COMPONENTS OF LINEOUT JUMPING

- 1. Multi-skilled approach
- 2. Lineout components
- 3. Dynamic lift
- 4. Dynamic jump

1. Multi-skilled approach

- Physiological
- Psychological
- Technical
- Tactical

2. Lineout jumping components

- Dynamic lift
- Dynamic jump
- Movement (speed & agility)
- Strength & conditioning

3. Dynamic lift

'What is required for a successful lift?'

Physical

- dynamic jump, poised, posture in balance, maximum height
- strength, power and speed (leg extensors, arm flexors and grip)
- core stability (by using tension across joints to resist disruptive forces and maintain accuracy)

Psychological

- control of attention, attention on your role
- mental simulation of movement (visualisation)

Technical

- technique
- practice (massed, variable and distributed)
- timing, front and back lifter pushing jumper into air, ability to move either forward or backwards
- footwork, agility and speed of movement

'What can affect a successful lift?'

Physical

- lack of physical preparation

Psychological

- control of attention, put off/interference, weather conditions

Technical

- poor technique, lifters out of sync, hand/feet positioning
- poor preparation, set up
- timing, too close/far away, too early/late

4. Dynamic jump

Physical

- strength, leg and core stability
- power, leg
- speed and footwork agility
- stability, balance and control

Psychological

- calling, listening and understanding
- trust lifters, stay on task
- mental simulation of movement (visualisation)

Technical

- type, front, straight up or back
- movement, step length
- body position, in balance, arms, head and foot positioning

Advantage in a lineout is gained if the jumper is in a position to catch the ball at a greater speed and height than the opposition, therefore strength/power and speed/agility of the lifters and jumper are of high importance. To attain maximum elevation of the catching hands the jumper must be fully extended and held at arm's length by the two players lifting.

While there are variations of the lift in which the jumper is held at waist level or below the maximum height will be increased if the jumper is held at the midpoint of the hamstrings and bottom of the quadriceps. Lifting the player to this fully extended position requires a coordinated series of actions of both the jumper and the lifters and an understanding of lifting mechanics.

The jumper maintains his body position at peak flight, and his lifters their stability, by using tension across the joints to resist disruptive forces and maintain accuracy.

Whether the optimum result is the height jumped or stability at peak flight, the reality of the game is that with all three athletes cooperating there is a conservation of energy by each player. The reality of rugby is that energy conserved in any individual skill, is energy still available. Lineout jumping should be regarded as a cooperative skill that is practised learned and work shared.

Success in the lineout depends on the successful completion of several quite different actions by a number of different lineout units. Breaking the lineout down into its units allows much more intensive practice and more specific coaching opportunities. Repetition of jumps and lifts can be achieved until the fatigue threshold where poor performance begins is reached. This should be the target.

Success of the lineout is dependent upon a number of factors, including;

- timing of the throw and jump
- strength/power of the lifter and jumper
- elevation of the jump
- stability/balance/control of the lifter and jumper
- speed/agility of movement to get into position
- flexibility of jumper

Below is a traditional lineout formation that is seen in the modern game.

Jumping Positions				
2	1 4	3 5	6	8 7
<u>Zones</u>				
	A	В	С	D
<u>Pods</u>				
2	1 4 3	3 5 6	5 6 8	6 8 7

The following practices (i) to (x) are designed to provide a step by step lineout development progression for individuals, units and the team.

Practice (i) a jump for a static pod

143

By repeating the jumping and lifting technique you begin to develop;

- a coordinated series of actions of both the jumper and lifters
- an understanding of lifting mechanics (countermovement)
- the jumpers ability to maintain his body position at peak flight
- the lifters stability by using tension across the joints to resist disruptive forces and maintain accuracy

Practice (ii) a 'jump-throw' to a static pod –

2 'A'
143

Asking the hooker to throw to a 'static' jumping pod (e.g. illustrated, call 'A' = pod of players 1 4 3) in any zone and linking it to the appropriate call you develop all of the above skills but also begin to develop;

- ball capture

Practice (iii) a 'throw-jump' to a pod walking in before 'set-jump'.

2 'B'
3 5 6

Asking the jumping pod to 'walk-in' (e.g. illustrated 'B' = pod of players 3 5 6) in any zone and linking it to the appropriate call you begin (in addition to the above) to develop;

- tempo, timing & movement
- footwork agility
- pods ability to 'set' and time jump to capture the ball

Practice (iv) a 'jump-throw' to a pod walking in before 'set-pause-jump'.



Asking the jumping pod to 'walk-in' (e.g. illustrated 'C' = pod of players 5 6 8) in any zone and linking it to the appropriate call you begin (in addition to the above) to develop;

- change of tempo, timing & movement
- jumpers ability to time the jump to meet the ball at the top of his jump

Practice (v) a 'throw-jump' to a pod walking in with forward or backward 'movement' before 'set-jump'



Asking the jumping pod to 'walk-in' (e.g. illustrated 'D' = pod of players 6 8 7) in any zone with movement forwards or backwards and linking it to the appropriate call (e.g. 'D1' = forward or 'D3' = back) you begin (in addition to the above) to develop;

- after the 'set' coordinated movement by lifters and jumper to get into position to complete lift
- ability of a jumping pod which is moving forward or back before setting being elevated to peak height

Practice (vi) - an offensive pod chooses a technique from practices (i) to (v) but now an opposition pod mirrors their movement and completes their lift but **does not** compete whilst at peak flight –

Together with the continued development areas noted in practices (i) to (v) above this practice introduces;

- an appreciation of the oppositions individual and/or the pods strengths & weaknesses e.g. poor reaction, agility, speed of movement
- coping with increased pressure on jumping pod with aerial distraction players need to concentrate on ball capture and quality of delivery
- Attacking team have to have a spatial awareness and call in relation to what the defence is doing (A in this Case)
- Defensive pods get an appreciation of triggers from the opposition hooker, lifters and jumpers.
- Speed of movement and reaction time is reinforced due to the reactive nature of Lineout Defence

Practice (vii) is the same as above but the opposition pod competes whilst at peak flight but **not** on the floor.



Together with the continued development areas mentioned this practice introduces;

- coping with increased pressure on lifting, jumping and ball capture.
- Control of core as jumper is required to extend upper torso into defensive positions
- Giving attacking pod a jump option(in this case C but 4 jumper needs to realise that he has to anticipate the throw and move quickly)

Practice (viii) is the same as the above but the opposition pod hold a tackle shield each and put pressure on the jumping pod after the ball has been captured and the jumper lowered to the floor.

This practice introduces;

- Coping with completing the lift, ball capture then placing the jumper out of the line and absorbing the pressure off the opposition.
- Focus needs to be on the body position of lifter so that like scrimmaging they are able to adequately transfer the weight from those behind them
- Timing of lateral movement as the jumper feet touch the ground
- Effectiveness of initial aggressive contact Destroying the maul before it is set

Practice (ix) is the final practice in this progression using pods. It permits the opposition to compete at peak flight and also on the floor. This combines all the progressive development areas (physical, mental, technical and tactical) components covered in practices (i) to (viii)

Practice (x) is the penultimate practice. It permits the offensive team (1 to 8) to line up and begins to challenge tactical decision making as well as physical, mental and technical attributes. Individual players act as opposition pods and challenge the ability of the lineout to function under game stimulated conditions.

The more contesting players, pods or at best a team you have to compete against the more challenging this practice becomes.

Speed of movement rather than maximal strength is more important for lineout training. Traditional strength training is for maximum strength which is developed by slow heavy resistance training. For lineouts the key is to improve jumping ability through the development of speed-strength movements.

Training for explosive power must include activities which maximise the stretch-reflex phenomenon in the preparatory phase of any movement. In addition the upward force must be applied through a full range of movement to increase the take-off velocity, and final height. In all lineout jumping it is important that the jumper initiate the movement using speed and agility which needs to be followed by the lifters.

Trying to incorporate more lineout specific lifting and jumping strength exercises into your team's strength and conditioning program would be beneficial for their physical development and it also has a mental benefit of improving people's perception and work ethics in relation to their individual lineout performance.

While being in position to catch the ball is of primary importance, the player must also be skilled at actually catching the ball. This of course is a basic rugby skill which is made more difficult by the jumping action itself and the fact that when the player jumps for the ball from a position on either side of the centre line, the ball, in theory, is in the middle, between the two lines of the players. The jump then, in most cases, is toward the centre of the line, leading often to instability.

Core stability training can also have a positive influence on the effectiveness of a lineout's performance and should also be incorporated into any training program. It is essential that the lifter is fully extended and the jumper also makes an effort to extend, to feel the tension in their body. This tension ensures that the lifted player may move to retrieve the ball while the two supporting players continue to provide support and balance of a stable body unit.