

IMPLEMENTING GAME SENSE COACHING APPROACH IN AUSTRALIAN FOOTBALL THROUGH ACTION RESEARCH

IMPLEMENTANDO EL ENFOQUE 'SENTIDO DEL JUEGO' DE ENTRENAMIENTO DEPORTIVO EN EL FÚTBOL AUSTRALIANO MEDIANTE INVESTIGACIÓN ACCIÓN

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ABSTRACT

This paper introduces the methods, selected findings and discussion of an action research investigating a coach and player experience of Game Sense coaching as a new approach to coaching an Australian football team. The study was conducted over five months, which covered the in-season training segment of the coach's training plan. The study involved the coach systematically reflecting on the experience of coaching and regular conversations with the sport pedagogue through coach use of a reflective journal. During the final week of training players were invited to complete a coaching efficacy survey to elicit qualitative data in an attempt to gain insights into their experience of the coaching. At the conclusion of the season the coach participated in a semi-structured interview with the sport pedagogue. The research adds further evidence that game-centred coaching approaches like the Game Sense approach take time to learn, require greater instructional knowledge and game understanding by the coach, and may be misinterpreted as small sided games.

RESUMEN

Este artículo presenta los métodos, algunos resultados y la discusión de un estudio de investigación-acción centrado en la experiencia del entrenador y de algunos jugadores de fútbol australiano que siguieron un plan de entrenamiento basado en el enfoque comprensivo del sentido de juego ("game sense coaching"). El estudio se desarrolló durante cinco meses, incluyendo los entrenamientos durante la temporada planificados por el entrenador. El estudio implicó la reflexión sistemática, mediante un diario, del entrenador sobre su experiencia, así como conversaciones regulares con el pedagogo deportivo (el investigador colaborador). Durante la última semana de entrenamiento, se invitó a los jugadores a realizar un cuestionario diseñado para obtener datos cualitativos sobre la efectividad del entrenamiento y sobre su propia experiencia. Al concluir la temporada, el entrenador participó en una

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entrevista semiestructurada con el pedagogo deportivo. El estudio viene a concluir que los enfoques de entrenamiento centrados en la comprensión del juego, como el “Game-Sense”, requieren más tiempo para ser dominados por parte de los entrenadores, un mayor conocimiento para su aplicación, desarrollo y comprensión del juego; y que pueden ser erróneamente interpretados como “partidillos”.

KEYWORDS. Game sense; coaching; action research; Australian football.

PALABRAS CLAVE. Comprensión del sentido de juego (*game sense*); entrenamiento; investigación acción; fútbol australiano.

1. INTRODUCTION

This study investigated how a community Australian football (Af) coach adopted the Game Sense coaching approach. The study emerged from the desire of the coach to move from what the coach considered “traditional” coaching to the Game Sense coaching approach (GSA) described in the recent Af coaching literature (Australian Football League (AFL), 2012). The study was therefore initiated by the interests of the practitioner, and typical of action research, involved the coach in their situated practice reflecting on action with aim of making change in the practice undertaken (Gubacs-Collins, 2007). The study adopted a similar methodology to Evans and Light (2008) collaborative action research (AR) for a rugby coach professional learning derived from the meaning and interpretation of the coach’s practice. AR is a relevant methodology for research with coaches because it specific to the coach’s situation, giving clear relevance, meaning and usefulness to the research. In collaborative AR, a sports pedagogue collaborates with a coach, bringing expertise in sport pedagogy and pedagogical theory, while both the pedagogue and practitioner learn about and from the research project (Light, Evans, Harvey & Hassanin, 2015).

The sporting context for this research is Af. Af is characterised by high intensity intermittent movement involving a series of contests for the ball. Like all invasion games, Af is a complex and dynamic performance context where the decisions and actions of players are constrained by the attributes of the particular game: for example, the performance competency of the players, the rules of the game, the performance environment (eg. ground size, weather conditions). Configurations of play emerge, dissolve, transform and re-configure into new configurations moment-by-moment due to the interaction dynamics of the players with each other and the performance environment (Pill, 2014). The game is inherently variable, requiring players to demonstrate adaptive movement ability.

2. APPROACHES TO COACHING

The coach was seeking to change from what the coach perceived was their practice of Af coaching, which the coach described as a “traditional” approach. The term “traditional” coaching approach has been explained as one emphasising movement responses as replication of mechanically stylised perceptions of movements referred to

as techniques. These techniques are progressively developed through coach demonstration or explanation-then practice-then-play athlete experience of the practice environment. The approach is representative of a complicated additive pedagogy in so far as the techniques are deconstructed into the micro-parts of the mechanics which are then progressively put together to form the whole movement. The micro-parts are practiced for refinement before the practice of a representation of the complete movement pattern, and thus a potential disconnect between the experience of practice and the player experience of the game is constructed. A pedagogical emphasis on directive instruction for reproduction of narrow representations of movement in this approach is disconnected from the realities of the player experience of the game (Davids, Renshaw & Glazier, 2005; Gopher, 2007; Light et al., 2015; Pill, 2014). The experience of training is unlike the description of Af as dynamic and complex, provided earlier in the paper. Technical emphasis idealising "right" movement mechanics is reductionist and thus frequently unable to account for the complexity of decision-making and flexibility of movement response in invasion games like Af (Light, 2006b; Light, Harvey & Mouchet, 2012).

In Australia, this historically common and therefore considered a traditional approach, foregrounding a direct style of coaching that emphasises technical reproduction, is recognised (Light, 2006a). Concerns about this mechanical and complicated linear representation of coaching practice as an additive process of mechanically putting the parts together via the transfer of information from coach to player, have existed for some time (Light et al., 2015). Coaching emphasis on movement reproduction using predominantly the tool of repetitive practice in highly structured practice tasks, referred to as drills, is observed as coaching player movement responses without representation of the context within which the responses being practiced are applied (Light, 2005; Pill, 2014). In the drill type practice tasks information about how to move is frequently not coupled with the information related to what to do in a manner consistent with that encountered by the player in the game. Substantial transfer of learning from practice to the game day experience is therefore problematic.

The effectiveness of a direct style of coaching emphasising technical reproduction has been questioned for its capacity to account for the contextual nature of games and capacity to fully develop player game understanding (Light, 2013). A more holistic account of skill moves beyond the mechanics of movement production to include the performance context. In the performance context that is the game, skill is the demonstration of motor responses that meet the "in the moment" demands of the game; that is, the momentary configuration of play in which the response is situated (David, Button & Bennet, 2008; Evans, 2012a). Skill is thus not something that can be captured by a fixed notion of a technique illustrated in a textbook.

Concerns about the efficacy of the common directive and technical coaching approach emphasising "textbook" notions of movement mechanics led to a development in sport coaching pedagogy in Australia known as the Game Sense approach (Australian Sports Commission, 1996; Light, 2013). Advocates of the GSA have argued that it takes greater account of the holistic on-the-ball and off-the-ball

requirement of players to be continually reading the play, reacting to the play and recovering into positions to continue game engagement in the emphasis on game-based practice experiences (Breed & Spittle, 2011; Light, 2013; Pill, 2013a). The GSA is also considered an example of the framing of coaching pedagogy as player and game-centred coaching that has emerged in various nuanced forms around the world (den Duyn, 1997; Pill, 2014). Although the GSA has been prominent in Australian sport coaching literature since the mid-1990's it has been suggested that a traditional reproductive style of coaching pedagogy emphasising direct instruction of highly prescribed technical models for individual player motor patterns is still dominant in Australian sport coaching (Light, 2013; Light & Evans, 2010).

The paper has so far explained the pedagogical questions related to the notion of a "traditional" coaching approach that is problematical and yet still common in Australian sport coaching (Light, 2013; Light & Evans, 2010) and the expression of the GSA as a response to those questions. The paper will now outline the GSA, introduce the method for the research, and present selected findings and a discussion on a collaborative AR investigating the implementation of the GSA during a season of Af.

3. GAME SENSE COACHING APPROACH – A BRIEF HISTORICAL OVERVIEW

In the early 1990's Australian Hockey Coach Rick Charlesworth mentioned Game Sense as a player development outcome of Designer Games that integrate technical, tactical and fitness training (Charlesworth, 1993; 1994). Charlesworth explained Designer Games as those that coaches develop to enable players to learn skills in a match-like context (Charlesworth, 1994). The Designer Games idea included the use of a questioning pedagogical focus during training and the coach acting more as a facilitator of situations in which players have the opportunity to think out solutions to game problems than is evident in a directive and reproductive coaching approach (Charlesworth, 1994).

Game Sense then emerged as a coaching approach in Australia during the mid-1990's (Australian Sports Commission, 1996). The GSA contrasted the common or traditional focus on coaching techniques to novice and beginner players in the way coaches are informed to develop skills, knowledge and understanding. The difference between the GSA and the historically more common in Australia directive coaching can be summarised in three areas: 1. pedagogical focus; 2. training structure; and 3. the role of the coach as educator.

Pedagogical focus

The linear representation of technique practice to learn skills before play typical of the direct instruction of skill as techniques is contrasted by the more holistic and representative understanding of skill learning in GSA literature. This is illustrated in Figure 1.



Figure 1. Game Sense is skilled performance in the context of the game; skill is not the reproduction of a technique in drills. A distinction is therefore drawn between technique and skill.

The GSA professional and scholarly literature (for example; Australian Sports Commission, 1999; Breed & Spittle, 2011; den Duyn, 1997; Pill, 2013a; Schembri, 2005) does not position tactical game understanding and skill performance in linear technical-before-tactical or tactical-before-technical pairings. Rather, in GSA literature tactical and technical game elements are discussed as complimentary pairs (Smith, 2014) best taught, at least initially, together rather than one-before-the-other.

Training structure

The practice session structure is another area where the GSA departs from the directive and reproductive focussed coaching. The difference in practice session phases are shown in Table I. It shows that directive coaching typically emphasises technical motor development through a focus on repetitive closed and open drill based activities that lead eventually to the application of those techniques in game play. The GSA, however, encourages the game or a game form to become the starting point and ongoing focus of the training session. This is why approaches like the GSA are referred to as "game-centred". Further, players are encouraged to understand the game being played and to become tactically and technically aware within the game context to assist the development of enhanced decision making and execution within the situated dynamics of play (Australian Sports Commission, 1996). This type of practice environment is suggested as permitting players more opportunity to test ideas and apply strategies they develop through discussion with each other and the coach (Evans & Light, 2008; Light & Evans, 2010; Pill, 2013b).

Table I. Directive coaching sequence and Game Sense coaching practice session phases

"Directive" coaching sequence	Game Sense coaching sequence
Warm - Up	Warm - Up
Skill Drills	Initial Game
Coach Talk	Question & Answer/Setting New Challenges
Skills Drills	Practice Task/s (if necessary)
Closing Game	Game Progression
Warm-Down	Question & Answer
	<i>Note: In GSA the coach may use some of the pedagogical features (eg. teaching in the game by questioning players)during each practice phase.</i>

Coach as educator

The GSA literature suggests the coach is positioned as more of a facilitator and in a less directive role (Breed & Spittle, 2011; Light, 2005; Light & Evans, 2010; Light et al., 2012; Pill, 2013a). In the GSA, the positioning of the coach as a facilitator guiding player autonomy in decision making to solve the game problems associated with each momentary configuration of play suggests an educative posture. This “athlete-centred” educative posture sees players given more choice and control of game related behaviour during practice and competition to encourage players to know, understand, appreciate and therefore respond effectively to the game context than is typically observed in the more common directive style of coaching (Kidman, 2001). The coach as educator (Jones, 2006) therefore manipulates the practice environment to structure and facilitate learning (Light et al., 2012).

The GSA is thus a shift in pedagogical focus and process towards problem solving and inquiry oriented processes as coaching is viewed as a teaching and learning activity (Evans, 2012a). Coaches have, however, always used a range of pedagogies, including small sided games, direct instruction, reciprocal peer instruction and athlete self-checking (Light, 2006a). As an educational endeavour, the GSA does not ignore pedagogies like direct instruction. There are times when it is necessary for directive instruction or a focus on technique (Light, 2004a; Light, 2006a). However, the notion of directiveness in the GSA relates to process directiveness as the coach facilitates player skill development by a focus on guided discovery (Breed & Spittle, 2011; Kidman, 2001; Pill, 2012), in contrast to the directive and technical coaching focused on the physiological demands associated with player alignment with prescriptive notions of movement models (techniques).

It has been suggested that the GSA focus on guided discovery and player problem solving places a greater cognitive demand on players than directive coaching (Evans, 2012a) and that this most clearly represents the change from directive coaching to the coach as educator typical of the GSA (Evans, 2006; Light, 2004a). The GSA pedagogical focus on inquiry processes through questioning players and player problem solving is considered by Light “radically different” (2006a, p.18) to the more common and longer established directive and technical coaching approach still typical in Australian community sport coaching.

4. THE GAME SENSE PROPOSITION HAS EVOLVED OVER TIME

Over time the GSA has evolved to look different across various stages of game development (Pill, 2012) while retaining the distinctiveness of its pedagogical focus as a game-centred training format. This is understandable as Game Sense as a product should be thought of as an athlete/player-sport specific proficiency (Charlesworth, 1993; Launder, 2001) that progresses from novice to expert (Pill, 2012) as improvements in physical competency and cognitive complexity in areas such as the capacity to interpret, respond and adapt creatively and flexibly to tactics, strategies and game rules, develop. For example, rather than starting with simple representative games that

progress in complexity over time the games used in advanced sport coaching settings are typically aimed at improving specific aspects of play and not at learning to play the game.

Research in Game-Centred Coaching

Having briefly explained the development of the GSA and what is considered its pedagogical distinctiveness the literature review now examines the themes emerging from previous examples of game-based coaching research. The literature examining game-centred approaches identify focussing and guiding player learning through questioning and challenging players to problem solve generate concerns among coaches, and is difficult to implement. It is found to be difficult to implement as game-centred approaches challenge coaches depth of game understanding, and concerning as questioning techniques are considered by coaches more demanding of the coach than directive instruction (Evans & Light, 2008; Light & Evans, 2010; Roberts, 2011). Research with elite-level Rugby coaches and sub-elite Af coaches suggests that while the GSA is promoted by the national sporting body in coach development programs the impact on coaching practice, particularly at community level, is limited (Light & Evans, 2010; Evans, 2006; Pill, 2013b). Adopting the GSA usually means that the coach acquires new coaching perspectives to shift the focus of coaching pedagogy into alignment with the new approach (Light & Evans, 2010).

The research literature also suggests coach misinterpretation of the GSA as just about playing games (Light, 2004b) and neglecting the teaching of "skill" (Evans, 2006) because the pedagogical approach of the GSA is narrowly interpreted as play practices and small-sided games. Coaches and players have, however, identified a benefit of the GSA as replication of match conditions in practice improving game day performance because of the enhanced likelihood of transfer of learning from practice to the game (Evans, 2006, 2012b; Evans & Light, 2008; Harvey, 2009; Light, 2004a; Thomas, Morgan & Mesquita, 2013; Pill, 2013b). However, the limited research consideration of the GSA means it is appropriate to look at research consideration of other game-centred approaches sharing similar pedagogical foci with the GSA.

A tactical games approach (Griffin, Mitchell & Oslin, 1997) has been found to improve decision-making and increased the number of tactical concepts used by players in games (Harvey, Cushion, Wegis and Massa-Gonzalez, 2010; Parrant & Martin, 2010). Research on the implementation of play practices (Lauder, 2001) such as 3v2 imbalanced games by an experienced soccer coach suggested the most able participants effectively transfer tactical response learning from practice to the game, but the less able players unable to perform with consistency in practice had little transfer of learning from practice to the game (Holt, Ward & Wallhead, 2006). However, Greco, Memmert & Morales (2010) found that tactical task conditions using small sided game situations, such as 3v3, and imbalanced games used as deliberate play improved youth basketball players performance through positive effects on tactical creativity. Zhang (2012) reported both play practice instruction and (technical) skill focussed instruction improved table tennis skills performed in skill tests, but participants in the play practice instruction had better improvements pre to post test.

Coaches have reported that the shift in practice from predominantly directive coaching focused on technique to game-centred coaching using well considered questions is difficult (Evans, 2006; Roberts, 2011), unless they have a strong educative perspective about their role as coach (Pill, 2013b). Coaches have suggested that game-centred coaching requires the coach to develop greater tactical understanding of the game, however, the planning process for coaching sessions can be daunting (Thomas et al., 2013). To effectively introduce game-centred coaching, coaches need to develop higher order questioning and observational pedagogical strategies (Evans & Light, 2008; Harvey et al., 2010; Roberts, 2011).

Bringing into focus the need for the research described in this paper, research in game-centred coaching is limited and there is a need for further studies focussing on coach implementation to explore coach and subsequent player learning (Harvey & Jarret, 2014; Thomas et al., 2013). Harvey & Jarrett (2014) suggest that game-centred approaches “are of significant importance as they have the potential to promote change” in the culture of sport and engagement (p. 278), therefore, research into game-centred approaches needs to undergo continued expansion.

5. METHODOLOGY

Collaborative Action Research

This study was a collaborative action research (AR) project involving the coach and a sport pedagogue. The process of systematic reflection of work practices with the aim of making changing in practice undertaken by practioners is typical of AR (Gubacs-Collins, 2007). This study of a specific case of sport coaching involved the systematic gathering of information about a phenomenon (Af sport coaching) to effectively understand how the subject (a coach learning the GSA) functions. The AR case study methodology drew the focus towards a holistic description and explanation of the phenomenon studied (Harvey et al., 2010). The methodology was informed by a collaborative coach-sports pedagogue AR project reported by Evans and Light (2008).

The main participant was the coach of a team in a high standard school “1st XVIII” competition involved in learning through experience in a collaborative AR with a “sports pedagogue”. The term sport pedagogue is used in this paper to describe the role of the researcher. Evans and Light (2008) explained the role of the sport pedagogue as a consultative facilitator within a team, assisting coach pedagogical development by the provision of relevant readings and discussion on the meaning and application of coaching theory to practice. This is an accurate description of the role of the sport pedagogue in this research. At the end of the season, eight 1st XVIII players voluntarily contributed data to the study through an end of season survey. The player survey questions were developed by the sport pedagogue and coach to elicit feedback in areas the coach identified as enabling further reflective practice. The study began after ethics approval and was conducted over five months, which covered the competitive season segment of the coach’s training plan.

The research was initiated following an approach from the coach to the sport pedagogue for assistance in learning to coach using the GSA. The coach reported interest in learning more about the GSA after having read about the GSA approach and having attended a coach accreditation course with a module on the GSA prior to contacting the sport pedagogue. Following the approach, the sport pedagogue shared further readings with the coach before an action plan was developed for implementation by the sports pedagogue and coach.

Data collection consisted of a coach reflective journal completed each week, a semi-structured interview with the coach at the end of the season, a survey of players, and notes kept by the sport pedagogue on the formal and informal conversations held with the coach. Each coach journal entry was accompanied by the coaching plan for the practice session. During the season, the sport pedagogue attended a training session once a month to observe training and discuss the intervention and the process of the collaborative AR, and attended five games. Discussion about the pedagogical changes occurring, the coach perception of player response to the changes, and the coach response to learning to coach using the GSA occurred after the sport pedagogue observation of coaching sessions. Conversations between the coach and sports pedagogue also occurred outside of training and game-day via email and phone. During the final week of training players were invited to complete a coaching efficacy survey consisting of a Likert Scale tool and open ended questions designed to elicit qualitative data. At the conclusion of the season the coach participated in a semi-structured interview with the sport pedagogue.

Data Analysis

The study used an interpretative epistemology adopting relativist ontology that there is no reality independent of perception, thus knowledge is subjective and socially constructed. It is therefore recognised that the perception of reality is the product of how people individually and collectively interpret the world. Making sense of the world and developing understanding of it are thus not considered to be fixed and stable phenomenon but open to revision as understanding can change based on experience (Potrac, Jones & Nelson, 2014). The view that coaching results from the complex interaction of coach, player, time and place together impacting player and coach development informed the process of data analysis.

The coach journal, player surveys and coach interview were interpretatively analysed using constant comparison. This involved the sport pedagogue firstly engaging in an open coding process to create initial categories. These categories were then collapsed and combined based on examination of similarities and differences of the initial categories. The categories were continually challenged against the data to result in concept and theory development (Strauss & Corbin, 1990). The coach was provided a copy of the preliminary version of the findings for review and the opportunity to challenge or correct errors of fact.

6. RESULTS AND DISCUSSION

Following analysis four themes emerged: 1. changing practice plans; 2. clarifying the relationship between technique, tactics and games; 3. Understanding that there is more to the GSA than playing games; and 4. players noticed a difference. To preserve the anonymity of the coach, the pseudonym “Chris” will be used when referring to the coach through the results and discussion section.

Changing practice plans

At the beginning of the AR, Chris’s pedagogy was observed by the sports pedagogue to be “traditional”, with a directive “skill and drill” emphasis coupled with fitness and conditioning activities (Figure 2). Figure 2 shows an example of the way Chris planned using practice-before-play at the end of training, typical of a “traditional” practice session. The plan shows that after an initial warm-up, two drill activities lead into a conditioning activity, which is followed by another drill before the session concludes with a form of match-simulation. Chris was not contexting the practice drills with game play to develop understanding at the beginning of the session. As Chris’s understanding of the GSA and confidence with it developed, practice session planning became game-centred but still did reflect the characteristic sequence of a GSA. Figure 3 shows a mid-season practice session; after an initial warm-up, a menu of games is planned but without an obvious conceptual or skill emphasis connecting the activities. Towards the end of the season, the practice session planning was more like that expected of the GSA. This is illustrated in Figure 4, which shows a practice session plan more like the game-practice-game sequence typical of the GSA (Pill, 2014).

WARM UP:				TIME:	CLOCK:	RATING:	WARM DOWN:				TIME:	CLOCK:	RATING:
Team Meeting				1 Min	3:46 PM	7/10	Static Warm Down				5 Min	5:41 PM	5/10
Dynamic Warm Up				15 Min	4:01 PM	6/10	TIME:				5 Min	5:41 PM	5/10
TIME:				16 Min	4:01 PM	7/10							
KEY ATTRIBUTE:		2. Speed of Ball Movement - Control				THEME:		DECISION BASED - BALL MOVEMENT				FS RATING	
TRAINING DRILLS:				TIME:	CLOCK:	RATING:	POINTS TO EMPHASISE:						
Quick accurate hands in Group of 5, 1 out fr				15 Min	4:16 PM	4/10	In conjunction with Clean hands. Different drill for kicking practice? Start with stoppage or ball up at one end. Lessens players at CHF Apply themes we have been working on to decision drill. Player runs off from scrimmage. 1 receiver o						
Kicking - Closed Style Lane Work				15 Min	4:31 PM	6/10							
FastLink Running				15 Min	4:46 PM	7/10							
Rest and Drink/Stretch				5 Min	4:51 PM								
Release & Run Handball - With Accurate Kick				15 Min	5:06 PM	7/10							
GAME - 3 teams game simulation, training b				15 Min	5:21 PM	7/10							
Kicking - Analysis with iPad				15 Min	5:36 PM	7/10							
TOTAL				95 Min	5:36 PM	6/10	PREVIOUS TRAINING'S EMPHASIS FOR TRAINING: Get the Fundamentals that we have been working on right. Release, left right etc.						
EMPAHSIS FOR NEXT TRAINING:													

Figure 2. Coaching plan before the commencement of the CAR

WARM UP:				TIME:	CLOCK:	RATING:	WARM DOWN:				TIME:	CLOCK:	RATING:		
Team Meeting				1 Min	3:46 PM	7/10	Static Warm Down				5 Min	5:06 PM	0/10		
Dynamic Warm Up				15 Min	4:01 PM	6/10	TIME:				5 Min	5:22 PM	0/10		
TIME:				16 Min	4:02 PM	7/10									
KEY ATTRIBUTE:				2. Speed of Ball Movement - Control				THEME:				DECISION BASED - BALL MOVEMENT			
												FS RATING			
TRAINING DRILLS:				TIME:	CLOCK:	RATING:	POINTS TO EMPHASISE:								
GAME - "10-2" Handball				10 Min	3:56 PM	6/10	Worked really well - Good warm up drill. Can change constraints Excellent, concentrate on ball movement through release player Fun finish to training with purpose								
GAME - End ball Handball Game				20 Min	4:16 PM	7/10									
Kicking - Kick to Advantage to 1 x 1 (lead or				10 Min	4:26 PM	5/10									
GAME - Clear Ball using release				15 Min	4:41 PM	7/10									
GAME - Full ground Ball movement				15 Min	4:56 PM	7/10									
GAME - Tika Tika - Ball Movement - Handbal				5 Min	5:01 PM	6/10									
TOTAL				75 Min	5:17 PM	6/10	PREVIOUS TRAINING'S EMPHASIS FOR TRAINING:								
								EMPAHSIS FOR NEXT TRAINING:							

Figure 3. Coaching plan early in CAR

WARM UP:				TIME:	CLOCK:	RATING:	WARM DOWN:				TIME:	CLOCK:	RATING:		
Team Meeting				1 Min	3:46 PM	7/10	Static Warm Down				5 Min	5:07 PM	6/10		
Dynamic Warm Up				15 Min	4:01 PM	7/10	TIME:				5 Min	5:07 PM	6/10		
TIME:				16 Min	4:02 PM	7/10									
KEY ATTRIBUTE:				KEY ATTRIBUTE NOT DECIDED OR SESSION NOT YET PLANNED				THEME:				THEME NOT DECIDED OR SESSION NOT Y FS RATING			
TRAINING DRILLS:				TIME:	CLOCK:	RATING:	POINTS TO EMPHASISE:								
GAME STYLE - Switch from Def 6 v 3, Mids &				15 Min	4:17 PM	6/10	Use switch & normal Start. Get someone else to start it off. 100% Option Zone & Man on Man Ensure Mids are setting up correctly and defenders roll up								
STATION - Netball Football 100% Option 2 Tr				15 Min	4:32 PM	6/10									
STATION - 3 Small Teams spread at stoppage				15 Min	4:47 PM	7/10									
GAME STYLE - Switch from Def 6 v 3, Mids &				15 Min	5:02 PM	8/10									
TOTAL				60 Min	5:02 PM	7/10	PREVIOUS TRAINING'S EMPHASIS FOR TRAINING:								
								Switch on & Concentrate. Transition							
								EMPAHSIS FOR NEXT TRAINING:							
								Game Plan specific for St Peters							

Figure 4. Coaching plan mid CAR

Although Chris appeared to understand the focus and pedagogical distinctiveness of the GSA when in conversation with the sport pedagogue, the change in planning demonstrated in Figures 2-4 show that it took nearly the full season before Chris was cognisant of the GSA in the planning format. The difficulty of learning to plan training through a new way of thinking about the purpose and structure of training was acknowledged by Chris during the interview:

It wasn't tying together. In my head I thought I was planning well. By the end of the year I was planning better. I was understanding the skill acquisition process tying together through the games and practice tasks.

Chris acknowledged that planning training using the GSCA “play-practice-play” sequence was different to the training he had experienced as a player and in his observation of most other coaches. Chris expressed wanting to get the planning “right”, but it was made more difficult to understand what “right” was, as he was unable to locate examples of existing GSA practice plans from other coaches to assist his appreciation of planning this way. In Chris’s experience, “training was cone-to-cone” (interview quote) closed and open drill activities. Chris identified a clear need for more published examples of the GSA in Af to assist his learning to understand the design and enactment of the GSCA. The absence of coaching plan illustrations limited conceptualisation of the entirety of the planning process. Although Chris appeared to understand the planning and pedagogical implications of the GSA in conversation with the sport pedagogue it took nearly five months for Chris to be able to express the conceptual understanding in training plan documents.

At the end of the season, Chris reflected in the coaching journal; “Must learn to get the balance right and ensure drills are tied into match sim or game activities”. This comment and a similar reflection in the end of season interview suggest a key issue in adopting the GSA for this coach was the complementarity of the practice task outcome in the broader context of the practice session objective. That is, understanding when to focus on inquiry orientated coaching pedagogy and when to use other pedagogies like direct instruction to achieve specific task objectives. The sport pedagogue noted that Chris felt he struggled with getting the task balance right at training. At the end of the season Chris reflected in the journal that one of the challenges in adopting the GSCA is that it is, “Important to have the whole session planned out and tied into each other”.

Clarifying the relationship between technique, tactics and games

Metzler (2011) indicated the identification of major tactical concepts as a key feature of approaches like the GSA. The relationship between target concepts to learn, players’ technical models, tactical understanding and the content of practice sessions was possibly the hardest aspect of the GSA for Chris to clarify in his own mind. In the end of season interview Chris reflected that:

Focus concepts can’t just be stated during the team meeting at the start of training, they must be reinforced through the activities and the dialogue within the practice session. They must be picked up on game day so players can see them connecting between what was practiced and game day performance expectations and outcomes. They must be reinforced week-to-week throughout the season as some players take longer to get it than others, and I don’t want what was learnt to be forgotten as new concepts are introduced. It is important not to focus on too many concepts at one time. In the beginning I tried to focus on too many concepts.

The struggle to develop this clarity was evident in the training log description of practice session “themes”. The common description of practice session theme on the training plans was variations of “decision-based ball movement”. Most sessions

therefore did not have a tactical theme indicated. Chris acknowledged the difficulty in aligning the tasks at training to a clearly identified tactical theme or concept in the interview:

I tried to develop themes and tie things in training back to themes. I will do this better next year. I will think of 6-8 main things crucial to the how I want them to learn to play, and everything at training will tie back to those things.

On more than one occasion during the sports pedagogue observation of training the sport pedagogue noted that Chris expressed the feeling that he was going into too much tactical depth and not affording enough time teaching the mechanics of movement models for kicking, marking, handball so that the players had technical models that would be successful during match conditions; whether that be teaching by inquiry orientated or directive pedagogy. This is similar to findings by Thomas et al (2013) where they describe that it takes time for the coach to learn what role to play "in context" - when to step back, when to freeze play or practice to take advantage of a teachable moment, and when to give clear direction or instruction. Chris reflected during the end of season interview that if the coach is busy "kicking the ball in they might miss teachable moments", and that he felt "aware he missed a lot of important things" when reverting to highly directive coach-centred activities such as off-the-line drills.

Understanding there is more to the Game Sense approach than playing games

In the beginning, Chris did not fully appreciate that the GSA isn't just about "getting bibs on and playing each other" (journal reflection) and that closed and open drills still have their place but need to be specifically tied into the focus of the training session. As already highlighted in the literature review of game-centred coaching, it is not uncommon for coaches to not grasp the pedagogically sophistication of these approaches beyond small-sided and modified games.

In the interview Chris commented that he too often found himself caught in running the game play. Chris reflected that in future the use of injured players and empowering team leaders to run games would release him from directing practice tasks to observe the players action. Chris reflected on the difficulty in changing from directive coaching, observing that the framing of questions and inquiry processes was a difficult habit to develop. For example,

...sometimes I gave them the answer to a question too quickly or I lead them too much. I gave them the answer and they gave it back to me when they answered the question (interview comment).

Breaking the habit of directive "telling" of the players what to do and how to do it was a continuous struggle and something Chris acknowledged he had to be vigilant about. That vigilance was not just towards persisting with questioning, but also about the manner in which questions were presented. Chris reflected during the end of season interview that "Questions must be pointed. Generalised 'what do you think?' often lead to an "all good" type of response from the players". Although the sophisticated use of

questioning to set challenges and guide learning was challenging, Chris was positive about the shift in focus:

I felt I was empowering the players in their learning [...] the players were coming up with ideas to modify the practice game constraints and I could see the games and the involvement excited the players. I heard them say things like, "this is cool, I like this" (interview comment).

Chris also reflected in the interview that the GSA use of play practices and game-simulations to stimulate learning were more dependent on the coach "setting them up correctly" (interview extract) so that disorganisation doesn't add to what Chris described as "the inherent messiness that comes with playing" (interview extract), than training drills. Chris noted that he believed that "by the time players get to this level of game development they have experienced most variations of the training drills in use, and could therefore get the drill "right" even if the coach wasn't accurate in the description" (interview comment). Further, in his training diary Chris noted that he believed that, "most players liked the greater emphasis on game play at training but directive instruction in closed "cone-to-cone" drills seemed to make players feel better about their skills" (diary comment). This suggests an important psychological function for this type of practice. Although Chris noted in the interview that, "some players just seem to want to be told what to do and not think through the problem, where do you want me to be?", the training diary included frequent annotation that players seem to have "fun" in the training sessions where high volumes of game play and match simulation featured.

Players noticed a difference

Eight players contributed voluntarily to an end of season survey. The players rated Chris's coaching efficacy in areas that Chris decided he wanted feedback. The data suggested players noticed training was different from previous experiences of Af coaching. The player survey's included comments like, "the training was much more game simulated", "more decision making drills than skill drills", and "there was much harder drills and complicated things" than they were previously exposed to. Five players indicated training was better because there was a perceived benefit of enhanced transfer from practice to match day. For example:

I think it worked well the way we trained to be on match day.

Yes it helped us because we had a greater understanding and knowledge of what to expect game day.

Not all players agreed the training difference was better than previous experiences of Af coaching. Two players indicated more "skill work" was needed at training, with one player writing, "Everyone needs skill work". It would appear that for these players, skill was something that was best developed in the regularity of drill practice. The comments indicating a desire for more "skill" practice resonates with Chris's feeling that some players preferred the directive and technically focussed practice environment, and he would occasionally hear from some players, "not the bibs again" (interview comment).

One player interpreted the shift to more of a facilitator role by the coach as Chris, “would try to be our friend too much instead of our coach”. The GSA and the “coach as educator” literature discuss the different and more equal player-coach power relationship in “athlete empowered” coaching (Kidman, 2001) like that of the GSA. For the player making that last comment, the player-coach relationship was either misinterpreted or not welcome.

Table II. Player rating of coaching efficacy

Criteria		Average	Range
Player Motivation	Built the self-esteem of players	3.6	2-4
	Built the self-confidence of players to play their game day role	3.9	3-5
	Built team confidence in a game plan	3.9	3-4
Game Development	Developed players' ability to make decisions during play	4.1	3-5
	Improved players' technical and tactical skills	3.6	1-5
	Ensured I understood the techniques and tactics being taught	3.6	1-5
Coach Effectiveness	Motivated players to learn	3	2-5
	Developing game strategies	3.8	3-4
	Developing technical skills	3.4	1-5

Scale: 1- very poor; 2- poor; 3- satisfactory; 4- good; 5-very good

The information summarised in Table II shows that the players rated the coach “satisfactory” or better in the coaching efficacy characteristics selected for the players to rate. The rating was highest for the game development characteristic, “Developed players' ability to make decisions during play”. In keeping with the descriptive data, the range of rating for the two Game Development characteristics, “Improved players' technical and tactical skills” and “Ensured I understood the techniques and tactics being taught”, and the coach effectiveness characteristic “Developing technical skills”, demonstrated the divergent perspectives on player experience of “skill” development throughout the season. The data collected from the eight players in the end of season survey suggested that while most appreciated the greater focus on game-based training and player-centred coaching some players were more comfortable with the familiarity drill-based practice.

5. CONCLUSION

The study reported in this paper pays attention to the increasing interest in game and player centred coaching approaches (Light et al., 2015). Findings revealed the coach entered the Collaborative AR with partial understanding of the tactical and problem solving nature of games. The relationship between movement responses, tactics and strategies, and games needed to be clarified for the coach to move from awareness of the pedagogical elements of the GSA to a degree of efficacy in use of the elements in practice. It took time for the coach to be cognisant of the distinction in understanding

game sense as an analogy for game intelligence/intelligent game behaviour, or euphemistically the characteristics of “thinking players”, and the pedagogical focus of the GSA.

Harvey & Jarret (2014) have observed that the induction and training of coaches to use game-centred approaches is generally inadequate. This is supported in the local context of the AR reported in this paper where the coach was able to understand the intentions of the GSA from a module in a coach accreditation course, but developing familiarity with the pedagogical tenets and efficacy in the use of the pedagogical mix associated with the GSA positioning of the coach “as educator” clearly develops over time as a consequence of practice with the pedagogical elements. Although attendance at “weekend” coach education courses can assist coach education, this project adds further support to the suggestion that to progress coach pedagogy “off the pages” of the coaching manuals, and thus from the pedagogical awareness begun in the short form coach accreditation course to coach efficacy in the use of game-based coaching, coach education programs need to be delivered differently (Harvey et al., 2010; Light et al., 2015). If coaches are to learn the “tricks of the trade” that come with understanding the pedagogical practice of game-based coaching like the GSA collaborative AR involving mentoring by sports pedagogues should be considered by institutional sporting organisations.

In this project collaborative AR appeared to provide a useful direction for coach education and the grounding of sport pedagogy research in the “natural” setting of coaching. The relatively limited research description of AR case study research across all levels of sport, and Af game development to reveal coaches understanding and implementation of game-based coaching promoted by the Australian Football League (AFL) (AFL, 2012) specifically, indicates a need for further research of this nature. This research will assist those working in coach education and sport pedagogical research further understand how game-based coaching approaches like the GSCA are understood, learnt and translated from theory into coaching behaviour in the field, how this impacts game development and player learning of the game. This study of a collaborative AR in Af adds further evidence that game-centred coaching approaches like the GSCA take time to learn, require greater instructional knowledge and game understanding by the coach, and may be misinterpreted if conceptual understanding of the approach is limited to a training module during a coach education course.

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