



In training the soccer scrimmage form must be used most of the time, just as in street soccer. (Rinus Michels FIFA coach of the century).



***‘Circuit Model’
Sheffield and Hallamshire Presentation
31-08-07
7pm-9pm.***

Most coaching seminars I’ve attended deliver a focus topic such as crossing and finishing. The coach will run through a technique, a skill and SSG just as the FA deliver. Coaches will go away with some neat exercises, a session that you can recreate with your team, which is fine and extremely useful, but I hope this seminar is going to be slightly different. In contrast to the norm what this seminar is going to present is an alternative framework to the FA of how to implement effective youth development coaching sessions. The following document is going to look at research, academic literature and outlines a framework of best practice.

***A Nation Stunted of ‘Technical Quality’, or a
Nation Inferior as clinical ‘Decision Makers’?***

Introduction

It has been well documented in recent times that the English game is underachieving at international level and this has been magnified with influx of foreign players into our leading league, 340 out of 500 registered players are foreign playing in the premier league, 2006/2007 (an average of 17 per club where the average squad number is 25-68% are foreign players). We simply aren’t creating the youngsters for the future of the English game. Questions need to be asked as to why; we have state of the art training facilities, world class playing stadiums and a highly evolved infrastructure of support staff. Perhaps it’s time that the nucleus of English player development is overhauled; our traditional coaching practices.

Society and modern technology has prevented ‘street football’ being at the centre of children’s lives in the 20th century, football activity in the parks and on the streets has diminished, and children don’t have the opportunity to practice through playful activity (SSG’s) like they used to.

What is concerning is that research suggests that the players who participated in playful activity and individual practice within their junior lives are the players who go on to earn



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full time employment within football. Does this form of opportunity now exist? Without the solid grounding in playful activities (1v1/3v3/4v4) as young children do we expose ourselves to a nation deficient of talent, unique individuals who evolve through playing with their friends? Players who can **think** for themselves.

Document Outline

The following document is going to look at the rationale for SSG as an integral part of our educational continuum and for us to start to embrace what the continentals have been doing for years. Creating ‘open’ training exercises, situations where players have to constantly problem solve.

First we will look at filmed segments of players playing in SSG’s (3v3, 4v4, 5v5 and 6v6), breaking down the number of opportunities for players to make decisions when in possession of the ball.

Secondly we will look at research of current structured training sessions and highlight some worrying issues around the delivered content within the English Academy system.

Finally this article will look at the ‘Circuit Model’, a coaching framework developed to effectively change tradition and enhance LTPD.

Throughout all 3 areas of this article, effort will be made to show how we most effectively use the precious training time available to accelerate players, perception, analysis, **decision making** and execution in game situations.

*Please note this study documents the number of decision making opportunities faced when in possession and **doesn’t** relate to decisions having to be made away from the ball or from a defensive context.*

The following identifies the difference between the minimum, maximum, average opportunities faced within each exercise over a 10 minute game of line ball

Game size	Minimum	Maximum	Average
3v3	17	27	22.5
4v4	18	27	23.5
5v5	8	24	16.2
6v6	9	20	13.4
Variation +/-	9	7	10.1



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This is a very small sample and doesn't identify what the decision of each player was (i.e pass, dribble, turn etc) but in the vision of creating players who are creative, problem solvers what this does highlight is the overwhelming variation in opportunities players face between 3v3 and 6v6 to execute techniques based around their perception and decision of ever changing situations. Providing ample opportunities to practice techniques under pressure is a must in developing expertise, literature explains that 10,000 hours of deliberate practice/ play is a essential in 'Elite' player development, so how we structure those hours is integral. A broad spectrum of educational continuums are available in player development and the one chosen by a coach as 'Best Practice' surely must be governed where possible by 'evidence', instead of chance, tradition, or opinion alone.

Take for example if we suggested we allocated the last 20 or 30 minutes to game play of a normal 2 hour session. During this period the coach could choose to play 2 games of 3v3 or 1 game of 6v6 which would have a huge impact on the number of decision making opportunities.

Using the average number of touches supplied by the data we then multiplied the figures for both 3v3 and 6v6 by the 10,000 hour rule to generate the number of decision making opportunities the SSG would provide during LTPD, the following was found:

1. 3v3: 22.5×2 or 3 (i.e 2 or 3 x10 minutes) = 45 or 67.5 x 5000 (i.e.10,000/ 2 , because the session is 2 hours long)= **225,000 (20 Mins)/ 337,500 (30 Mins) decision making opportunities.**
2. 6v6: 13.4×2 or 3 (i.e 2 or 3 x10 minutes) = 26.8 or 40.2 x 5000(i.e 10,000/ 2 , because the session is 2 hours long)= **134,000/ 201,000 decision making opportunities.**

Firstly there is a variation between the 20 and 30 minutes, but more significantly between the 3v3/4v4 and 6v6. In fact if we played 4v4 instead of 6v6 each player would have a 136,500 increased decision making opportunities across their education. Significant?

The research documented by the study at John Moores surrounding the participation content within academy coaching would suggest that the actual amount of time allocated to SSG and conditioned games is actually 17% (at under 9)- this is less than 20 minutes! 23% for the under 13's just above 20 minutes and 18% for the Under 16's, less than 20 minutes.

The figures provided above would suggest that even in this small amount of time allocated to SSG and conditioned games, what type of game we choose across the age groups will have major impact on the number of decision making opportunities each player is exposed to. Yes 6v6 has its place, just as 7v7 and 8v8, but the consideration for the coach is the percentage they wish to allocate to each game form. When seeking to develop 'intelligent' players from a young age, players need the opportunity to deal with the ball under pressure, and whilst developing technique have the opportunity to effectively recognise critical tactical game play principles such as angles, space, timing,



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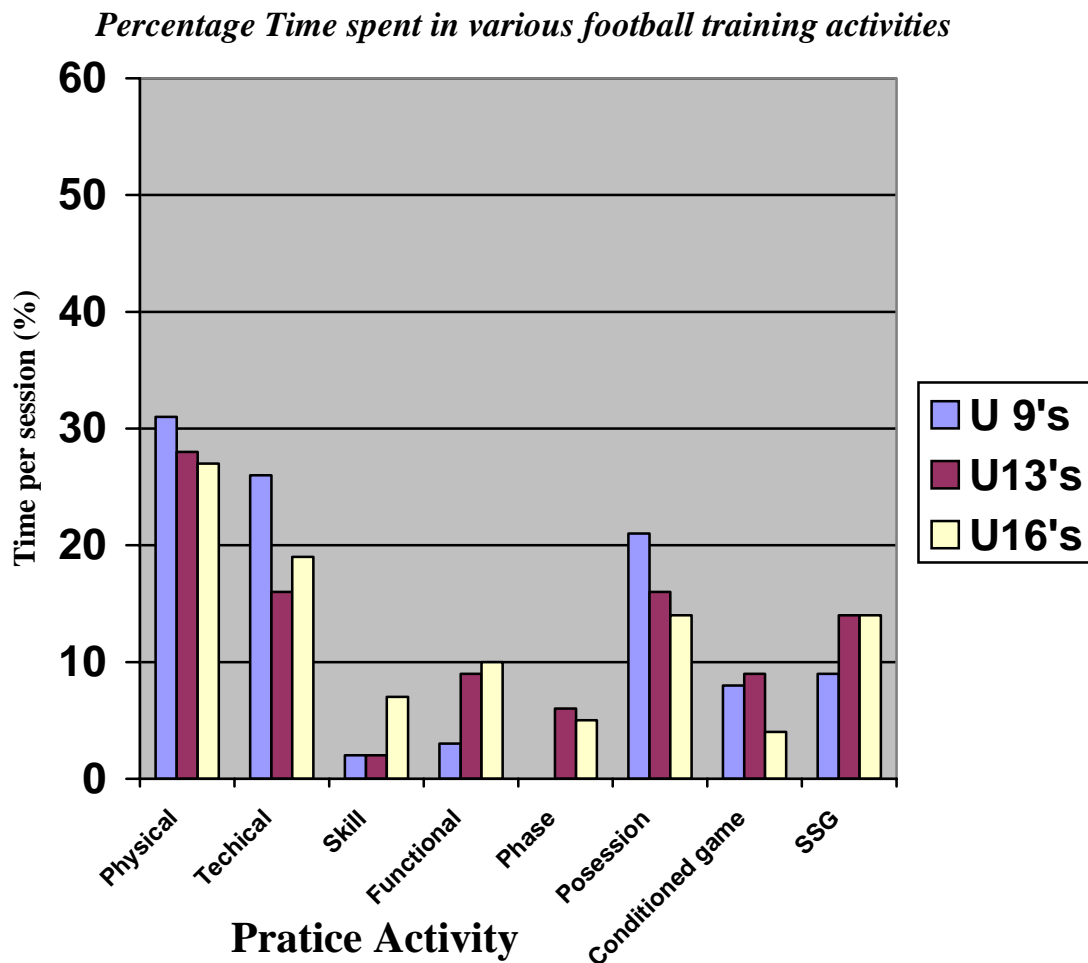
and awareness. Yes 6v6 will help this, but is the repetition equal to that of 4v4, is the framework as simple and finally is there the same amount of scope for experimentation?

What is clearly present through the evidence is the importance of how coaches incorporate SSG during a session, and more importantly the size of the SSG to promote as much opportunity as possible to problem solve and make decisions based around your interpretation of ever changing situations.

Part 2: Reviewing research of the breakdown of academy coaching sessions.

What is interesting is that a study produced by Mark Williams, Ian Yates and Paul Ford of John Moores University (Figure 1) outlined the breakdown of training sessions delivered throughout a select number of academies in England. This outlined some very interesting assessments as to the content that the next generation of players are opened up to in their search for the so called '**Technical**' quality needed to compete in leading league throughout Europe...The Premiership.

Figure 1





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Table 1: Percentage Time of various football specific training activities.

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

Table 2: The different forms of practice activity that were coded.

Activity	Form	Definition
Physiological	Training	Primary goal of Physiological aspects of game (e.g., warm- up, cool down, conditioning, stretching).
Technical Practice	Training	Individual or group activity covering isolated technical skills under no pressure.
Skills Practice	Training	Individual or with a group covering technical elements under pressure from an opponent(s).
Functional Practice	Training	Re- enacting isolated simulated game incidents without focus on a particular technical skill.
Phase of Play	Playing	One goal covering team cognitive strategies used to outsmart opponents.
Possession Game	Playing	No goal in which ball retention rather than scoring a goal was the primary objective
Conditioned Game	Playing	Restrictions/ variations to rules, goals or areas of play, but with teams scoring in the same way.
Small Sided game	Playing	Two goals, realistic to regulation rules, with teams scoring in the same way.



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Whilst there might be floors in the data as this is a sample, and no period of time allocated for breaks between activities, there are still clearly concerns and very obvious problems that must be effecting the development of home grown players. On average around 50% of sessions are made up of Physiological training and **unopposed** technical work (57% at age 9, 44% at age 13 and 46% at age 16). Where the opportunity is for the players to problem solve, make decisions, and enhance visual search strategies, advance cue recognition, creative thinking and improvisation in relation to the task? Shouldn't small sided games and conditioned games be the bones of the session, activities that effectively re-create the demands faced during match play? Hence, allowing players to have creative, flexible and adaptive motor skills.

In addition, this documents highlights that we feel (i.e academy coaches) that a commitment of 2% is adequate to devote to "Skill Practices" in U9 and U13 age groups. Again this is only a sample but even still this figure seems extremely low when striving to develop elite players, players who can deal with the ball under pressure and appreciate what decision to make, and technique to use in accordance to each slightly different situation.

Yes Possession takes up a reasonably high percentage of sessions according to the data, and could be classed as a skill practice but this article is trying highlight that little time is being spent in other skill practices i.e 1v1 dribbling/ turns/ receiving!!! Skills surely important when trying to nurture talented youngsters and provide all the required 'tools' essential in effective game play. Wouldn't it be more beneficial to replace a high percentage of the technical drills with skill based activities from an early age, encouraging players to be brave, clever and adaptable in 1v1 situations?

The question I ask when talking about home grown players is: Are we technical inadequate or more importantly are we technically deficient in skill related situations? Are we able to deal with the mental processes prior to the one motor skill. I believe it might not all be the technique but possibly and more importantly the PROCESS, the DECISION, the complexities of the game.

Coaches need to understand the effectiveness or ineffectiveness of sessions where the technique stands in isolation and the benefits of allocating significant time to this form of practice. Looking at the data I would suggest that coaches have tried to affect the trend and improve technique but to some degree have missed the point. We now need to look beyond just the technique (yes there is a place for technique), give every player the opportunity to learn the game through training activities, emphasising the importance for players to discover what techniques works for the individual in complex 'open' not 'closed' situations. The children we are fortunate to teach will learn all the techniques early, they need the time to realise how to implement them through their own eyes/ perceptions and not through the interpretations of the coach, parent or other support mechanisms. Whilst this might mean at times the coach will provide a more 'hands off' approach to educating, this isn't to say they aren't important, the design of the exercise will be essential, and how the coach facilitates and guides the players will be vital.



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“It is crucial for the coach to achieve the correct balance between providing feedback often enough to facilitate learning, while at the same time not providing feedback too frequently so that the learner fails to become adequately involved in the problem solving process. Although a decrement in performance may be observed during practice as a result of the reduction in feedback frequency, performance is likely to be enhanced during retention and competition”.

Journal of Sport Sciences, June 2005;23 (6): 637-650. Practice, Instruction and skill acquisition in soccer: Challenging tradition.

This may be somewhat difficult to accept as a form of an educational philosophy, as it contradicts tradition but yet this is what has been done in Brazil for years. Ronaldo, Pele, Ronaldinho, Robinho, Romario, Juninho are all testament to this system. They weren't created through text books, by being told what to do; they created their unique identity playing beach/ street football, they played in an environment that encouraged mistakes and allowed a huge amount of fulfillment. I suppose this form of education must have some weight, to date they have won more World Cups than anyone else.

“I played football everyday in the streets” (Ronaldinho).

While prescriptive instructional approaches are likely to produce faster performance gains initially, they may result in less efficient and reliable performance in the long term. The emphasis when learning by guided discovery is on players taking responsibility for their own development, finding unique solutions to movement problems exploration and discovery. These “hands off” approach may be more effective in developing “smart” learners who are able to apply their skills in a variety of performance situations (i.e. what has been termed “adaptive” rather than “routine” expertise: see Holyoak, 1991).

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Part 3: The circuit model and how this can have a positive impact on effecting what is discussed in part 1 and 2.

The Circuit Model

The circuit model has been designed around literature, and studies. It has been designed to ensure that we develop more dynamic problem solvers, players who can stand alone and step up to the plate instead of looking for constant support from the side. Players who look composed on the ball and comfortable in themselves in doing the right things at the right time.

The following are the break downs of sessions through the different age groups, working on the basis that groups will be split into groups of 6 or 7.

Standard layout of the Circuit Model: working within a standard 2 hour session.

1. 30 min-(12.45 %) – Technique.

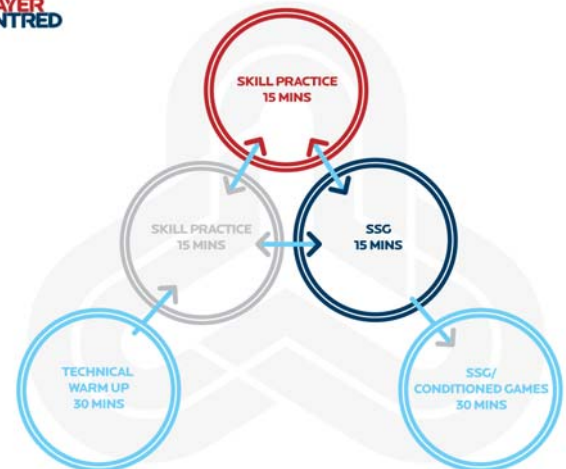


2. 15 min- (12.45%) Skill.
3. 15 min- (12.45%) Skill.
4. 15 min – (12.45%) 3v3 game.

Circuit

5. 30 min 4v4 (25% approx).

(15 min (12.45%)– Allocated to turn around periods between exercises and altering and setting up of equipment, late arrivals etc.



Whilst the players wouldn't play 3v3/4v4 non stop for 45 minutes using the figures hypothetically, the circuit model would create **506,250/ 528,750** decision making opportunities in game realistic situations (SSG's). This figure is nearly 4 times that generated through the standard session which allocates approx 20 minutes (according to the research paper on "structuring practice for effective learning") to a 6v6/7v7 game at the end of the session only creating **134,000 (20 Mins)** decision making opportunities in game realistic situations. (Once again this is stereotyping the type of game that happens at the end of a session but what I see in 9 out of 10 sessions is a game where the group is split into 2 7v7, 8v8 depending on the numbers).



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Taking into consideration the study done by Williams, Yates and Ford their figures would suggest that only 43% of current sessions (for under 9's) provide opportunity for players to actively make decisions- execute techniques as they perceive them, and more importantly only 17% to SSG/ conditioned games.

In contrast a standard circuit model working with a group of the same age (9 year olds) would offer 62.35% of the session to decision make/ problem solving. Of the 62.35, 37.45 % would be structured towards SSG i.e 3v3/4v4.(Double that of the standard session and we have allocated a percentage of time to lost time). This is once again magnifying the number of decision making opportunities through open exercises.

Conclusion.

Is it time for change? In the first premiership season 1992/93, 11 foreign players were signed and eligible to play, In contrast 340 foreign players are eligible to play in the current 2006/7 season. Whilst the current England squad has arguably some of the most talented players in recent years, what does the future hold? In the 10th Year of the academy system we must ask are current methods effectively educating our most promising youngsters? Is our coaching and 'win at all costs' mentality crushing the creative mind, and forcing players to fall in line with a structure far too early. I rarely hear coaches encouraging players to be clever, brave or individualistic; instead I hear criticism and questioning such as "why have you done that?", well they are 11 and they are learning, that is why. Whilst the athletic requirements of the premiership now dictate that certain players will unfortunately never become elite players due to their physiological deficiencies, I do believe we hold the 'key' of recreating playful and experimental practice, a format perfect for players to develop self expression and inventiveness. Coaches must never forget what they did as children, and remember this has now been lost!

The circuit model will offer current players a more open framework, a framework with a variable and random form of exercise structure. SSG will be at the heart of sessions; players will have to multi task thanks to exposure to more realistic game scenarios and will create adaptable thought processes required to optimise skill acquisition. Youngsters will become more familiar with emerging patterns of play, developing skill perceptions within game play from an **early age** such as visual search strategies, anticipation skills and decision making abilities. We will develop players who innovate, improvise and respond as individuals. Players who can identify what technique to use situation specific, players comfortable on the ball like our European counterparts.

The circuit model offers players this experience of an experimental coaching environment, within a structured but playful framework, which should subsequently help develop the above.



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To try to finally summarise the importance of SSG and there involvement in coaching sessions I thought the following figures would be very interesting, a possible eye opener to the need for change...!

A standard academy allocates 17% of their sessions (under 9) to SSG and conditioned games. It then allocates 23% at under 13. The circuit model allocates 37.45% and 42.5% respectively. The difference between the two types of sessions (25 minutes and 23 minutes) over a 5 year period (under 9 to 13), multiplied by the average number of decisions that 3v3, 4v4, 5v5,6v6 would provide during a 10 minute span (18.9) would mean that a Normal academy session would provide **114,345 reduced** opportunities to decision make through SSG based activities. (If we were to use the figures generated by 4v4 at 23.5, this would generate **142,175 reduced** decision making opportunities through SSG based activities). Alternatively a standard session would accumulate a provision of no fewer than **1008** hours less than the circuit model for players to participate in SSG. *1/10 of the 10,000 hour rule, 1/10 of a players football education. Time that now doesn't exist on the streets.*

Please remember : We can't rush but must work quickly- time is precious and can't be wasted. Coaches must place the player at centre, give them the tools and then guide them instead of telling them. Let them play!

By Martin Diggle
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