FUNDAMENTAL MOVEMENT SKILLS

Coaching Association of Canada
If you can't 
Catch 
Run 
Swim 
Throw

You won't take part in

Soccer 
Basketball 
Volleyball 
Track and Field 
Squash 
Badminton 
Rugby 
Tennis

If you can't 
Catch 
Jump 
Throw 
Swim 
Run

You won't take part in

Baseball 
Softball 
Bowling 
Soccer 
Goalball 
Football 
Rugby

If you can't 
Throw 
Jump 
Swim 
Catch 
Run

You won't take part in

Swimming 
Diving 
Water Polo 
Scuba 
Kayaking 
Sailing 
Surfing
Stages of Canadian Sport for Life

- Active Start
- FUNdamentals
- Learning to Train

Fundamental Movement Skills

- In water
- On ice or snow
- On land
- In air

Coaching Association of Canada's Fundamental Movement Skills Workshop

Canadian Sport for Life

- Active for Life
- Fit for Life
- Competitive for Life
- T2 Win
- T2 Compete
- Train to Train

Physical Literacy

- Physical Activity for Health
- Sporting Excellence
- Active for Life

First Contact

- Awareness
- Learn to Train
- FUNdamentals
- Infants
- Seniors

Stages of Canadian Sport for Life
## Stage of Long-Term Athlete Development

**Active Start**
(Ages 0-6, boys and girls)

**FUNdamentals**
(Ages 6-9 boys, 6-8 girls)

**Learning to Train**
(Ages 9-12 boys, 8-11 girls)

### Participants learn

**Basic Movements** → **Fundamental Movement Skills** → **Fundamental Sport Skills**

### Skills developed during the stage

<table>
<thead>
<tr>
<th>Body control skills</th>
<th>Agility, balance, and co-ordination</th>
<th>Gliding</th>
<th>Court movement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rhythm, poise, expression</td>
<td></td>
<td>In the back</td>
</tr>
<tr>
<td>Body movement (locomotor) skills</td>
<td>Walk, run, hop, skip, jump</td>
<td>Long-jump</td>
<td>Running a pass route</td>
</tr>
<tr>
<td></td>
<td>Slide, skate, ski, swim</td>
<td></td>
<td>Base running</td>
</tr>
<tr>
<td>Object manipulation skills</td>
<td>Catch, trap, receive</td>
<td></td>
<td>Volleyball spike</td>
</tr>
<tr>
<td></td>
<td>Throw, strike, push, kick</td>
<td></td>
<td>Basic ollie</td>
</tr>
</tbody>
</table>

### Instructional Strategy

- Movement exploration and opportunity to play with different objects (balls, bats, trikes, etc.)
- Movement exploration, basic instruction, and opportunities for active play
- Instruction and opportunity to practice

### NCCP Training

- **NCCP Fundamental Movement Skills Workshop**
- **NSO Fundamental Sport Skill Programs**

*Delivered through the provincial/territorial coaching representatives. For a list go to coach.ca.
**Delivered through the provincial/territorial sport organizations. Examples include but not limited to: Run Jump Throw, Rally Cap, Steve Nash Youth Basketball, Husky Snow Stars, CanSkate, Atomic Volleyball, I Love Waterpolo.
Outcomes

• Create safe games where children can practise fundamental movement skills

• Apply a six-step teaching process to fundamental movement skills

• Model responsible behaviour in a leadership role

• Lead children in activities that will promote the development of fundamental movement skills
NCCP Core Competencies

• The NCCP’s five core competencies will help you become a more effective leader and have a more meaningful impact on learners’ experience

• The five competencies are:
  » Problem-solving
  » Valuing
  » Critical Thinking
  » Leading
  » Interacting
Unit 1: Summary

• The competencies of the NCCP are:
  » Problem-solving
  » Valuing
  » Critical Thinking
  » Leading
  » Interacting
Unit 2: Learning to Teach Movement Skills

- Where to observe different movement skills from
- The four phases of movement
- Characteristics of effective feedback
Where to Observe From Worksheet

Place a ✓ to indicate where you should stand to observe.
Phases of Movement

Four Phases

1. Preparation
2. Force production
3. Critical instant
4. Recovery/Follow-through

Key Ideas

• Use all the body parts (joints) that can be used
• Use them through as great a range of motion as is naturally possible
• Critical instant is the moment of release
• Follow through in the direction you want the “force” to go
Phases of Movement Examples

1. The arm action is vigorous
2. The knee lift is strong
3. The push-off with the foot is strong
4. The stride is longer

1. There is a full backswing
2. The legs extend forcefully and work together
3. The arms are above the head at take-off
4. The legs come through for the landing
Communicating What to Do to Improve

• Get eye-to-eye with participants

• Be positive, tell them something they did right

• Listen to what they tell you

• Body language says more than words
Effective Feedback

• Start positive
• Keep it short and simple
• Tell people what you WANT THEM TO DO — not what they did wrong
• Make sure people understand what you want them to DO
Unit 2: Summary

• Moving to a suitable position to view a skill
• Demonstrating correct observation positioning
• Identifying: Preparation, Force production, Critical instant, Follow-through/Recovery
• Communicating effectively
• Providing feedback to improve skill performance
Unit 3: Throwing

- Children go through stages in learning to throw
- Young children cannot throw with an adult throwing pattern
- Three stages of maturity for throwing
- Key factors that contribute to having a mature throw
- Six-step teaching model
- How to organize games to practise skills
HOW TO TEACH SKILLS

1. Identify
   Can the skill be improved?

2. Analyze
   Is it an immature skill or a poorly executed mature skill?

3. Generate
   Identify what needs to change, and discuss ways to change it

4. Plan
   Identify exactly what to do (activity and instructions)

5. Implement
   Implement the plan and observe the new outcome

6. Assess
   Assess the skill, compare it again to the reference model and start again

coach.ca
REACH HIGHER
Instructional Design Model

1. **Identify** the coaching challenge
2. Coaches **analyze** the coaching challenge
3. Coaches **generate** ideas and options
4. Coaches **plan** and develop solutions
5. **Implement** and/or test the solution
6. Assess the solution
How to Teach Throwing

1. Identify
   Can the throw be improved?

2. Analyze
   Is it an immature throw or a poorly executed mature throw?

3. Generate
   Identify what needs to change, and discuss ways to change it

4. Plan
   Identify exactly what to do (activity and instructions)

5. Implement
   Implement the plan, and observe the new outcome

6. Assess
   Assess the throw, compare it again to the reference model, and start again.
<table>
<thead>
<tr>
<th>Stage 3</th>
<th>![Stage 3 Images]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>![Stage 1 Images]</td>
</tr>
<tr>
<td>Stage 2</td>
<td>![Stage 2 Images]</td>
</tr>
</tbody>
</table>
**Participants with a Disability**

- **Locomotor**: For wheelchair users at Stages 1 or 2, position the wheelchair in the direction the ball is to be thrown. For those at Stage 3, point the wheelchair slightly to the side of the throwing arm.

- **Cognitive**: Physically guide individuals with a visual disability through the motions with additional verbal cues; a high number of repetitions is also recommended.

- **Intellectual**: For individuals with an intellectual disability, keep instructions brief and simple. Demonstrate rather than explain, and review instructions frequently.

---

**Key Points at Each Stage**

1. The arm is taken up and to the side
2. The forearm and hand are well back behind the head, and there is a slight backward lean of the body
3. The shoulder, elbow, and wrist are used
4. There is some shift of body weight forward, and the leg on the throwing side of the body moves during the throw

**To Move to the Next Stage**

1. Take the hand/arm back behind the head
2. Use the shoulders, elbow, and wrist
3. Step and lean forward as you throw

**Cue Words**

- Ball back
- Step and throw

**Stage 1**

- Preparation
- Force Production
- Recovery/Follow-through

**Stage 2**

- The most important difference is to step forward - but with the SAME foot as the hand holding the ball
- There is greater use of the shoulder, arm, and wrist
- There is more use of the trunk, but little or no twisting of the trunk

**Stage 3**

- Note the rotation of the trunk, backward on the side she throws from
- The throwing arm is taken up and back
- There is a step forward with the foot opposite the throwing arm
- During force production, the trunk, shoulder, arm, and hand are all used
- Body weight moves forward during the throw
- Weight ends up on the opposite foot
Unit 3: Summary

- Six-step teaching model

- Children go through stages in learning to throw and cannot throw with an adult throwing pattern

- Three stages of maturity for throwing
Unit 4: Creating Safe Fun Games

- How to organize games to practise skills
- Creating safe games where children can practise their skills
Games

Fun
Safe
Simple
Everyone participates – avoid elimination
Graduated challenges
A chance to practise skills
Adaptations

Locomotor Disability
• The inability to move oneself and objects from place to place.

Sensory Disability
• A disability that affects how people gather information from the world around them.

Intellectual Disability
• Any condition that includes a lifelong impairment of a person’s ability to learn or adapt to his or her environment.
Unit 4: Summary

• Creating and organizing games to practise skills
• Adapting games for a person with a disability
• Keeping activities safe
Unit 5: More Fundamental Movement Skills

- Children go through stages in learning to run, jump, kick, strike, and catch and young children cannot run, jump, kick, strike, or catch with an adult pattern.
- Choosing the optimal position to observe running, jumping, kicking, striking, and catching.
- Applying the six-step teaching model to running, jumping, kicking, striking, and catching.
- Creating and adapting games to practise skills.
HOW TO TEACH SKILLS

1. Identify
   Can the skill be improved?

2. Analyze
   Is it an immature skill or a poorly executed mature skill?

3. Generate
   Identify what needs to change, and discuss ways to change it

4. Plan
   Identify exactly what to do (activity and instructions)

5. Implement
   Implement the plan and observe the new outcome

6. Assess
   Assess the skill, compare it again to the reference model and start again
# More Fundamental Movement Skills

<table>
<thead>
<tr>
<th></th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Force Production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Instant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow-through</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Stage 1 of running usually develops during the second year of life, before children take part in organized physical activities/sports. For that reason, the early stage of running is not shown here.

Stage 2

Key Points at Each Stage
1. In the early stage of running, instruction is not effective or recommended
2. Children need opportunities to run and play in safe, open spaces

To Move to the Next Stage
1. Provide opportunities for play in open spaces
2. Be a role model, and play running games with children
3. Ensure the space is safe
4. Encourage children to try running sideways and backward, not always in a straight line

Cue Words
- Play!
- Push hard
- Pump your arms
- High knees

Stage 3

The Four Phases
Preparation: From the moment the heel contacts the ground until the moment of deepest bend at the knee
Force Production: From the deepest bend of the knee to the moment the foot leaves the ground
Critical Instant: The push-off as the toes leave the ground
Recovery: Time in the air when there is no contact with the ground

1. There is little arm action
2. Knee lift is poor
3. The push-off from the foot is weak
4. The head often looks down
5. The arms move more side-to-side than front-to-back

1. The arm action is vigorous
2. The knee lift is strong
3. The push-off with the foot is strong
4. The stride is longer

Participants with a Disability

Wheelchair users can "wheel" while other children are running, as long as the wheeling surface is relatively smooth. Encourage participants with other locomotor disabilities to run as best they can - taking care to provide adequate support if needed.

Runners with a visual impairment may have enough residual vision to run unaided or may need to run with a sighted guide. Guides can often be recruited from local running clubs. Uneven surfaces are very challenging for runners with this impairment and should be avoided.

For safety, and to ensure that runners do not get lost, those running alone outside a gymnasium or track need to be very familiar with the route being run and must be carefully monitored.
Stage 1

Key Points at Each Stage
1. There is little use of the arms
2. The push-off with the legs is weak
3. The arms are not working together (not synchronized)
4. The push is mostly off one leg not the two together

To Move to the Next Stage
1. Push with both legs
2. Lean forward to take off

Cue Words
• Push hard
• Lean forward

Stage 2

Key Points at Each Stage
1. The arms don't swing forcefully up over the head
2. The legs are not fully extended at take-off
3. There is no arm backswing

To Move to the Next Stage
1. Swing the arms back, then vigorously forward and up; the arms are above and in front of the head
2. There is an explosive push with both legs
3. Lean forward

Cue Words
• Arms back
• Swing arms and push
• Explode with legs

Stage 3

Key Points at Each Stage
1. There is a full backswing
2. The legs extend forcefully and work together
3. The arms are above the head at take-off
4. The legs come through for the landing

Participants with a Disability

For wheelchair users, jumping is not possible. For other locomotor disabilities, consult with the athlete/child/caregiver to ensure safety.

For individuals with a visual disability, initially provide balance support, and then reduce this support gradually as the athlete/child/caregiver directs.

For individuals with an intellectual disability, keep instructions brief and simple. Demonstrate rather than explain, and review instructions frequently.
**Stage 1**

Key Points at Each Stage

1. The kicker makes a shuffle-type approach to the ball or stands still while kicking
2. The approach is straight-on
3. There is almost no preparation backswing with the foot
4. Contact is often made with the toe or even the shin
5. Arm action is erratic, and there is usually no follow-through

To Move to the Next Stage

1. Move toward the ball to start the kick
2. Bend the knee back
3. Watch the ball
4. Contact the ball with the toe

Cue Words

- Bend knee
- Toe on ball

**Stage 2**

Key Points at Each Stage

1. The kicker makes a shuffle-type approach to the ball
2. The approach is straight-on
3. The knees are bent in the backswing
4. Most force comes from the knee action
5. Contact is often made with the toe
6. The follow-through with the leg is straight ahead

To Move to the Next Stage

1. Start behind the ball and to one side
2. Stride toward the ball
3. Place the non-kicking foot to the side of the ball
4. The hip and knee are drawn back as far as possible
5. Strike the ball with the laces area of the foot
6. Follow through in the direction you want the ball to go

Cue Words

- Foot by ball
- Backswing hip and knee
- Follow-through

**Stage 3**

Key Points at Each Stage

1. The kicker makes a multi-step approach to the ball
2. The approach is angled
3. The hip and knee are bent in the backswing
4. The force comes from the hip and knee action
5. Contact is made with the instep/laces area
6. There is good follow-through

Cue Words

- Lean back slightly to get the ball off the ground.
- Don’t make contact with the top of the ball
- Contact with “laces” at or below the centre of the ball

Participants with a Disability

- **Locomotor**: For wheelchair users, kicking is not possible. For other locomotor disabilities, consult with the athlete/child/caregiver to ensure safety.
- **Sensory**: For individuals with a visual disability, use a ball that provides an auditory cue so that participants can hear the ball move.
- **Intellectual**: For individuals with an intellectual disability, keep instructions brief and simple. Demonstrate rather than explain, and review instructions frequently.
**Stage 1**

Key Points at Each Stage:
1. The hitter faces the direction the ball is coming from
2. The bat comes over the head in the vertical plane
3. There is little or no body action - shoulders and elbows only

To Move to the Next Stage:
1. Stand sideways to the ball
2. Take the bat back in preparation for the swing
3. Use the shoulders, elbows, and wrist, and keep the bat parallel to the ground
4. Keep the eye on the ball as it approaches

Cue Words:
- Sideways to ball backswing

**Stage 2**

Key Points at Each Stage:
1. The striker stands sideways to the ball
2. There is some backswing
3. The bat is parallel to the ground
4. There is little use of rotation in the trunk or hips
5. There is no shift of body weight

To Move to the Next Stage:
1. There is a full backswing, with the bat "up and back"
2. The trunk and hips rotate back for a longer backswing
3. Use the hips, then the trunk, then the arms to generate power
4. Shift the weight forward during force production

Cue Words:
- "Up and back"
- Use hips and trunk
- Shift weight

**Stage 3**

Key Points at Each Stage:
1. There is a clear backswing in the preparation phase
2. The bat is taken "up and back" with a rotation of the trunk
3. During force production, the hips, trunk, shoulders, elbows, and wrists are used in sequence
4. The weight shifts from the back foot to the front foot during force production
5. There is good follow-through

Participants with a Disability:

For wheelchair users, position the wheelchair at 45 degrees to the approaching ball so that their backswing won't hit the frame of the chair. Use a soft ball, as the hitter can't get out the way.

For individuals with an intellectual disability, keep instructions brief and simple. Demonstrate rather than explain, and review instructions frequently.

Practice with participants "sweeping" the bat on the surface of the floor while trying to hit a noise-making ball rolled toward them.
Stage 1
1. The head is often turned away from the ball
2. There is little or no attempt to close the arms/hands around the ball
3. The arms are too far apart to cradle the ball

Stage 2
1. Watch the ball approach until it is in the arms
2. Keep the elbows in close to the body, with the palms turned upward
3. Close the arms on the ball as it arrives

Stage 3
1. Keep the eye on the ball at all times
2. Reach out toward the ball, and move the hands with the ball as it approaches
3. Close the hands and arms around the ball as contact is made
4. Pull the ball into the chest

Key Points at Each Stage
- Watch ball
- Cradle ball

To Move to the Next Stage
- Eye on ball
- Reach for ball
- "Give" with ball

Participants with a Disability
Wheelchair users cannot move to get out of the way of balls or move quickly from side to side. Use a soft ball so there is no damage if a ball hits a child. Have throwers sit in a chair to be at the same height.

A very difficult skill for individuals with a visual impairment. Use a soft ball that makes noise, and roll it along the floor toward the sitting child.

For individuals with an intellectual disability, keep instructions brief and simple. Use brightly coloured balls or beanbags or both.
Unit 5: Summary

- How to identify different stages of running, jumping, kicking, striking, and catching

- There are key factors that contribute to developing a mature run, jump, kick, strike, and catch

- Applying the six-step teaching model to running, jumping, kicking, striking, and catching
Unit 6: Summary

• The NCCP is Canada's National Coaching Certification Program
• After completing this workshop, participants will be entered in the NCCP Database as having completed the NCCP Fundamental Movement Skills Coach Professional Development Workshop
• The processes learned in this module can be applied to the analysis and improvement of fundamental movement skills AND sport-specific skills