game is on the Saturday.

Week 1: Advantage 2 on 1 off Disadvantage 2 days training before game
Week 2: Advantage Big Taper before game Disadvantage 3 days consecutive training

Both examples will work with CORRECT TIME MANAGEMENT
This is a week’s planning using a Football example. Here the activities on the field are categorised according to their physiological impact, e.g., 7 v 7 on a whole pitch carried out for a long period (10 minutes) would be “Endurance”, Soccer tennis for 1 minute would be “Recovery”. A small sided e.g., 3 v 3, in a limited space with lots of acceleration, deceleration and change of direction carried out for three minutes would be “strength”. Speed is more difficult to categorise but would involve games and drills where there is enough space for players to accelerate and run without obstruction.
Does a microcycle always have to be a week long?

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Clearly games do not fit neatly into 7 day cycles. With more than one game in a 7 day cycle the key consideration is rest and recovery.
Who is in charge? If you are the only coach this is obvious, but where there is a team of coaches this becomes more problematical. Should an S & C coach who may know very little about the technical and tactical content run the warm up? Should the coach who may know very little about the principles of warm up and e.g., speed development do the warm up? Should there be an integrated approach involving “team coaching”, should both parties up skill themselves in their deficiencies? Who should plan the volume and intensity of the sessions? How does the load fit in with the planned week, what if this is a “recovery week” yet the coach suddenly decides to do lots of tactical work in response (“reaction”) to a poor performance? What is the purpose of SSGs? Are they to improve fitness, decision making or both? How do we monitor the training to see if we are achieving the desired outcome?
The ability to play the game is central, everything else is an element of this.
Quick rugby explanation.

Attack: go forward by “pass”, “run” or “kick” (though the latter turns the ball over and is effectively transition to defence). To be successful with “running” requires the physical components of acceleration, body mass, strength, change of direction speed and the work capacity to successfully repeat this for the duration of the game, plus all the technical elements.

The force plate graph story that I told earlier from the Australian Women’s team is an example of a particular physical element having an influence on a particular game component.
Task

- Break Your Sport into the 4 components
- Describe the key physical determinants of each
- Describe how these can be developed “off court”
- Describe how these can be developed “on court”
- How do you measure the intensity of volume of these?
What type of session have you planned? If you have planned a hard conditioning session why are you, the coach, spending lots of time talking?

Players learn by doing and making mistakes, and discovering ways to succeed, so why are you, the coach, spending lots of time talking?

Vern Gambetta has a “no Ls rule”, No Lines (i.e., queuing up waiting) No Laps (i.e., jogging round the pitch) & No Lectures (i.e., Coach twittering on)
Every session should be aimed at developing part of your coaching/team philosophy. The session content should reflect the aims and these should fit in with the stage of the plan. The session should have a logical progression where high quality speed and agility are early in the session, and aerobic type fitness activities are nearer the end of the session. With better players the latter can be mixed with more technical work to put skills under pressure.
Thoughts from European Soccer

Mourinho (2001) states that the training process should always be an "exponent of the principle of specificity. Specificity / model of play and not just a specificity / soccer".

Every part of your session should reflect how you want to play. I would argue that early in the development pathway players should be playing a variety of invasion and other games, farther up the pathway they should be playing more sport specific games and at the elite end every second as Mourinho says should be devoted to how you and your team want to play.
We did not really touch on this, but effectively it is saying be aware in your planning of the tactical, technical and physical components of each activity and how manipulating the constraints (court size, playing numbers, rules etc) affects each of these components.
Task

- Analyse your last session(s) and ask:
- What did you do in your warm up, what were its aims? What components of technical/tactical/physical did you incorporate?
- How did you quantify the physical components of the session?
- How will you “maximise” the intensity physically and tactically? What is “World’s Best”?
- Was there any “wasted time?”
Planning ("Tactical Periodisation")
Acknowledgements

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