

## Summary of Locomotor Developmental Sequences

Fundamental Motor Skill	Stage 1	Stage 2	Stage 3	Stage 4
Gallahue, Ozmun & Goodway	<b>Initial Stage</b>	<b>Emerging Stages</b>		<b>Proficient Stage</b>
<b>Run</b>	<i>Run – Arms Above Head</i> Arms are high at head height. Flat-footed contact. Short, wide stride. Feet shoulder width apart.	<i>Run – Arms Mid Trunk</i> Arms at mid-trunk level. Vertical component of run still great. Legs near full extension.	<i>Heel-Toe Run - Arms Extended</i> Arms below waist. Arm-leg opposition with elbows nearly extended. Heel-toe contact.	<i>Run - Pumping Arms</i> Heel-toe contact (sometimes toe-heel when sprinting). Arm-Leg opposition. Heel recovery close to buttocks. Elbow bent at 90 degrees.
<b>Hop</b> (1 foot to 1 foot)	<i>Hop–Free Foot in Front</i> Non-support (free) foot in front of base leg with thigh parallel to floor. Body upright & hands shoulder height.	<i>Hop–Free Foot by Support Leg</i> Non-support knee flexed with knee in front and foot beside support leg. Slight body lean forward. Both arms move together.	<i>Hop–Free Foot Behind Support Leg</i> Non-support thigh alongside base support leg with free foot behind support leg, knee flexed More body lean forward. Arms swing forward together.	<i>Hop – Free Leg Pumps</i> Non-support leg is bent and knee pumps forward & back in a pendular action. Forward body lean. Arm opposition with swing leg.
<b>Long Jump</b> (2 feet to 2 feet)	<i>Short Jump - Braking Arms</i> Arms act as “brakes” moving forward then toward trunk on jump. Large vertical component. Legs not extended.	<i>Short Jump - Winging Arms</i> Arms act as “wings” to side of body. Vertical component still great. Legs near full extension.	<i>Longer Jump - Arms Swing to Head</i> Arms move forward/elbows in front of trunk at take-off. Hands swing to head height. Take-off angle still above 45 degrees. Legs often fully extended.	<i>Long Jump - Full Body Extension</i> Complete arm and leg extension at take-off. Take-off near 45 degree angle. Thighs parallel to surface when feet contact for landing.
	<b>Initial Stage</b>	<b>Emerging Stage</b>	<b>Proficient Stage</b>	
<b>Gallop</b> (Step-together-step-together)	<i>Choppy Run-Gallop</i> Resembles rhythmically uneven run. Back leg crosses in front of lead leg during airborne phase & remains in front at touch down.	<i>Gallop - Stiff Back Leg</i> Slow-moderate tempo, choppy rhythm. Back leg is stiff. Hips often turned sideways. Vertical component exaggerated.	<i>Gallop - Smooth Rhythmical</i> Smooth, rhythmical pattern with moderate tempo. Feet remain close to ground. Hips facing forward.	
<b>Skip</b> (step-hop-step-hop)	<i>Broken Skip</i> Broken skip pattern or irregular rhythm. Slow, deliberate movement. Ineffective arm action.	<i>Skip - High Arms &amp; Legs</i> Rhythmical skip pattern. Arms swing high & provide body lift. Excessive vertical component.	<i>Rhythmical Skip</i> Arm action reduced/hands below shoulders. Easy, rhythmical movement. Support foot near surface on hop.	

## Summary of Manipulative Developmental Sequences

Fundamental Motor Skill	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Gallahue, Ozmun & Goodway	<b>Initial Stage</b>	<b>Emerging Stages</b>			<b>Proficient Stage</b>
<b>Throw</b>	<i>Front- Chop Throw</i> Feet stationary. Front facing. Arm “chop throws” from ear. No spinal rotation.	<i>Sideways - Sling Shot</i> Body turned sideways. Horizontal wind. "Sling shot throw" with block rotation of trunk. Arm swings across body.	<i>Step Same Arm-Leg</i> High wind up of arm. Ipsilateral (same arm-leg) step. Little spinal rotation. Follow-through across body.	<i>Step Opposite Arm-Leg</i> High wind up of arm. Contralateral (opposite arm-leg) step. Little spinal rotation. Follow-through across body.	<i>Arm Wind Up</i> Arm swings downward & back. Contralateral step. Segmented body rotation. Arm-Leg Follow-through.
<b>2 Handed Catch</b>	<i>Delayed Reaction</i> Delayed arm action to ball. Arms straight in front until ball contact, then scooping action to chest. Feet stationary. Head often turns to side.	<i>Hugging</i> Arms encircle ball as it approaches. Ball is "hugged" to chest. Feet are stationary or may take one step.	<i>Scooping</i> Arms out & scoop ball to chest. Arms "scoop" under ball to trap it to chest. Single step may be used to step into the ball flight.	<i>Hand Catch</i> Initial contact with ball is with hands only. Hand catch only if tossed to trunk. Feet stationary or limited to one step. Would not catch a ball tossed to side of body.	<i>Move to Ball</i> Tracks flight of ball & moves body under ball flight. Catch with hands only. Fine adjustment of fingers to ball position as ball is caught.
	<b>Initial Stage</b>	<b>Emerging Stages</b>			<b>Proficient Stage</b>
<b>Kick</b>	<i>Stationary - Push</i> Stationary position. Little/no leg wind up. Foot "pushes" ball. Often step backward after kick or poor balance.	<i>Stationary- Leg Swing</i> Stationary position. Free leg winds-up behind base leg. Opposition of arms and legs.	<i>Moving Approach</i> Moving approach to ball (1 step or several steps). Foot travels in a low arc. Arm/Leg opposition. Steps past/beside ball on follow-through.	<i>Leap-Kick-Hop</i> Rapid approach to ball. Leaps before kick. Backward trunk lean during wind-up. Kicks hard. Hops after kick.	
<b>Punt</b> (Drop ball & kick it)	<i>Stationary-Yoke &amp; Push</i> Stationary position. No leg wind-up. Ball toss erratic “yoking”. Push ball & often step back.	<i>Stationary Leg Swing</i> Stationary position. Free leg wind-up to rear. Yoking toss. Forceful kick attempt.	<i>Moving Approach</i> Moving approach to ball. Some arm/leg yoking. Ball is tossed or dropped. Often steps beyond ball after kick.	<i>Leap-Punt-Hop</i> Rapid approach to the ball. Controlled drop of ball. Leap before ball contact. Kicks hard. Hop after ball contact.	
<b>Strike</b> (Bat a ball)	<i>Chop Strike</i> Feet stationary-front facing. Hand position on bat variable. “Chopping” downward strike pattern.	<i>Horizontal Push</i> Sideways, feet stationary or small step. Horizontal push/swing of bat. Trunk rotates as a block.	<i>Ipsilateral Step &amp; Strike</i> Sideways orientation at start. Ipsilateral (same arm-foot) step. Diagonal downward swing of bat.	<i>Contralateral Step &amp; Strike</i> Sideways orientation at start. Contralateral (opposite arm-leg) step. Segmented body rotation Wrist rollover on follow-through.	

