

IT'S NOT ALL ABOUT GAME SENSE

Introduction

The Teaching games for Understanding (TGFU) coaching framework originally developed in the UK by Rod Thorpe and others was the catalyst to what we now call 'the Game Sense' approach to coaching and teaching physical skills. It is widely accepted that this approach results in greater transfer from practice to game situations.

In particular it has been shown that in an invasion game like Rugby, this transfer of tactical and strategic knowledge as well as technical skills is critical for successful performance. In this paper I will argue that as well as 'game sense' training, there is also a necessity to employ training methods based on the traditional approach where the focus is on development of technique. This is particularly the case when coaching junior teams, where athlete safety is paramount – players must develop 'confidence in contact'.

TGFU or Game Sense

The 'Game Sense' approach to coaching can be described 'as the use of games as a learning tool that allows for tactical and strategic learning with skill development'. (Evans 2006). The games are designed and modified to suit the athlete's level of expertise or their development. Critical to the development of a player's expertise under this approach are the questioning techniques employed by the coach. These questions must be designed in such a way that players are engaged in critical reflection of their performance and that of their team.

Rick Shuttleworth (2006) describes skills as 'movement patterns performed under pressure'. The movement pattern or technique is pressured by time and space constraints thus elucidating a skilled response. The game sense environment where a coach manipulates various constraints attempting to replicate match conditions, will produce more skilled players. Passos et al (2008) have identified a method to improve the decision making of players. They propose a four stage coaching framework: i) identify the problem; ii) set out a strategy to solve it; iii) create an action model; and iv) build a decision-making exercise. Decision making should be improved through training methods:

'that provide an accurate balance between stability of actions, which gives structure to the players' performance, and variability, which allows them to cope with the uncertainty of situational constraints, such as the behaviour of specific opponents.'

These players are then able to more readily transfer these skills to matches. How do we ensure that the technique part of their performance is safe, and as efficient as possible?

Mastery of Technique

Fitts and Posner (1967) proposed that when learning physical skills, we pass through 3 phases:

- (i) Cognitive, where an athlete develops component parts of the skill and forms a mental picture;
- (ii) Associative, where the component parts are linked into a smooth action, practice and feedback are essential as the athlete moves through this phase;
- (iii) Autonomous, the athlete performs the skill with little or no conscious thought.

Other theories on skills development include Schmidt's Schema Theory based on the view that 'actions are not stored', rather we refer to abstract relationships or rules about movement. (Schmidt 1975) He proposed that every time a movement is performed, four pieces of information are gathered – the initial conditions; certain aspects of the action; the results (success or failure) and how the action felt.

'Relationships between these pieces of information are used to construct a recall schema and a recognition schema' (Schmidt, 1975).

Araujo et al (2006) take this one step further when they propose:

'the most relevant informational constraints for decision making and controlling action in dynamic environments such as a Rugby match are those that emerge during ongoing performer-environment interactions, not information from past experiences stored as representations in the brain.'

They go on to say that in order to cope with such a dynamic performance environment, players are unlikely to come up with effective solutions based solely on programmed solutions based on past experiences at training and on match day.

The challenge for the rugby coach is to understand where players are on their skill development journey, and design training plans which best suit their needs. The goal of training should be to improve skills (technique under pressure) and promote effective decision making. Players need to increase the degree to which they are attuned to the information of specific performance contexts. This will include a constraints or game sense approach, however it's not all about game sense. There must be some consideration given to a safe performance environment.

The nature of rugby with so many specialised positions requiring unique sets of skills which need to be acquired safely lends itself to some isolated closed skill instruction. The ARU Smart Rugby program has been developed in response to safety concerns around certain aspects of the game. Statistics show that the tackle and subsequent contest for possession are areas of the game where the majority of injuries occur. In fact statistics show that around 50% of injuries occur at the tackle. Further, the ball carrier is more than twice as

likely to be injured than the tackler. (ARU, 2011) Treating this aspect of the game with a game sense approach in the cognitive phase of skill development may be counter productive. The Smart Rugby resource details specific progressions based around effective acquisition of technique when learning to tackle. Great care is taken to ensure that coaches break the technique down and insist on safe body shape and progressions are based on safe mastery of technique. Once correct safe technique is mastered, constraints around time and space as well as environmental complexities may be applied to the training session. It may also be necessary to deconstruct a players' ineffective tackling technique in a closed environment before moving to a more game like, open training environment.

It is also necessary to apply this sequence of instruction when dealing with aspects of the scrum and lineout. Safety is once again paramount and a game sense approach in the initial stages is unwise.

Tight forwards in particular must be taught about the elements of correct body shape well before they pack a live scrum. Some guided discovery learning may be appropriate where players experiment with 1 v 1 scenarios to come up with their own ideas on most effective body shape. Work on body shape technique should continue even as players progress to elite levels. Some game sense principles can be applied to scrumming training, however much work in this critical aspect of the game will be done using traditional approaches to training. Teams at the elite levels of the game utilise the scrum machine to improve timing and hone issues around effective pushing positions. There is much work also done in closed training environments. Progression to live scrumming sessions is possible at all levels of rugby, but only after the correct, safe technique is mastered. The laws of the game at junior pathway levels are an acknowledgement of this. There is no pushing, and the team feeding the ball wins it.

The lineout is another aspect of the game where mastery of technique in a closed environment via traditional methods is preferable to a game sense approach, in the initial stages of skill acquisition. Once again, the major concerns here are around supporting jumpers, and doing so safely. Once a player is supported in the air he is in an extremely vulnerable position – getting him to the ground safely is paramount. When players are learning correct, safe technique a game sense approach may be dangerous. There is scope however to introduce opposed sessions as players become more confident with their technique. It is essential that this does occur at some point in the training progression.

Passos et al (2006) quite correctly criticise the 'one size fits all', traditional approach to coaching. From a theoretical standpoint, it makes perfect sense. The key to using more traditional methods of coaching these potentially dangerous aspects of the game is to allow for individual solutions to the problems presented. This needs to be done safely. It is the responsibility of the coaching staff to ensure their athletes remain uninjured. This may not be possible if players are left to decide the best tackle technique or easiest lifting technique. Individual techniques must be part of training, as long as safety is a major consideration.

Conclusion

There is no doubt that a coaching framework based on a Game Sense, Constraints Based approach is crucial in the development of proficient rugby players. This methodology has the potential to produce players of the highest quality who are excellent decision makers in a highly complex performance environment. There are however certain aspects of the game which are effectively coached using more traditional, drill based methods. This is especially the case when dealing with players in the Cognitive phase of skill development, where safety needs to be a priority. The skills and techniques required in and around the collision zone need to be acquired safely. That includes the tackle and subsequent contest for the ball. Players need to develop a confidence in contact in order to prevent injuries. Decision making is critical in these areas of the game however as statistics show, the majority of injuries are sustained at the tackle. The same can be said when coaching the scrum and lineout. Player safety needs to be first and foremost in a coach's mind. It's not all about Game Sense.

Bibliography

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