



WELSH ATHLETICS
ATHLETAU CYMRU

LISTEN ENGAGE REPRESENT

Movement Skills for Running, Jumping & Throwing

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CONTEXT

- ‘Movement Skills and Competences’
 - Efficiency (minimum wastage of energy)
 - Effectiveness (achievement of target outcome)
- Foundations / building blocks for:
 - Being a healthy / active person
 - Essential for ‘performing well’ at relevant level (all ages)
 - Physical Preparation strands (fundamental movements)
 - Technical model development for track & field AND for recreational running
 - Injury Avoidance.

MOVEMENT SKILLS

PART 1

The objectives of the workshops include:

- Understand how excellent movement skills underpin health, sporting movements and performance.
- Learn to see and feel human movement.
- Understand how we move ourselves (mobility, stability, force production and direction, and how coordinated links in a chain move our whole body).
- Understand that stability and control are not optional.
- Understand how Balance = Centre of Mass over Base of Support

MOVEMENT SKILLS PART 2

Movement Skills part 2 reinforces the key concepts introduced in Movement Skills part 1.

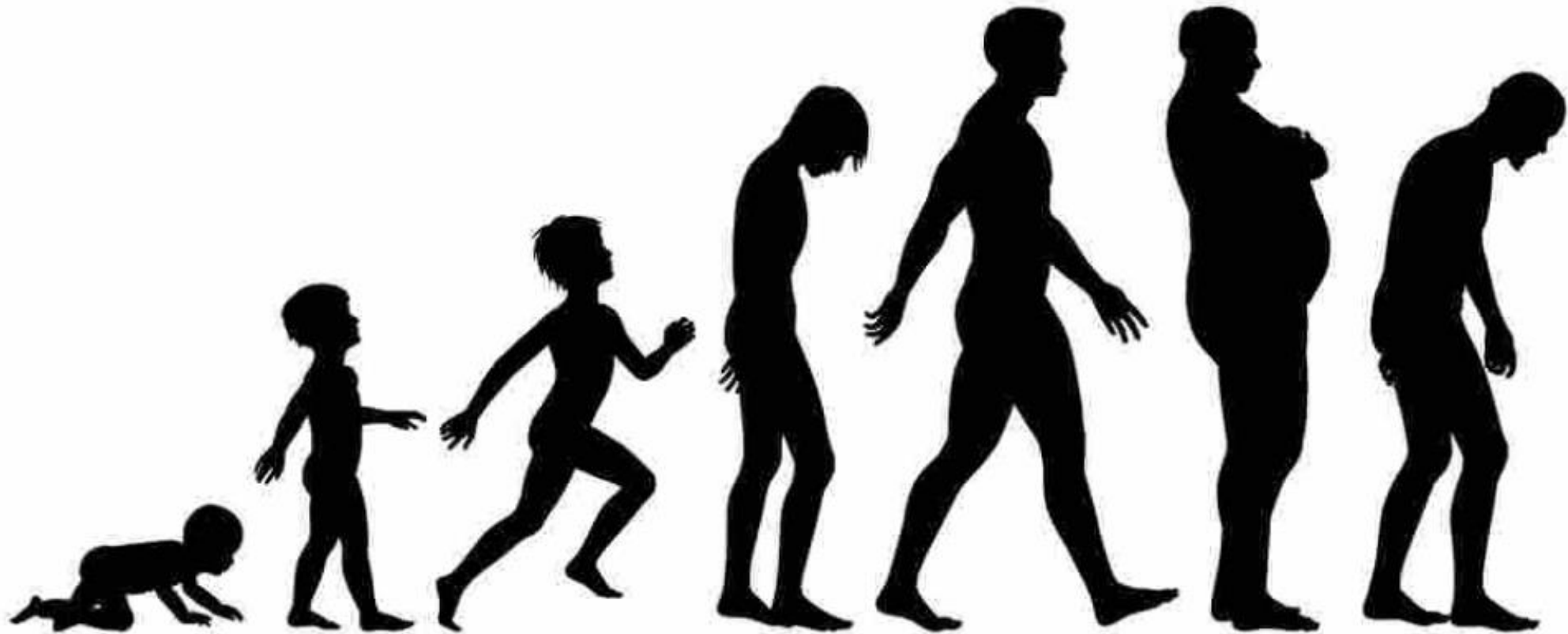
This workshop features:

- develop your ability to coach movement based training
- an introduction to how the ability to move can influence injury potential
- practical exposure to progressing and regressing drills and exercises based on athletic ability
- the importance of organising training strategies.



THE IMPORTANCE OF POSTURE:

WHERE ARE YOU AND YOUR ATHLETES?



MODERN SOCIETY?

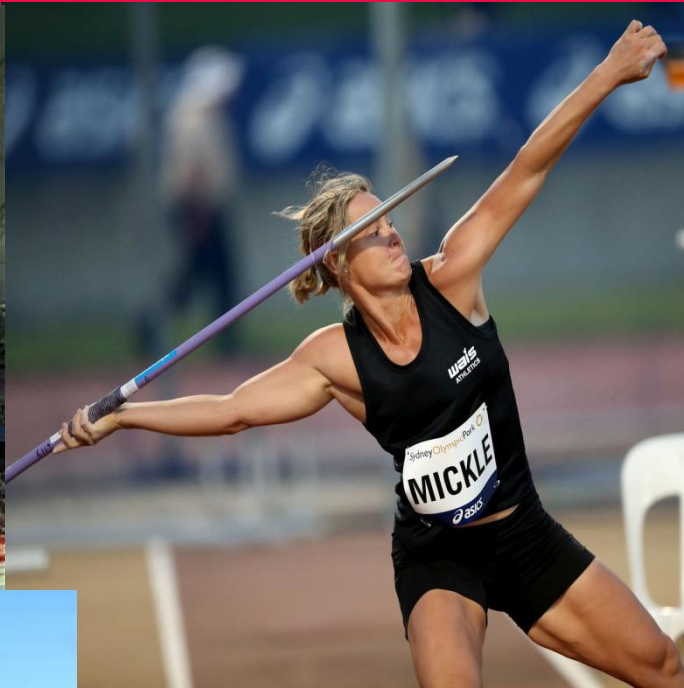
- Has 'Physical' gone out of physical education?
- Is there an inconsistency in the quality of PE at school
- Changing lifestyles
 - Children AND Adults
- Less active and more seated in poor posture
 - Technology – Emails, Facebook, Twitter, etc.
 - Less informal learning – 'street' games dying out.



WHAT IS "MOVEMENT" OR "SHAPE"?

- All athletic movement has common body 'shapes'
 - Posture, arms, trunk, hip, knee, ankle
- We select the best 'shape' to achieve our desired outcome – within our personal constraints:
 - Impairment, injury, tightness, age
 - Understanding of the movement:
 - Never done it before – familiarity.







NOT UNIQUE TO 'ATHLETICS'





ACTIVITIES

WHERE are you looking and WHAT are you seeing?



Activities to 'SEE'/'FEEL' shape (overall image)

Sit upright

stand up
(out of your chair)

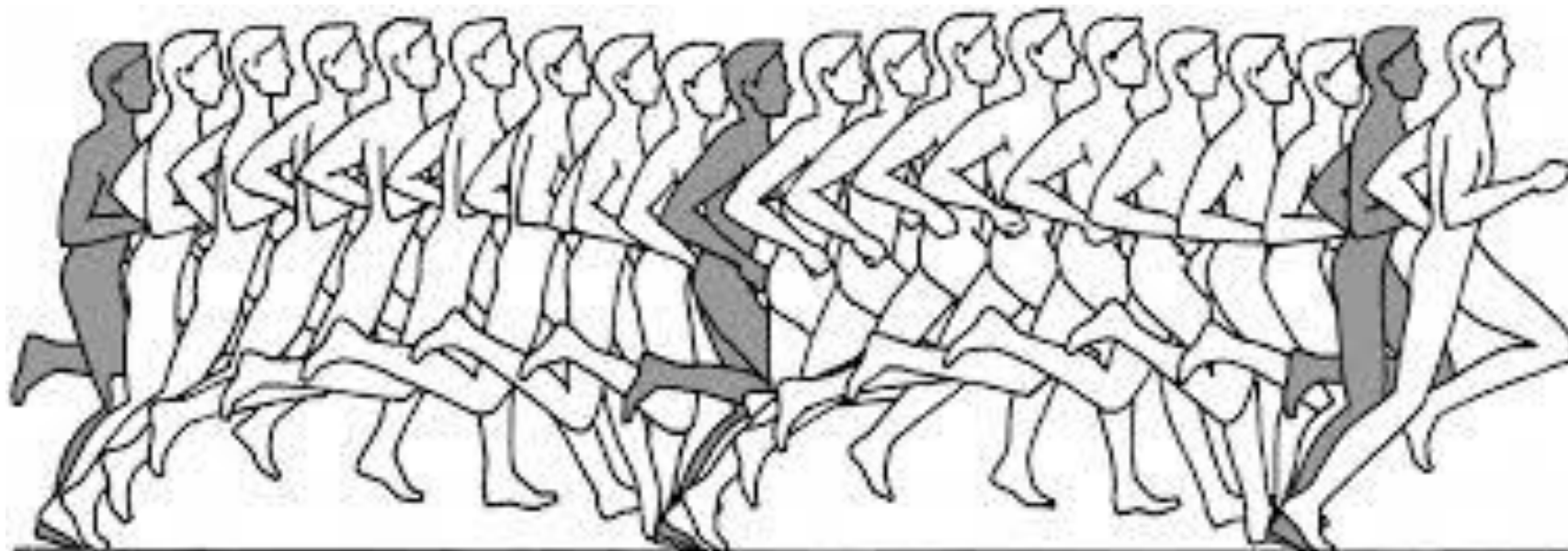
Now think about your posture /
movement / how you stood up



WHY IS MOVEMENT IMPORTANT?

- Movement requires us to Produce, Direct and Control Force
- **Only** produce force when in contact with an external resistance – typically the ground (but could include water)
- Stable contact is essential or:
 - Amount of Force is reduced
 - Energy 'leaks' away along the chain
 - Select 'inefficient' solutions to the movement challenge
- Key movement sequences that produce force:
 - Triple FLEXION & EXTENSION – hip
-> Knee-> Ankle

SHAPE SEQUENCE



WHAT DOES THIS LOOK LIKE IN PRACTICE?

- All athletic movement has common shape(s) selected because they optimise force production.
- Efficient and Effective movement demands:
 - **Stability** to produce and direct force (no leaks)
 - **Coordination** of all the links in the chain.
 - **Flexibility** to be able to move.

FUNDAMENTAL MOVEMENT

- Fundamental Patterns of movement develop from birth
 - Fundamental or Primal patterns
- Added together they create 'Fundamental Movement Shapes'



FUNDAMENTAL MOVEMENT PATTERNS

Squat: double leg and single leg

Lunge: forwards and backwards

Push/pull: with band

Brace: front plank

Twist: with band

Land: hop and fix

Sport movement skills



Fundamental movement skills

Jump

Step

Hop

Run

Fundamental movement pattern

Single leg

Push Pull

Twist

Single leg

Pull Push

Twist

Single leg

Pull

Double leg

- We assemble the basic patterns into more complex *movement shapes* - run/jump/throw
- Simple 'Fundamental' Patterns are the basis for physical preparation activities (Jumping, Throwing, Running, Weight Lifting)

- 'Discover' running as a child
 - Progression from walking – falling.....
 - "how many legs do we run on?"
- Series of 'steps' and 'mini squats'
 - Single leg at any time
 - Stability & Control

*SOME THINGS TO
THINK ABOUT...*



HOW AND WHERE?

- ✓ **Jumps**
 - Squats
 - Single leg / Double leg
- ✓ **Throws**
 - Push / Pull / Sling / Heave
 - Trunk stability & bracing
- ✓ **Running**
 - Posture
 - Drills:
 - ✓ 'A' skips
 - ✓ Stepping over mid shin
 - ✓ Stepping over knee
 - ✓ Wall drives (trunk bracing)
- ✓ **Where can you include these considerations?**
 - Warm up/cool down/physical preparation

IN SUMMARY

- ✓ Fundamental Movement Pattern
- ✓ Athletic Shape
- ✓ Practical Activities
- ✓ See & Feel
- ✓ Injury avoidance & athlete development.



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Thank you.



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