

CHAPTER 9: IMPACT *PLUS* - THE SKILLS

INTRODUCTION AND OVERVIEW

This chapter is intended to introduce coaches to the key concepts in teaching the basic skills of Attacking, Overhead Passing, Serving, Forearm Passing, and for more advanced level teams the skill of Blocking. The core coaching information is what coaches need to know and understand, but not necessarily communicate in its entirety to players. What the players *do* need to hear, know and understand are the 3 or 4 “keys” or “cues” presented for each skill. If they *need* more information, give it as appropriate on an individual basis.

One note on the “Homework” sections for each skill: *while always better to practice over a net, if by themselves, players can utilize a wall and ball to practice at home by drawing or taping a line that is net height and hitting over that to simulate a net.*

Overhead Passing skills - may be used on the court to receive serve, pass a free ball, or in a more specialized application to set the ball to attackers. All players need to be trained and be comfortable with using this skill....not just the “setters” on the team, and not just from along the net but from all areas of the court.

Forearm Passing skills - are used on the court to receive serve, pass free or down balls, dig a hard driven spike or in an emergency used with a floor recovery skill to save the ball from hitting the floor. After players learn the basic forearm pass technique, they can go on to explore it’s myriad of variations used on the court.

Serving skills - focus on the standing floater serve technique and should be practiced and encouraged for use by all players strong enough to throw the ball across the net with an overhand motion. Players not yet strong enough for an overhand serve may find they have more success if taught an underhand, sidearm or roundhouse serve. Once a basic standing floater is learned, players can add other serving “tools” such as a topspin, jump serve or short serve.

Attacking skills - may be taught for right and left handed hitters, approaching from the right, middle or left sides of the net. Attacks may be made from the back row – from deep in the backcourt as well as from just behind the attack line, from 3 meters back for younger/shorter/beginning players to minimize the possibility of jumping, swinging and hitting into the net, as well as the optimal 1 meter off the net for more experienced hitters. Most right handed hitters will approach on the diagonal – from outside the court to in – when on the left edge of the court. Lefthanders will approach diagonally when hitting from the right edge of the net. For right handed players attacking from the right edge of the court, the approach angle is parallel to the right sideline, or parallel to the net and moving toward the right edge of the court (the “slide”). For lefthanders, it is similar – from the left edge of the court the approach is more parallel to the left sideline, or a “slide” from inside the court parallel to net toward the left sideline.

Blocking skills - are considered more “advanced” in the sense that younger players may not even be physically capable of getting their hands above the net in order to block. Even for older and taller, but less experienced players, blocking may not be a point producing effort because the opponents’ attack style does not merit the effort. Blocking is also difficult for players to receive much feedback on as it is possible for even good blockers to never touch the ball. That being said, coaches may want to spend *some* time, just not a majority of it, teaching proper blocking technique in practice to expose players to the skills and concepts involved which may be needed during competition in the future.

This chapter is not intended to be the end-all, be-all of skill technique tutorials, but rather to introduce the main concepts. Coaches are encouraged to seek more information by attending an IMPACT *Plus*, CAP I or other on-court skills/coaching clinic.

NOTES:

"Education is not the filling of a pail, but the lighting of a fire" ~ William Butler Yeats

COACHES Need to Know THIS Stuff...

ATTACKING SKILLS

KIDS Need to Hear THIS...

CORE COACHING MECHANICS:

- ☞ **Be Available & Prepared to Attack.**
- ☞ **3 or 4 Approach Steps and a 2 Foot Jump (unless using a Slide Approach).**
- ☞ **Swing Both Arms Forward and Up on Takeoff.**
- ☞ **Contact the Ball High at Full Arm Extension.**

- Ready !**
(Get Available)
- Run!**
(Accelerate)
- Jump!**
(Explode)
- High 5!**
(Swing Fast)

GET AVAILABLE!

Youth... **READY!**



ACCELERATE!

Youth... **RUN!**



EXPLOD!

Youth... **JUMP!**



SWING FAST!

Youth... **HIGH FIVE!**



ERRORS TO CORRECT:

- One Foot Take Off (If not a Slide Approach)
- Elbow Drops into "Shot Put" Action
- Contact with Fist Instead of Open Hand
- Took Off Too Soon or Too Late (Timing)

Options to Learn Later

- ☒ Crosscourt Shot
- ☒ Line Shot
- ☒ Cut Shot
- ☒ Roll Shot
- ☒ Open Hand Tip
- ☒ Wipe Off Shot

- ☒ Arm Warm Up Routine
- ☒ Tool/Use the Block
- ☒ Transition Set from the Setter
- ☒ Transition Set from the Blocker
- ☒ Hit a Set from the Back Row
- ☒ 3 Meter or Back Row Attacks
- ☒ High Outside Set
- ☒ Low Sets
- ☒ Footwork/Approaches for Plays
- ☒ Bad Sets
- ☒ One Foot Slides
- ☒ Position Sets

MORE DETAILS & POWERFUL WORDS!

- ☞ Use a Quick Approach. (**ACCELERATE!**)
- ☞ Finish Right-Left with Feet if Right Handed. (**LEFT-RIGHT-LEFT or RIGHT-LEFT-RIGHT!**)
- ☞ Swing Both Arms from Behind to in Front of You Like a Pendulum. (**EXPLODE UP! SWING HIGH! HIGH FIVE!**)
- ☞ The Faster You Swing, the Harder You Hit! (**THROW YOUR HAND AT THE BALL! SWING FAST!**)
- ☞ Swing Through the Ball. (**SNAP! CRUSH!**)
- ☞ Land on 2 Feet. (**BALANCE!**)

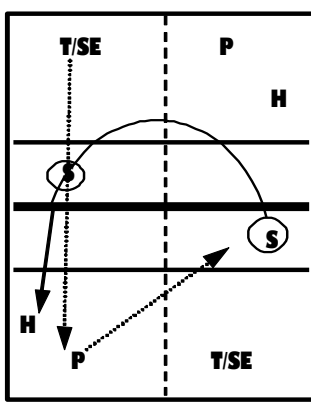
PLAYER HOMEWORK:

- 1) Players stand & toss ball to selves to hit over net with a spiking action.
- 2) Players stand 9 or more meters from the wall and set to selves; hit the ball with a game-like flight over an imaginary net marked on the wall.

TOP DRILLS/GAMES:

- 1) Hit From 3 Meter Line
- 2) Hit Front & Back Sets
- 3) Hit From 1 Meter
- 4) Call Your Shot Drill

NOTES:

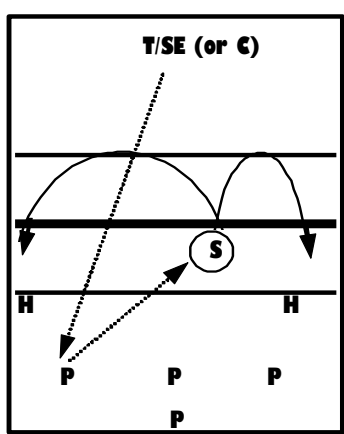


1) 3 METER LINE HITTING:

- ✗ Divide the court and into halves, and divide team into 2 groups. Each group consists of 2-3 Tossers/ Servers (**T/SE**), 2-3 Passers (**P**), 2-3 Setters (**S**), and 2-3 Hitters (**H**).
- ✗ **T/SE** puts ball into play to **P**, who passes (over or underhand) to the **S**.
- ✗ **S** then sets a high set to the 3 meter line to the **H**, who attacks the back row set.
- ✗ Players rotate within their small groups for set number of repetitions or other goal, and then rotate within their 1/2 court large group to perform a different skill **OR** players may perform a single repetition and follow the path of the ball to rotate to the next

2) HITTING FRONT & BACK SETS:

- ✗ Tosser/Server (**T/SE**) or Coach (**C**) puts ball into play to a Passer (**P**), who passes (over or underhand) to the Setter (**S**).
- ✗ **S** sets a front set to **H** in Left Front and on the following pass sets a back set to a **H** in Right Front.
- ✗ Players may rotate within their small group for certain number of repetitions or goal is met, at which time all groups rotate to a new station to perform a different skill **OR** players may perform a single repetition and follow (**P** rotates to **H**, etc.) to rotate to the next small group (circle drill). **S** may stay or be part of the large group rotation.



“Nothing has a better effect on children than praise” ~ Sir P. Sidney

COACHES Need to Know **THIS** Stuff...

OVERHEAD PASSING SKILLS

KIDS Need to Hear **THIS...**

CORE COACHING MECHANICS:

- ⌘ **Right Foot Forward and Knees Bent**
- ⌘ **Hands & Fingers in Shape of Ball in Front & Above Forehead.**
- ⌘ **Fly Like a Super Hero — All Fingertips Follow the Ball into Extension.**

👂 **Stopped and Balanced!**
(Staggered Stance)

👂 **Moose Antlers!**
(Ball-Shaped Hands)

👂 **Superhero Takeoff!**
(Show 10 at the End)

STAGGERED STANCE!

Youth... **STOPPED & BALANCED!**



BALL SHAPED HANDS!

Youth... **MOOSE ANTLERS!**



Show 10 AT THE END !

Youth... **SUPERHERO TAKEOFF!**



ERRORS TO CORRECT:

- ⊗ Palm of the Hand Contacts the Ball
- ⊗ Not Facing the Target When Receiving the Ball
- ⊗ “Swan Dive” or “Swimming” Follow-Through
- ⊗ Contacting Ball Too Low—in Front of Face Instead of on Forehead

MORE DETAILS & POWERFUL WORDS!

- Ball Played Above the Forehead— See the Whole Court Under the Ball. **(FEET/FOREHEAD TO THE BALL!)**
- Beat the Ball to the Net Target Position and Wait—be Still on Contact. **(HANDS UP EARLY!)**
- Staggered Foot Position, Knees Bent with Feet, Hips and Shoulders Square to the Target. **(RIGHT FOOT FORWARD! SQUARE UP!)**
- Elbows Bent Comfortably and Wrists Relaxed like a Trampoline for the Ball. **(THUMBS BACK! BALL SHAPED! MOOSE ANTLERS!)**
- Contact Ball Above Forehead With All but Palms. **(FINGER PADS!)**
- Extend Through the Ball to the Target. **(EXTEND! STEP THROUGH THE BALL! FOLLOW! COVER!)**

Options to Learn Later

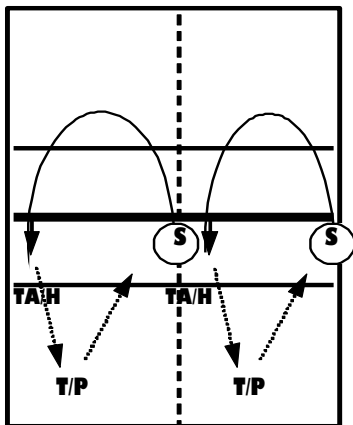
- ☒ Setters on the Net
- ☒ Setters Moving Off the Net
- ☒ Non-Setters Set After Blocking
- ☒ Non-Setters From Off the Net
- ☒ Back Sets
- ☒ Bump Sets
- ☒ From the Ground
- ☒ Jump Sets
- ☒ Side Sets
- ☒ Dumps—One & Two Handed
- ☒ Run-Through
- ☒ Out of the Net Sets
- ☒ Check the Blockers
- ☒ Vocalize
- ☒ Cover
- ☒ Play Sets
- ☒ Set From the Knees
- ☒ One Hand Saves
- ☒ Position & Quick Sets

TOP DRILLS/GAMES:

- 1) Triangles
- 2) Front & Back Sets (4's)
- 3) Running Bump Sets
- 4) 3 Meter & 1 Meter Sets

HOMEWORK:

- 1) Bounce the ball off a wall with varying directions, angles and heights for different movements and sets.
- 2) Set to self or partner, varying combinations such as front set to self, turn and back set to partner.

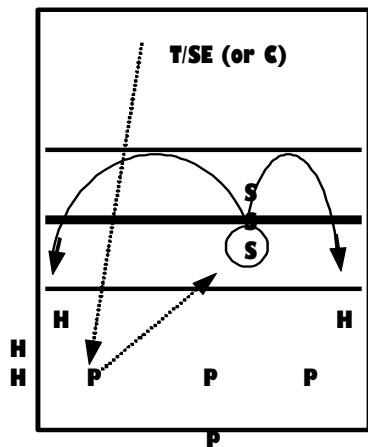


1) TRIANGLES:

- ☒ Divide the court into halves, and divide team into 4 groups of 3 (or 4 w/1 sub/retriever); use both sides of net. Each group consists of a Tosser/Passer (T/P), a Setter (S), and a Target/Hitter (TA/H).
- ☒ T/P puts ball into play to S; after the initial toss the player may then pass (over or underhand) to the S or continue to toss each repetition.
- ☒ S then sets a high set to the TA/H, (the Left Front H), who either catches & tosses, over or underhand passes, or hits or tips the ball back to the T/P.
- ☒ Players rotate within their small groups when a set number of repetitions or other specified goal is reached.

2) FRONT & BACK SETS:

- ☒ Tosser/Server (T/SE) or Coach (C) puts ball into play to a Passer (P), who passes (over or underhand) to the Setter (S).
- ☒ S sets a front set to H in Left Front and on the following pass sets a back set to H in Right Front.
- ☒ Players may rotate within their small group for a certain number of repetitions or when a goal is met, at which time all groups rotate to a new station to perform a different skill OR players may perform a single repetition and follow the path of the ball (P rotates to H, etc.) to rotate to the next small group (circle drill). S may stay or be part of the large group rotation.



NOTES:

Nothing in the world can take the place of persistence ~ Calvin Coolidge

COACHES Need to Know THIS Stuff...

SERVING SKILLS

KIDS Need to Hear THIS...

- CORE COACHING MECHANICS:**
- ⌘ **Opposite Foot Forward & Knees Bent.**
 - ⌘ **Toss Low, in Front & Consistent.**
 - ⌘ **Elbow High—Rigid Wrist/Hand.**

- 👂 **Stable Stance!**
(Square up to Target)
- 👂 **Low Toss!**
(Out in Front)
- 👂 **Swing Fast!**
(Palm to Target)

SQUARE UP TO TARGET!

Youth... **STABLE STANCE!**



OUT IN FRONT!

Youth... **LOW TOSS!**



PALM TO TARGET!

Youth... **SWING FAST!**



ERRORS TO CORRECT:

- ☒ Knuckles/Uneven Surface Contacts Ball
- ☒ Floppy Wrist on Contact
- ☒ Toss is Too Low to Hit
- ☒ Same Foot (as Hitting Arm) is Forward
- ☒ Loss of Power from Contact with Fingers

MORE DETAILS & POWERFUL WORDS!

- 👁️ If Underhand Serving, Stance is the Same, just Contact Ball Below Waist. (**BOWLING BALL!**)
- 👁️ Pick a Target. (**SQUARE UP!**)
- 👁️ Transfer your Weight from Rear to Front Foot; can Add a Step into the Transfer. (**STEP! TOSS IN FRONT!**)
- 👁️ Contact with a Fist, Half-Closed Fist or Open Palm/Heel of Hand. (**STIFF WRIST! PUNCH IT! HIT THE BACK OF THE BALL!**)
- 👁️ Fast Armswing for Deep/Hard Serves; Slower for Short/Soft Serves. (**ELBOW HIGH! SWING FAST!**)
- 👁️ Follow Through to the Target. (**PALM TO TARGET! FREEZE!**)
- 👁️ Serve and Run to Defense. (**FOLLOW!**)

Options to Learn Later

- ☒ Underhand
- ☒ Overhead
- ☒ Roundhouse
- ☒ At Endline
- ☒ Off Endline
- ☒ Deep & Short Corners
- ☒ Short Zones
- ☒ Deep Zones
- ☒ Topspin
- ☒ Floater
- ☒ Jump Topspin Serve
- ☒ Jump Floater Serve
- ☒ High Spin
- ☒ Sky/Moon Ball
- ☒ High Fade
- ☒ Slide Jumper

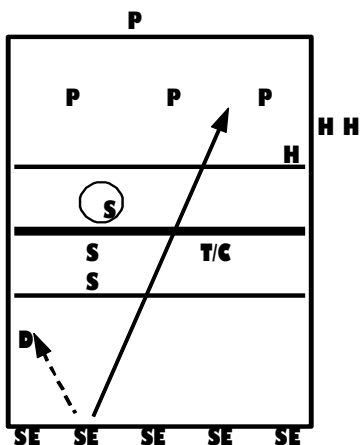
TOP DRILLS/GAMES:

- 1) Serve & Run to Defense
- 2) Placement Serving
- 3) "Okole" Serving
- 4) Timed Serving

HOMEWORK:

- 1) TOSS-TOSS-TOSS! The toss is the key! Continue to toss the ball for the overhead serve. Perfect it —perfect the serve!
- 2) Serve the ball above a net line marked on a wall

NOTES:

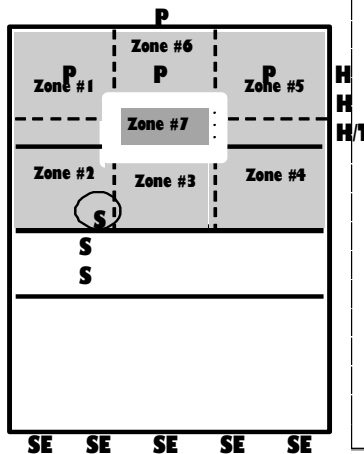


1) SERVE & RUN TO DEFENSE

- ✗ Divide the team into 2 groups - Servers (**SE**) and Setters (**S**), and Passers (**P**) and Hitters (**H**). A Coach (**C**) or other player presents a Target (**T**) for the Server/Digger (**D**).
- ✗ **SE** puts ball into play to a **P**, who passes (over or underhand) to the **S**. After serving, the **SE** runs into the court to her defensive position to defend against the **H**.
- ✗ **S** then sets to the **H**, who attacks against the **D**.
- ✗ Players rotate within their small groups for set number of repetitions or other goal, and then rotate to perform a different skill **OR** players may perform a single repetition and follow the path of the ball to rotate to the next small group (circle drill).

2) PLACEMENT SERVING:

- ✗ Server (**SE**) puts ball into play to a Passer (**P**) in the specific required zone, who passes (over or underhand) to the Setter (**S**).
- ✗ **S** sets a front (or back) set to the **H** in Left Front (or in Right Front).
- ✗ Waiting **P**'s rotate in for the passer who played the ball. **SE**'s can switch with **P**'s and/or **H**'s after the required number of repetitions or goal is met, **OR** players may perform a single repetition and follow (**S** rotates to **P**, who rotates to **H**, etc.) in a large circle drill.



Encouragement is oxygen to the soul ~ George Adams

COACHES Need to Know **THIS** Stuff...

FOREARM PASSING SKILLS

KIDS Need to Hear **THIS...**

CORE COACHING MECHANICS:

- **Ready to Move: Weight Forward, Feet Wide, Knees Bent and Chest Down (like a wrestler).**
- **Form the Platform and Contact the Ball Above the Wrists.**
- **Rebound the Ball and Finish to the Target.**

Ready!
(Read & Anticipate)

Solid Platform!
(Locked & Out Early)

Platform to Target!
(Push to the Target)

**READY! READ!
ANTICIPATE!**

**PLATFORM LOCKED &
OUT EARLY!**

PUSH TO TARGET!

Youth... **READY!**

Youth... **SOLID PLATFORM!**

Youth... **PLATFORM
TO TARGET!**



ERRORS TO CORRECT:

- Standing Too Upright
- Getting Ready Too Late—Ball is Too Close
- Contacting Ball on Hands or Wrists
- Platform Formed with Crossed Thumbs
- Too Much Arm Swing or Platform Motion
- Bent Elbows

MORE DETAILS & POWERFUL WORDS!

- ☞ Take a Straddle Position with Right Foot Leading. (**FEET APART! RIGHT FOOT FORWARD! GALLOP!**)
- ☞ Form Platform with Elbows Extended & Close Together, Thumbs Together & Wrists to Floor. (**ELBOWS LOCKED! THUMBS TOGETHER! WRISTS DOWN! OUT EARLY!**)
- ☞ Contacted Ball Low, Near Waist Level, at Midline of Body Whenever Possible. (**REACH OUT! MIDLINE!**)
- ☞ Bend the Knees & Bend Slightly at the Waist; Transfer Your Weight From Rear to Front Foot. (**ROCKING HORSE! LEAN! SHOVEL! PUSH THE BALL TO THE TARGET!**)
- ☞ Always Try for Two Arms on the Ball, but it is Permissible to Reach Out and Play the Ball with One Arm, Especially on a Dig. (**TWO ARMS! FEET TO THE BALL! TOUCH IT!**)
- ☞ Drop the Inside Shoulder of the Platform to Direct the Ball to One Side or the Other. (**TILT! DROP YOUR SHOULDER! ELBOWS TO THE TARGET! TURN THE STEERING WHEEL!**)

Options to Learn Later

- ☒ Forearm Pass & Dig
- ☒ Overhead Pass & Dig
- ☒ Reverse Overhead Pass
- ☒ Forward Run Throughs
- ☒ Lateral Run Throughs
- ☒ "J" Stroke
- ☒ Pass Floater Serves
- ☒ Pass Topspin Serves
- ☒ High Passes
- ☒ Low Passes
- ☒ Free Balls
- ☒ Alone
- ☒ With Others
- ☒ Dig Hard Attacks
- ☒ Dig Tips

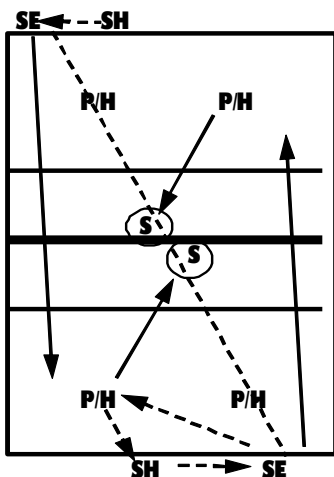
TOP DRILLS/GAMES:

- 1) Triples Passing
- 2) Pass/Dig, Set, Hit
- 3) Passing w/ Movement

HOMEWORK:

- 1) Pass a ball against wall; pass as many as possible without a bounce; keep knees bent.
- 2) Same, but take the ball off to one side, then the other.
- 3) Same, but pass the ball into corners.

NOTES:

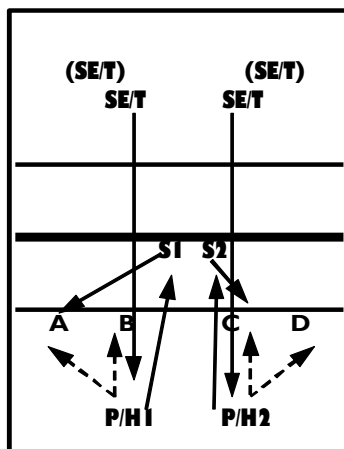


1) TRIPLES PASSING

- ☒ Divide the team into 2 groups - with 2 Servers/Retrievers (SE/SH), 2 Setters (S), and 2 Passer/Hitters (P/H) in each group.
- ☒ SE puts ball into play to opposite P/H's, who forearm passes to the S.
- ☒ S then sets to the P/H, who approaches, jumps, catches the set and rolls the ball to the SH.
- ☒ After serving, the SE joins the passing line, the SH becomes the SE and the P becomes the SH OR SE/SH's can rotate with the P's after a certain number of repetitions or other goal is met.

2) PASS/DIG - SET - HIT:

- ☒ Divide players into groups of 3-5: Passer/Hitters (P/H), a Setter (S) & Server/Tossers (SE/T).
- ☒ SE/T puts ball into play to the P/H who passes to the S.
- ☒ S1 sets a back row set to the A zone for P/H1 to attack, and sets the next to the B zone. S2 first sets a back row set to the C zone and then to the D zone for the P/H2.
- ☒ Waiting P/H's and SE/T's may rotate in after a certain number of repetitions or goal has been met, and/or SE/T's can switch with P/H's or players may perform a single repetition (2 attacks) and follow the ball to rotate in a large circle drill.




If a child lives with praise, he will learn to appreciate ~ Dorothy Nolte

COACHES Need to Know **THIS** Stuff...

BLOCKING SKILLS

KIDS Need to Hear **THIS...**

- CORE COACHING MECHANICS:**
- **Ready Position with Knees Bent, Hands Up in Front and Ready to Move.**
 - **Use Proper Footwork to Slide Along the Net and Line Up with the Hitter's Angle.**
 - **Penetrate the Plane of the Net with Palms Facing into the Court.**

-  **Ready!**
(Read & Anticipate)
-  **Slide to the Hitter!**
(Front the Hitter)
-  **Jump & Penetrate!**
(Explode, Press & Seal)

**READ!
ANTICIPATE!**
Youth... **READY!**



**FRONT THE
HITTER ANGLES!**
Youth... **SLIDE TO
THE HITTER!**



**EXPLODE!
PRESS & SEAL!**
Youth... **JUMP &
PENETRATE!**



- ERRORS TO CORRECT:**
- Eyes Closed When Blocking
 - Not Penetrating the Net
 - Hands/Body Facing Out of Bounds
 - Jumping Forward or Swinging Arms into Net
 - Watching the Ball; Jumping Early/Late
 - Arms Too Wide

MORE DETAILS & POWERFUL WORDS!

- ☞ Watch the Hitter, not the Ball; Wait & Jump on the Hitter's Arm Swing. (**BALL-SETTER-BALL-HITTER! WAIT! TIME IT!**)
- ☞ Take Away the Hitter's Favorite or Best Shot; Evaluate the Pass Quality & Anticipate the Type of Set that is Likely to be Delivered and to Which Hitter; Read the Hitter's Angle & Speed of Approach. (**READ! ANTICIPATE THE HIT! FIND YOUR HITTER!**)
- ☞ Channel or Deflect the Ball into Your Court. (**TAKE AWAY A ZONE! TOUCH IT!**)
- ☞ Bend the Knees & Bend Slightly at the Waist; Hips & Toes Parallel to the Net, with Weight on Front of Foot, Ready to Jump Up at Any Moment. (**SQUARE UP! PRESSED & READY! LEGS LOADED! COILED! EXPLODE UP!**)
- ☞ Always Try to Block the Ball on the Opponent's Side of the Net with Big, Tight Hands & Arms- from Fingertips Down Through Wrists, Elbows, Shoulders & Stomach Muscles. (**BIG HANDS - BIG EYES! SEAL! SURROUND! PRESS! CORNER IT!**)
- ☞ Keep the Hands in Front of the Ball as Long as Possible; Jump & Land with Hands Above Head. (**CLOSE! LAND HANDS HIGH!**)

Options to Learn Later

- ☒ One on One Blocking
- ☒ Double Blocking
- ☒ Triple Blocking
- ☒ Soft Blocking
- ☒ Zone Blocking
- ☒ Read Blocking
- ☒ Commit Blocking
- ☒ Middle Blocking
- ☒ Stack Blocking
- ☒ Block & Transition to Hit
- ☒ Block & Set the Second Ball
- ☒ Block & Play Ball for First Contact
- ☒ Block Back Row Attacks
- ☒ Block Slides
- ☒ Block Crossing Plays
- ☒ Block Quicks
- ☒ Swing Block

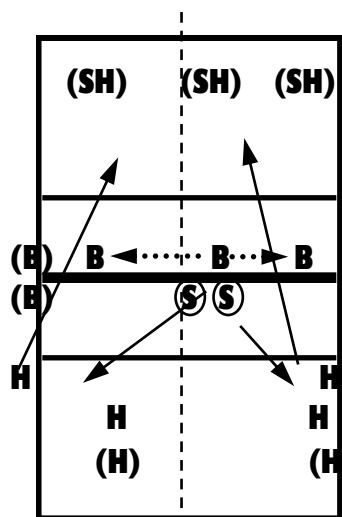
TOP DRILLS/GAMES:

- 1) Block with Partner
- 2) Block Solo
- 3) Block Hitters in ANY Drill

HOMEWORK:

- 1) Practice your block jump facing a wall; concentrate on hand position and squat.
- 2) Same, but practice blocking footwork along the wall to one side, then the other.

NOTES:

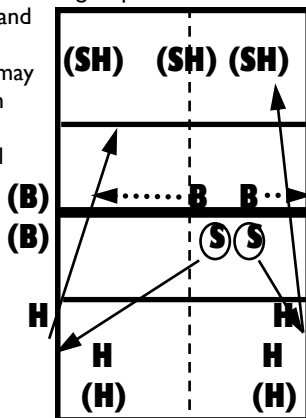


1) BLOCK WITH PARTNER

- ☒ Divide the team into 2 groups - 2-3 Blockers (B), 2-3 Hitters (H) and a Setter (S). Each group may also include 2-3 Retrievers (SH).
- ☒ H tosses ball to S, who hits back at H to pass/dig back to S. S then sets to H, and H attacks against the 2 B's forming a double block.
- ☒ As variation to initiate the play, SH may put ball into play with a serve or toss across net to H to pass to S.
- ☒ Players rotate within their small groups for a set # of repetitions or other goal, and then rotate to perform a different skill OR players may perform a single repetition and follow the path of ball to rotate to the next small group (circle drill).

2) BLOCK SOLO:

- ☒ Same groups and set up as above, except the B performs a Solo Block against the H.
- ☒ As variation to initiate the play, SH may put ball into play with serve or toss across net to the H to pass to the S.
- ☒ Players may rotate as above.



ADDITIONAL RESOURCES

⇒ If you want to read more about the volleyball topics below, or others related to this chapter, download and print out the articles found at www.usavolleyball.org under the Resources tab, then click on the Education/IMPACT/Articles links.

- [Volleyball Jargon & Acronyms](#), by John Kessel
- [Inspiring Words for the Gym](#), by John Kessel
- [How Can I Spike Harder](#), by John Kessel

NOTES:

