

Force Alignment

Theory

- The initial step should be towards the impact point so that the base of support (formed by the feet) is aligned with the intended generation of forces. Transferring the body's momentum in the target direction sets up an uncoiling of the body levers towards the intended hit line. For maximum efficiency, the body levers should be aligned with the target as they are sequentially released.
- The bat and hands should be vertically aligned under the shoulders and in close to the body at the top of the backswing. As a result, all the upper body levers will be aligned behind the bat in the direction of the target.
- The front shoulder is initially dipped in the direction of the ball, so that a line drawn through both shoulder joints would point at the ground in line with the impact point.
- The front elbow sets the line for the upper body levers - it should be directed at the target in the preparation phase. A line drawn starting at the top hand, up the front arm, along the shoulders down the back arm to the bottom hand and then down the bat should form a figure "9." It is this "9" that rotates during the backswing and the downswing in a plane in line with the target.
- When the front or back foot is firmly planted on the pitch, the downswing should commence - the shoulders are then rolled upwards in a plane aligned with the intended direction of the hit. The width of the bat will encompass the arms and shoulders if they are correctly aligned. The hands and bat explode down the same plane from close in to the body to fully extend towards contact as the figure "9" opens late, increasing the length of the lever to maximize bat speed in the direction of the target.
- Because the shoulders are the largest upper body levers, if they roll upwards in the direction of the intended hit during the downswing, the arms and wrists should follow. If the shoulders do not roll in the correct direction, the upper body levers will not work together and power and accuracy will be reduced. With an efficient downswing, the wrists will uncock naturally and the bat will be swung along the line of the hit as long as comfortable ("throw your hands at the ball") to ensure good force generation and full contact.
- The following points in relation to force alignment should be monitored by coaches:
 - i Set up body position side-on to the flight path of the ball.
 - ii Backswing finishes with the bat pointing between WK and 2nd slip.
 - iii Front shoulder dipped at the top of the backswing.
 - iv Step towards the impact point.
 - v Hands and bat kept in close and vertically aligned under the shoulders.
 - vi The width of bat encompasses the upper body levers (figure "9.")
 - vii Front elbow aligned with the target through the downswing.
 - viii Shoulders, arms and bat rotate down to impact in the same plane.

Error Correction

REHEARSAL

Downswing

Players rehearse the cradling motion of the elbows in the downswing phase. The hands are clasped together, and form a straight line with the forearms. This unit is rotated back and forth in co-ordination with the step. The coach begins by calling "step, and swing" and the players step forward and "cradle the baby." The coach repeats for a step back, and then nominates forward or back randomly. The players progress to performing the rehearsal with a bat from the stance position, concentrating on maintaining the figure "9" unit through the downswing, until the wrists are released just prior to impact.

Kinesthetic

The above process is repeated with the eyes closed to gain internal feedback on the execution of the stroke.

STUMP BETWEEN ELBOWS

Players rehearse the cradling motion of the elbows in the downswing phase by holding a plastic stump between their elbows. The hands are clasped onto the stump. The shoulder and stump unit is rotated back and forth in co-ordination with the step. The coach begins by calling "step, and swing" and the players step forward and "cradle the stump." The coach repeats for a step back, and then nominates forward or back randomly. The players progress to performing the rehearsal through to the follow-through phase, with the stump falling in the movement that precedes the impact point.

BALL FLICK

A ball is held in the batter's bottom hand. The top hand is held so that the front of the forearm is against the back of the ball. The batter steps in co-ordination with a front shoulder dip, and then flicks the ball with an extension of the front arm in the direction they want the ball to go.

Progress to kinesthetic work where the eyes are closed during the above process. The batter keeps their eyes closed until they have nominated the direction that they think the ball was flicked.

With targets

The ball is flicked between targets (either stumps lined up on the ground or markers.)

Stump line

The ball is flicked to the nominated side of a stump placed at varied distances and angles from the batter as their skill level improves.

BAT SLIDE

Impact

A balance beam is placed along the line of an off drive (see the accompanying movie clip.) The batter begins with their feet stable in the downswing, and the bat on the beam at a position between the feet when viewed from side on. The batter pushes the bat along the beam, extending the arc, and then finishing with a full follow-through. Vary the line of the beam to rehearse a variety of front