

ACCELERATION, AGILITY AND MOBILITY

ROBB ROGERS M.Ed.,M.S.C.C.,C.S.C.S.

ACCELERATION

- THE ABILITY TO OVERCOME INERTIA AND MOVE IN A PARTICULAR DIRECTION ADDING MOMENTUM WITH EACH SUCCESSIVE STEP.

AGILITY

ABILITY TO DEMONSTRATE A VARIETY OF FOOT MOVEMENT RHYTHMS AND SKILLS WHILE DEMONSTRATING BALANCE AND BODY CONTROL. MAY OR MAY NOT CREATE MOVEMENT IN A PARTICULAR DIRECTION.

MOBILITY

- ABILITY TO CREATE A VARIETY OF FOOT MOVEMENTS AND RHYTHMS WHILE ACCELERATING IN A PARTICULAR DIRECTION(S) WITH BALANCE AND BODY CONTROL.

ACCELERATION MECHANICS

- STANCE
- POSTURE
- ARM ACTION
- LEG ACTION
- FIRST STEP
- GET AWAY STEP

DRILL CUES

- VISUAL
- AURAL
- AUDITORY
- KINESTHETIC

DRILL RESPONSE

CLOSED RESPONSE – ONLY ONE RESPONSE IS EXPECTED AND CORRECT

OPEN RESPONSE – A VARIETY OF RESPONSES IS CORRECT, DEPENDING UPON THE CUE GIVEN.

LINEAR VS. LATERAL

- MECHANICAL SIMILARITIES AND DIFFERENCES
- THE WHEEL

STANCES

- TWO POINT
- THREE POINT
- FOUR POINT
 - 6 POINT
 - PRONE
 - SUPINE
 - SEATED

START DRILLS

- TALL, FALL & RUN
- SCRAMBLE UP & GO LINEAR/LATERAL
- MOUNTAIN CLIMBER START
- ROLLOVER START
- TRACK START
- MEDIBALL - RESISTED
- TUBING - ASSISTED
- THE WHEEL

TRANSITION DRILLS

- PUSH – PUSH
- PUSH – PUSH AND GO
- LINEAR – FORWARD/BACKWARD
- LATERAL
 - CROSSOVER RUN
 - SHUFFLE
 - CARIOCA

RESISTED DRILLS

- SLEDS
- TUBING
- HILLS
- PARACHUTE

ASSISTED DRILLS

- DOWN HILL
- TUBING
- WITH WIND

AGILITY

- LADDER
- DOT DRILLS
- JUMP ROPE
- STEP UPS
- LINE HOPS

MOBILITY

- UNIDIRECTIONAL DRILLS
- SPEED ANGLES
- SHUTTLES

UNIDIRECTIONAL DRILLS

- BACKPEDAL INTO A SPRINT
- SHUFFLE INTO A SPRINT
- CARIOCA INTO A SPRINT
- CROSSOVER RUN INTO A SPRINT

SPEED ANGLES

- W DRILL
- STAR DRILL
- SQUARE DRILL
- TRIANGLE DRILL
- CIRCLE DRILLS

SHUTTLES

- PRO SHORT SHUTTLE (5-10-5)
- PRO 60 YARD SHUTTLE (5-10-15)
- LINE TOUCHES
- VARIATIONS
 - SHUFFLE
 - CARIOCA
 - BACKPEDAL/SPRINT

PLYOMETRICS

- WHAT IS THE DIFFERENCE BETWEEN PLYO'S AND AGILITIES/MOBILITIES?

THE DIFFERENCE

- PLYOMETRICS ARE FROM TRACK
- MOBILITY/AGILITY DRILLS ARE FROM SPORT

QUANTIFICATION

- MOBILITY/AGILITY DRILLS AND PLYO'S ARE STRENGTH TRAINING DRILLS
- THE LOAD IS BODYWEIGHT
- THE TRAINING STIMULUS IS SPEED OF MOVEMENT/RESPONSE

SETS AND REPS = VOLUME

- 4 SETS OF 5 REPS IS 20 REPS
- 4 DRILLS OF 10 FOOT CONTACTS IS 40 REPS

DRILL TYPE DETERMINES INTENSITY

- AGILITIES – MOSTLY LOW LEVEL IN TERMS OF INTENSITY
- MOBILITY DRILLS
 - UNIDIRECTIONAL ARE LOW LEVEL
 - SPEED ANGLES ARE MEDIUM INTENSITY
 - SHUTTLES ARE HIGH INTENSITY

PLYOMETRIC INTENSITY

- IN PLACE VS. MOVING
- TWO LEG JUMPS VS. 1 LEG HOPS
- BOUNDS (ALTERNATE LEG JUMP)
- SHORT RESPONSE (UNDER 10) VS. LONG RESPONSE (OVER 10 FOOT CONTACTS)
- SHOCK – DEPTH JUMPS

TRAINING DESIGN

- SPEED EARLY IN THE WEEK & EARLY IN THE WORKOUT
- POWER IN MID WEEK & MID WORKOUT
- STRENGTH LATE IN THE WEEK AND LATE IN THE WORKOUT
- FITNESS IS LAST IN THE WORKOUT AND AT THE END OF THE WEEK

WHAT IS SPEED?

- ABSOLUTE SPEED
- OVERSPEED
- TECHNIQUE/FORM ABOVE 85%
- PLYOMETRICS CAN BE SPEED AND/OR POWER DEPENDING ON GROUND CONTACT TIME AND ABILITY OF THE ATHLETE

WHAT IS POWER?

- STANCE & START DRILLS
- MOBILITY DRILLS
- PLYOMETRICS ARE ALL POWER

HOW MUCH?

- AGILITIES

- LOW UNDER 100 REPS
- MEDIUM UP TO 250 REPS
- HIGH UP TO 400 REPS
- EXTREME OVER 500 REPS

- MOBILITIES

- LOW UP TO 25 REPS
- MEDIUM UP TO 50 REPS
- HIGH OVER 50 REPS
- EXTREME OVER 75 REPS

SPEED CONTINUUM

~~SPEED~~ — ~~POWER~~ — ~~STRENGTH~~

YOU MUST TRAIN FROM END TO END

THANK YOU

- VERN GAMBETTA
- JIMMY RADCLIFFE
- RUSS BALL
- MIKE CLARK
- MIKE BOYLE
- CARLOS SANTANA
- AL VERMEIL
- GARRET GIEMONT
- PERFORM BETTER