

“IMPROVING VISUAL AWARENESS AND DECISION MAKING IN CLUB RUGBY PLAYERS”

Introduction

“Why didn’t he look to his left”

“Why didn’t we use the short side”

How many times as a rugby coach have we thought or heard comments made about our players such as the ones above.

The ability of our players to react to what is around them, and to make the correct decision is possibly the hardest thing to coach or instill in them.

Firstly, what is it that makes a player with good vision and decision making skills. There are times when we observe players and think how much time they seem to have during a game and their ability to make correct decisions on the run. How do they achieve this?

These players have learnt to react quickly to what is happening around them and to carry out hopefully the correct decision for a positive outcome.

As for any skill that we use in rugby union, the skills of decision making and vision can be taught and improved within our players.

So how do we coach this skill? Before we discuss this we need to understand what visual awareness is and how it relates to decision making.

What is Visual Awareness and its relationship to Decision Making?

Vision is possibly the most variable and selective of all the human senses. Attempting to observe fast movements in sport, places great demands on human vision. Vision involves many subtle and sophisticated links between the brain, muscles and eyes.

The eyes send information to the brain where it is interpreted and integrated as a three dimensional phenomenon. (Knudson and Kluka 1991). This integration is known as “fusion”. The eyes continuously move throughout the visual field until something gets our attention and we will focus both eyes on that object. This is known as “fixation”. Fixations are important because focus ability is limited to about 3 degrees. Because the focus of the visual field is so small, peripheral vision is very important in sport. The information gathered from our peripheral vision is processed quickly to facilitate the detection of motion, so that our visual focus can be directed to other events.

The eye movements of athletes have been measured to determine visual search strategies used

in sport. The assumption is that when the performer “looks” or fixates the eyes, information is gathered. The location, order, and duration of these fixations are assumed to reflect the perceptual decision making strategy used to extract information from the environment. (Williams, Davids, Burwitz & Williams, 1994)

“Good eyes” are important for motor skills like catching a ball or contacting a ball with a bat, but they also contribute to the rapid succession of decisions that comprise tactical elements like player movement and shot selection in everything from table- tennis to soccer. (S. Calder 1997)

The visual information that is gathered by our rugby players during a game is fundamental to their spatial orientation, anticipation, timing, reactions, static and dynamic balance. The focusing of visual attention by our players on important cues during a game will lead to effective anticipation and hopefully correct decision making.

The challenge as a coach is how do we interpret the above information and build it into a training regime that will benefit the players and the team as a whole.

What are we trying to achieve?

We now realise that vision and how it is interpreted is a major factor in the decision making process of our players. Other factors such as skill, pressure, fitness, fatigue, environment etc. will also impact on their decision making ability.

However, if we can take the “blinkers” off our players and get them to react to what is in front of them we will hopefully create a more dynamic player.

If we can combine vision training into our existing training format we will have a potent resource that will expand our options as a coach in what we can do with our players during a game.

How do we achieve this? The ability of our players to **look** up and **scan** the field is one of the most important skills that will improve vision and therefore decision making. Therefore we need to include this as part of our coaching sessions.

As coaches we should encourage our players to do the following.

LOOK - THINK - REACT

Coaching Visual Awareness and Decision Making

Most club rugby players would have been exposed to very limited if any visual awareness training. This training may have involved training in hand eye co-ordination and peripheral vision drills as well as designer games. This training was possibly very random and used to fill in any downtime during a session. Look through most rugby coaching resources and there would be limited information on visual awareness and its relationship to decision making. The basis of this paper is to concentrate on improving players “visual awareness” by improving concentration, eye movements, focus, depth perception and head position.

The following ideas were introduced to me by Dave Ellis who is the skills coach for the

International Rugby Academy in New Zealand. These ideas or methods are not new, they have been used by sports such as cricket, hockey, netball etc, for a number of years. Dave Ellis has adapted these ideas to the game of rugby union. As with any coaching method that you are exposed to as a coach, I have taken the basic idea and developed it into a training tool that will work for me and hopefully my players.

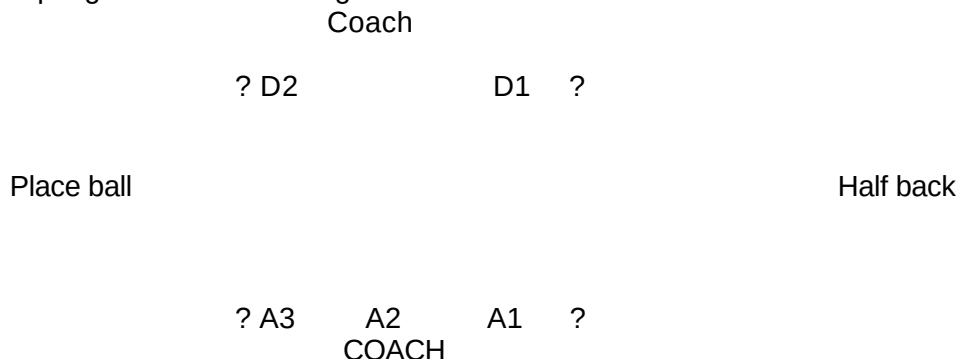
The coaching idea is based on the use of coloured rugby balls, cards and bibs to create an environment that the players will learn to look and react in. The process is designed to make players start to use their eyes and react to "cues" that are presented to them. We are putting a training technique in place that will teach the players to react to situations that are happening in front of them and then executing the appropriate option for a positive outcome.

Why use coloured balls and cards etc? I have found that by using these training aids that the players' concentration levels are improved. It has been shown that vision training through concentration can improve the co-ordination of the eyes and improve visual awareness. Focusing visual attention on important cues (visual search, scanning) can lead to good decisions during the game or anticipation.

Further to the above training aids I have incorporated the use of coloured agility poles, hit shields and tackle suits that can be used in a wide variety of training drills to improve vision and decision making. The use of these training aids will be included in an appendix dedicated to training drills.

Let's look at how we can implement these ideas into a training environment. We will work on a ball handling drill to emphasise the basic idea of the above training method.

Set up a grid as shown in diagram 1.



The size of the grid will depend on the skill level of the players involved and can be reduced or increased as you require. As players work through the grid they can place the ball on the opposite side of the half back so that we are working both sides of the players. Players should also adopt different positions so they are getting use to different roles.

Step 1

- ! run a normal ball handling drill. Let's use three options such as block, slide and quick hands as an example.
- ! the half back nominates the option prior to passing the ball.
- ! attacking players (A1, A2, A3) perform the option as nominated.

Step 2

- ! now we will introduce the coloured balls. The coloured balls are now allocated an option for each colour. For example:
- ! Blue ball-option 1 (block)
- ! Red ball-option 2 (slide)
- ! White ball-option 3 (quick hands)
- ! now the players must look at the ball and decide the option that has been allocated to that colour and perform that option.

Step 3

- ! same as 2 however the balls are hidden behind a hit shield. Now we have reduced the time for the players to look for the coloured “cue” ball and then react and perform the allocated option.

Step 4

- ! remove the coloured balls or tell the players that they have no relevance.
- ! the coach now allocates the existing options to coloured cards. For example:
- ! Blue card-option 1
- ! red card- option 2
- ! white card -option 3
- ! The coach now stands in front of the attacking players (see diagram). The coach now holds up a coloured card prior to the ball being passed into the grid.
- ! The players now need to look up and scan for the coloured card and then perform the option allocated.
- ! the coach should move around so that the players are constantly scanning the grid in front of them to decide what option is to be used.
- ! as the players become accustomed to the drill the coach can delay the showing of the card so that the players are starting to think and react on the run

Note: A by product of these drills will be an improvement in the communication of the players. You will note the players calling out the option to be performed as they react to what they see.

Step 5

- ! now we introduce a pressure phase to the drill
- ! get defender D1 only to attack A1
- ! the coach is still directing the attacking options by way of the coloured “cue” cards

Step 6

- ! now introduce a second defender D2
- ! the coach now takes up a position behind the attackers.
- ! D1 continues to attack A1
- ! the coach directs D2 to attack the player that he is standing behind.
- ! the attacking players (A1,A2,A3) now must look at the position of the defenders and perform the correct option that will beat the defenders.
- ! note: the coloured balls and cue cards have no relevance it is up to the attacking players to choose the correct options.

Step 7

- ! the final progression is to allow the two defenders D1 and D2 to attack any of the attacking players.
- ! they could start on one corner of the grid and attack players as the ball is passed into the grid
- ! the attacking players are now in a game like situation and must perform the appropriate option as dictated by what is in front of them.
- ! Players should select the option that will put players into SPACE and not under PRESSURE.

The above example is an indication of the steps and how the coloured training aids are utilised.

Incorporating Vision Training into existing programs

The most limiting factor in coaching rugby is TIME. Time management is critical in structuring an effective coaching plan for your team. At the club rugby level we would have possibly two training sessions per week to prepare players.

So where and when can we incorporate vision and decision making into our existing club program. As will be seen from the training examples in the appendix, vision training can be incorporated into most existing skill units and warm up routines. Most drills that we use as coaches can easily have a vision component incorporated within them to make them more effective and enjoyable. Some examples are:

- ! hold coloured cards up so that players can identify them while they are warming up
- ! while using speed ladders make the player identify the coloured cards so that they keep their head up while performing the drill
- ! in a ruck and maul drill allocate coloured balls an option such as blue-long place, red-lay the egg, green-pop pass etc and have players use options as they work up grid and encounter each ball.
- ! use coloured tackle shields in defence drill such as red, yellow blue. The coach stands behind attackers and holds up the red card to indicate the red shield is now the ball carrier. The defenders react and make a tackle on the red shield.

As can be seen the use of these aids is only limited by the imagination of the coach. The overall effect is beneficial in that we can still have our players performing skill based training as well as teaching them to scan with the eyes and keep their heads up.

The ideal place to introduce vision training is in the pre-season training program. Once the basic principles are established, we can continue to refine and develop them as we progress through the season.

Peripheral vision drills are best conducted in small groups. Coaches should encourage players to form position specific skill groups so that they can work together prior to team training. These groups could be hookers, halfbacks and five eights, fullback and wingers, backrow etc. Introduce peripheral vision drills to these players as part of their warm up for these mini skill groups. There are plenty of drills that incorporate peripheral vision as well as footwork as part of their makeup. It should be noted that peripheral vision works best off movement rather than stationary objects.

Designer or game specific games are an important training tool for the development of visual awareness and decision making in our players. They can also be used as part of a fitness component and exposing players to game like pressure. The games can be designed in such a way that the desired coaching objectives are achieved, this is done by adding or subtracting constraints to the game. (Rick Charlesworth, 1994). Constraints such as playing numbers, field size, pass direction etc can be used to increase or decrease pressure on the players during these games. I have found that visual awareness can be enhanced in these drills by the use of contrasting coloured bibs and applying various roles or constraints on these players. The roles of these players could be that they can pass in any direction, they are the only ones that can score points, they can not make a touch etc. The use of contrasting coloured bibs will ensure that the players concentrate and scan the field to identify these players that have specific roles and then make the appropriate decisions for a positive result. (refer to item 4 in appendix)

These games are a great environment for players to learn where, when and why they use their game specific skills and not just how they are performed.

Conclusion

It is obvious that the "playmakers" within the team would benefit the most from an improvement in their "visual awareness". Players such as the halfback, Five-eight, fullback and inside centre are required to have a good "grasp" of this skill and this should be noted when selecting for these

positions.

However, just as we try to ensure that all our players are multi-skilled, the addition of visual awareness training will benefit all players regardless of the number on their back.

Some coaches will say that they use sequence or pattern plays to develop their game plans and therefore they have limited the options or the requirements of their players to make decisions and therefore mistakes. This is a good point. However, the game of rugby does not always go to plan. The opposition does not always react in the manner that is hoped they will and the support player does not always arrive on time.

The ability of our players to react to what is in front of them during a game is important in the overall success of the team. It is pointless in my opinion if we develop players that are highly skilled and then these same players lack the confidence or "vision" to use these skills during a game.

The addition of visual training into existing programs will ensure that we have players that will learn to concentrate, look for cues and keep their eyes up as they scan the field in front of them. An improvement in visual awareness will hopefully ensure that we develop players that are confident to make decisions and confident to use their skills.

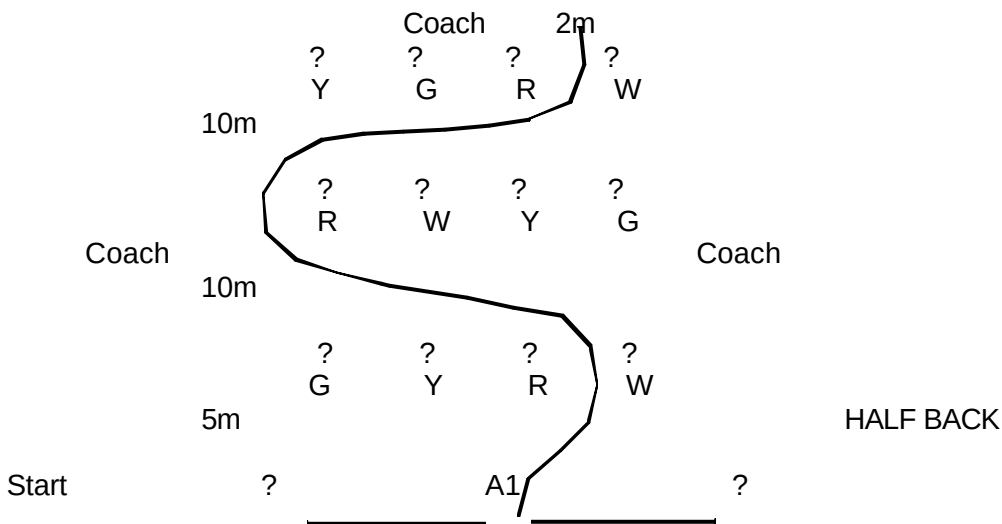
APPENDIX

TRAINING DRILL OPTIONS

1.AGILITY AND VISION DRILL

Equipment

- ! 4 different coloured balls such as red,yellow,green and white.
- ! 12 coloured agility poles to match balls.3 x red,3 x yellow,3 x green and 3 x white
- ! training cones
- ! 4 coloured cards to match balls and agility poles.
- ! set out grid as in diagram



Set out agility poles as shown. Distance of poles can be changed to suit ability of players.

- half back passes coloured ball to A1.If it is the red ball player then runs around corresponding coloured agility poles.A1 slides between both marker cones

Variations

- ! A1 runs around coloured cones and transfers ball to outside hand and touches pole with inside hand.
- ! A1 lies on stomach facing out of grid.Coach blows whistle and holds up coloured card.A1 scans grid and runs around corresponding pole.
- ! A1 lies on stomach and half back roles ball into grid behind A1.On whistle A1 gets to

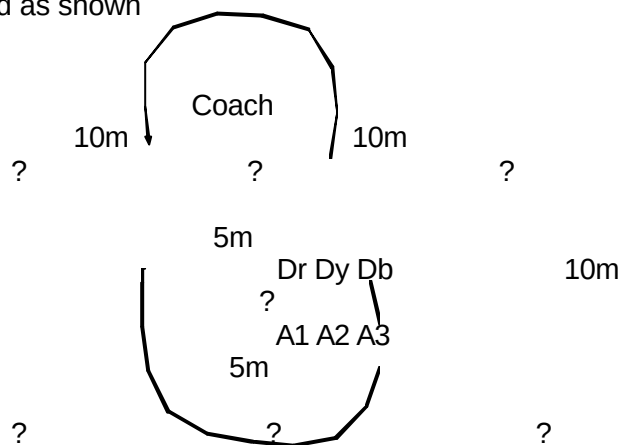
- feet, looks for ball and then runs around corresponding agility poles.
- ! introduce a second player. Both lie on stomach. Two balls are rolled into grid. On whistle the two players get to feet and pick up a ball each and run around corresponding poles.

2.DEFENCE DRILL

Equipment

- ! 7 marker cones
- ! three coloured hit shields, red, yellow and blue
- ! three coloured tackle suits or bibs, red, yellow and blue
- ! three coloured cards, Red, yellow and blue

Set out grid as shown



- ! attacking players and defenders start on middle cone in grid
- ! coach stands behind defenders
- ! on whistle or coaches call, players round cones as marked by arrows and enter grid. Work one grid at a time.
- ! coach holds up coloured card. Attacking players A1, A2, A3 scan the grid to locate coloured card.
- ! Defenders Dr-red shield, Dy-yellow and Db-blue enter grid.
- ! if red card is held up attacking players track red shield holder and make tackle.
- ! defenders should run straight down grid, while attacking players attack inside shoulders
- ! replace hit shields with coloured tackle suits or bibs
- !

3.PERIPHERAL VISION DRILL

Equipment

- ! one ball
- ! various coloured cards
- ! A1 faces A2. A2 has a ball and works in a semi circle around A1 passing the ball to A1 and receiving it back

-
- A diagram showing a vertical line with points A1, A2, A3, and A4. A3 is to the left of A2, and A4 is to the right of A2. A vertical line segment to the right of A4 is labeled 3m.

Equipment

- ! mark out field depending on numbers
- ! allocate bibs to make up two teams. Every fourth player gets a different coloured bib to his team mate.
- ! for example. team one is given yellow bibs and every fourth player gets a blue bib. Team 2 is given green bibs and every fourth player a red bib. A team of ten would consist of 8 yellow bibs and 2 blue bibs.

Rules

- Attacking players should be encouraged to scan defensive line and look for the weakness in the line. They should channel their attack at the gaps in the line. Defenders need to work hard and communicate so that they can limit attackers options.

REFERENCES

- ! Kluka,D.A (1991) Visual skills:Considerations in learning motor skills for sport.
.ASAPHERED journal,14(1),41-43
- ! Williams,A.M,Davids K,Burwitz L,& Williams J.G (1994).Visual search dtrategies in
experienced and inexperienced soccer players.Research Quarterly for excercise and
sport,65,127-135
- ! Calder S,(1997). Looks Good for Hockey.PHD paper
- ! Knudson D, Kluka D A, (1997),The Impact of Vision and Vision Training on Sport
Performance.JOEPERD Journal,5, 5-14.
- ! Ellis D, (2002),Vision Training and Decision Making,INRA Journal,volume 1,3-18
- ! Risk B (2000),Visual Skill and Pole Vaulting,Track Coach-Winter 2000.
- ! Charlesworth R (2002) Staying at the Top.Pan Macmillan