

Helping people achieve
their best
-the crucial role of the
coach.

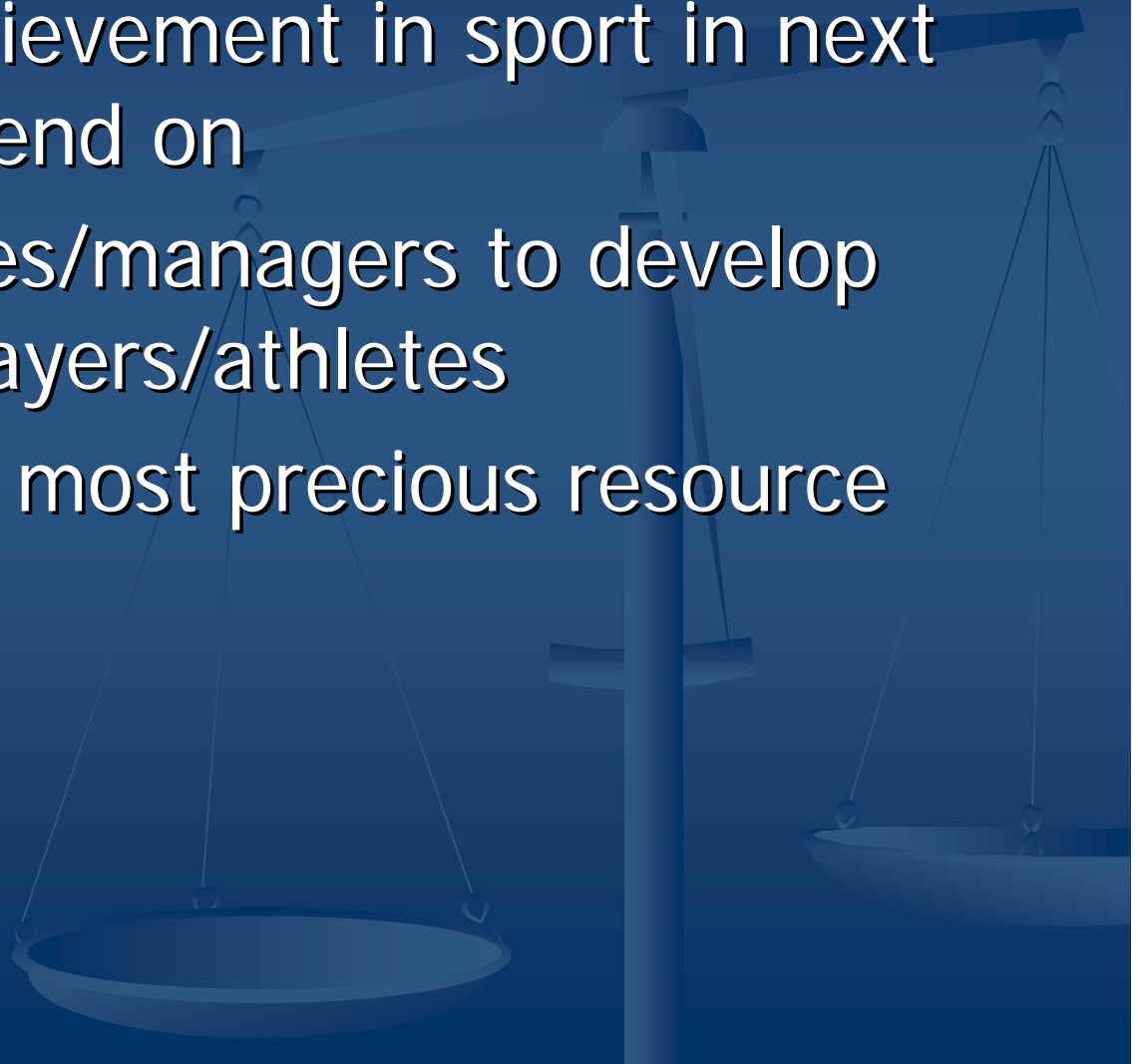
Jim Kilty

Philosophy

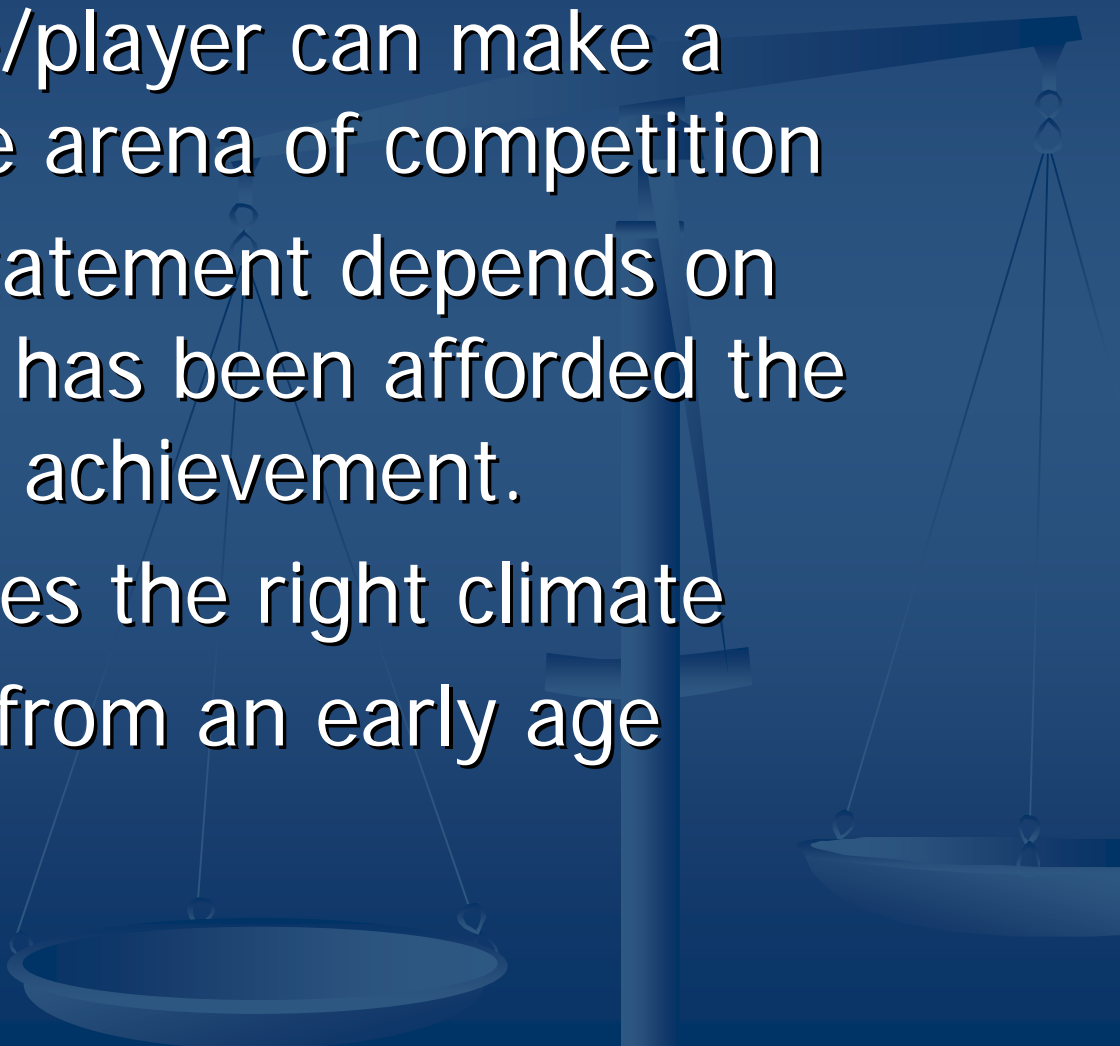
- Coaching is an art based on scientific principles
- Outside of Skill, Speed is a most important component of fitness for most sports
- Ability to apply/use speed depends on
 - Power and
 - movement skills,They play a significant role in developing speed (improving intra- and inter-muscular coordination)

Developing People

- Standard of achievement in sport in next decade will depend on
- Ability of coaches/managers to develop people - the players/athletes
- They are sports most precious resource

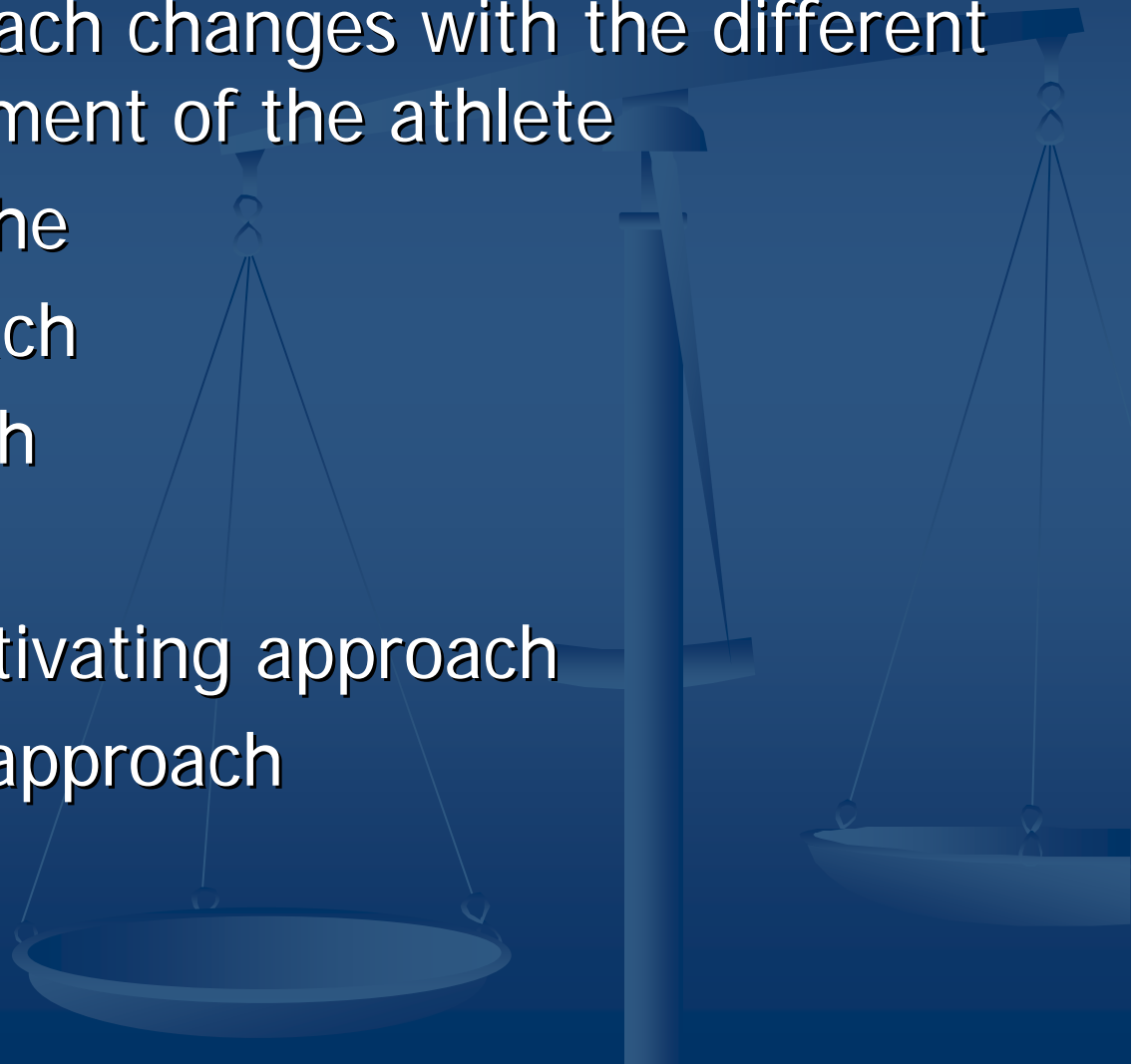


Performance Arena

- Only the athlete/player can make a statement in the arena of competition
 - Quality of the statement depends on whether he/she has been afforded the right climate for achievement.
 - The coach creates the right climate
 - Can be created from an early age
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Role of the coach

- The role of the coach changes with the different stages of development of the athlete
- Early on there is the
 - Teacher approach
 - Leader approach
- Later there is a
 - managing / motivating approach
 - friendship role approach



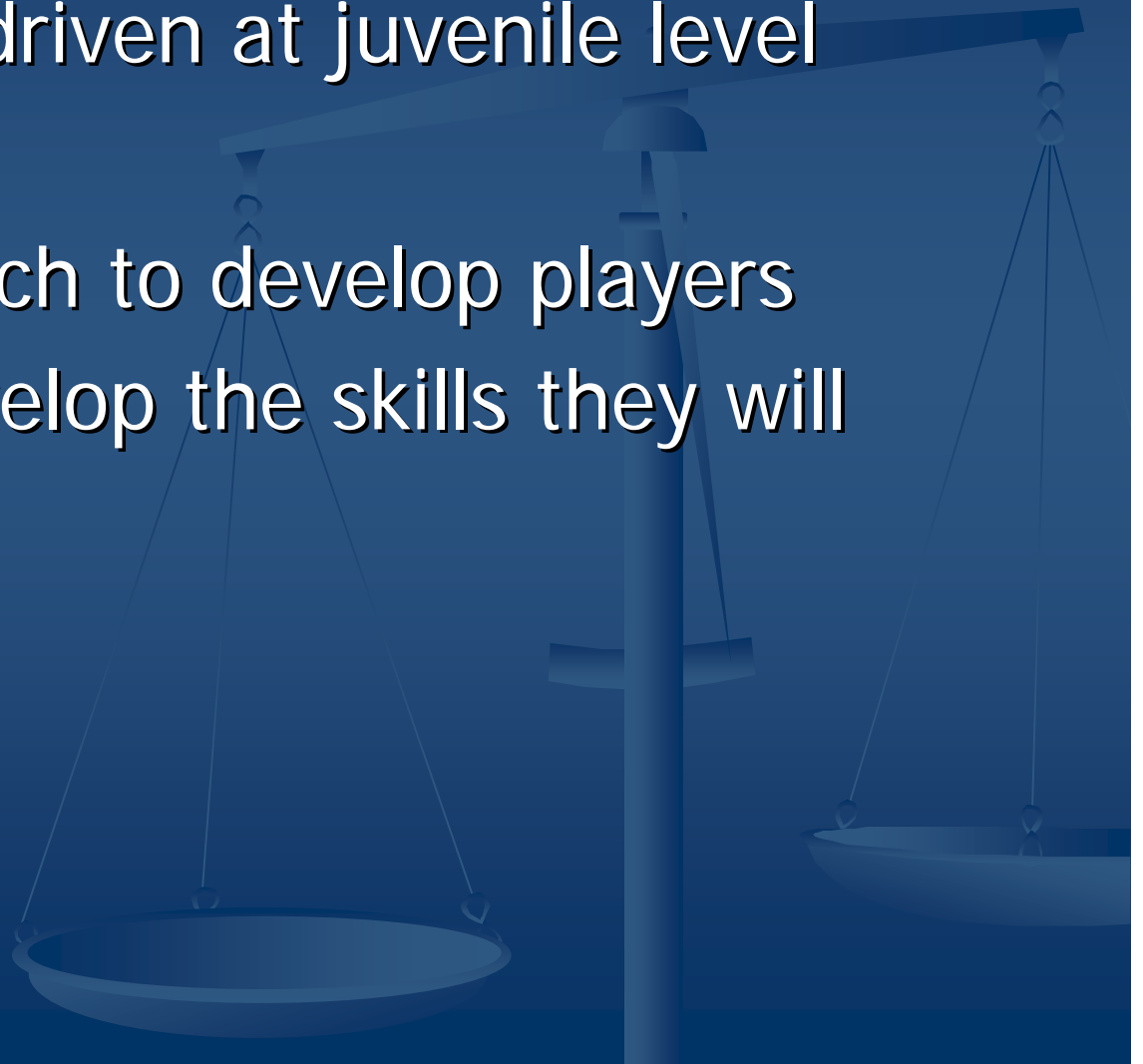
A Coach

- Common sense
- Ability to communicate
- Ability to lead
- Knowledge of players/athletes
- Knowledge of demands of the sport
- Ability to plan & programme

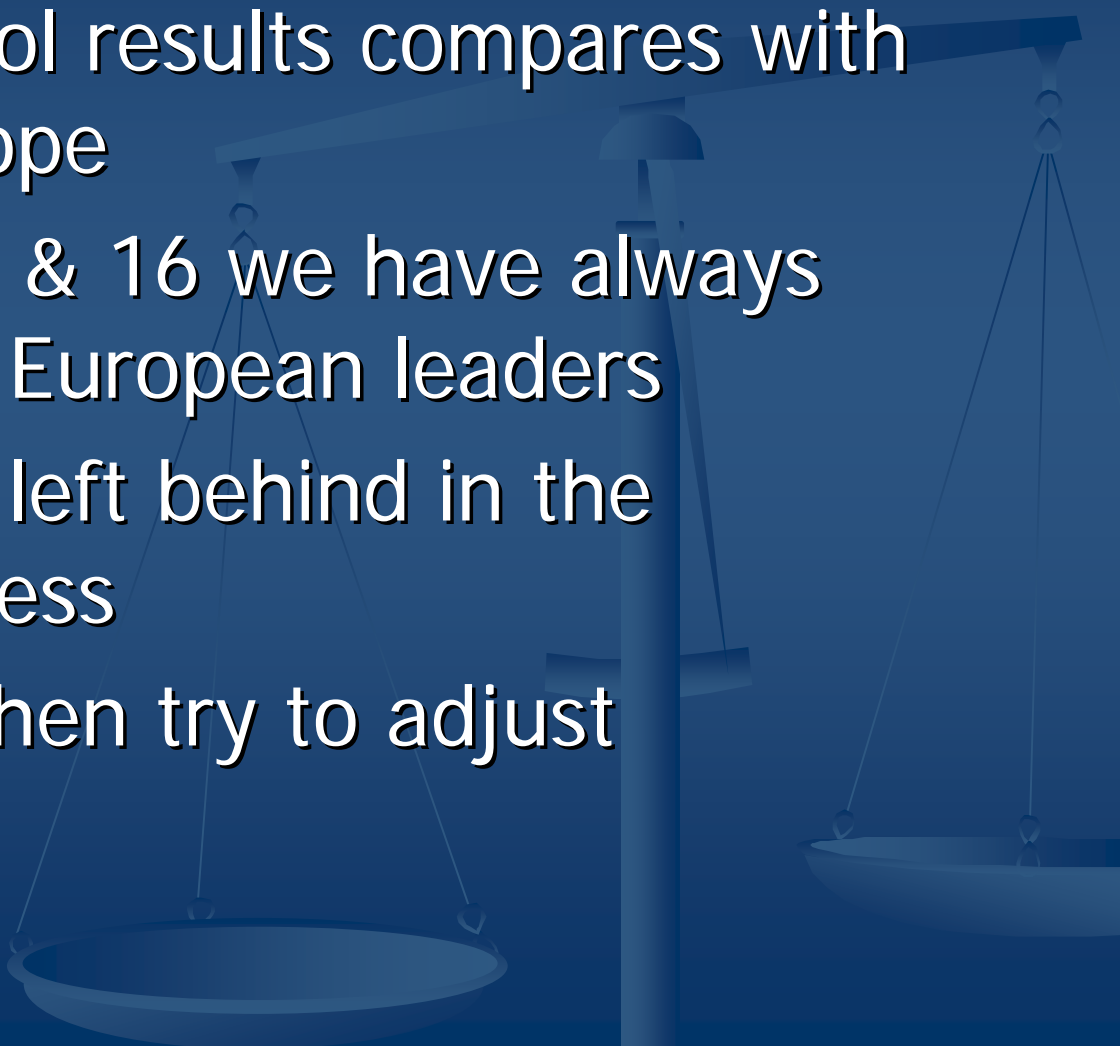


The Irish Approach

- We are results driven at juvenile level
- We train to win
- We need to coach to develop players
- We need to develop the skills they will need
 - Movement
 - Game
 - Positional



Athletics – as an example

- All-Ireland School results compares with anything in Europe
 - At Under 14, 15 & 16 we have always been producing European leaders
 - After 18 we are left behind in the developing process
 - We produce & then try to adjust
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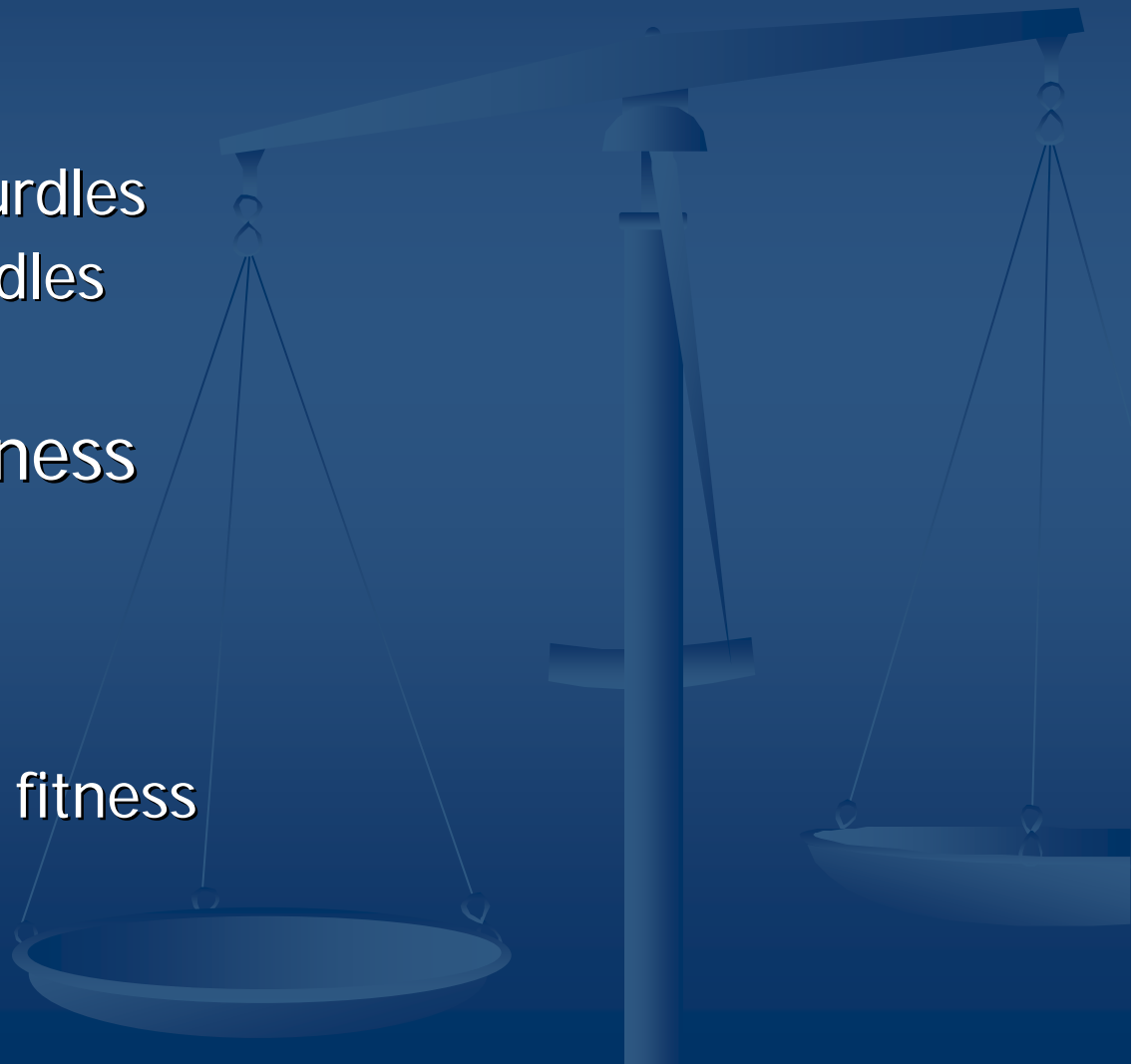
Coaching Philosophy

- We need to develop the LTP development philosophy
- Look at our approach
- Principles of coaching
- also the principles of player development



Demands of the sport - Hurdles

- Technical
 - Start to H1
 - Technique over hurdles
 - Pace between hurdles
 - H10 to finish
- Components of fitness
 - Speed
 - Speed endurance
 - Power
 - Heightened motor fitness



Sprint Hurdles

- What we can't change - 42 steps – fixed
- What we can change
 - Contact time on the ground **Power/Speed**
 - Flight time over the hurdle **Technique**
 - Speed between hurdles **Power/Speed**
 - Acceleration to 1st Hurdle and on the H3 **P/S**
 - Run-in from final hurdle **Power/Speed maintenance**

Demands

■ Fitness

- Strength → Power
- Core → Stability in the air
- Balance → Stability on landing
- Short contact → Speed & power output

■ Technique

Ability to reproduce
over 10 Hurdles

Rugby – Back row

| | | |
|------------------|-------------|-----------|
| Walking | 24% | 76 times |
| Jogging | 72% | 154 times |
| Striding | 9% | 33 times |
| Sprinting | 2.3% | 6 times |
| TOTAL | 4080m | |

Adapted from Deutsch et al 1998

Rugby – Backs

| | | |
|------------------|-----------|-----------|
| Walking | 30% | 125 times |
| Jogging | 41% | 140 times |
| Striding | 10% | 44 times |
| Sprinting | 4% | 14 times |
| TOTAL | 5640m | |

Soccer

| | | |
|------------------|------------------|------------------|
| Walking | N/A | |
| Jogging | N/A | |
| Striding | 7.8% - 16% | 80 – 40 times |
| Sprinting | 1% - 3.4% | 13 times |
| TOTAL | 4.9 – 13.3 Km | |

Neweham 2002.

Hurling

| | | |
|------------------|-------------|-----------------|
| Standing | 10% | |
| Walking | 45% | Backwards 4% |
| Jogging | 20% | Sideways 2% |
| Striding | 12% | Backwards 1% |
| Sprinting | 2.9% | |

Rochford 2003.

Play & Activity Time Analysis for 2003 All-Ireland Hurling Final

| Activity | First Half | Second Half | Overall |
|-------------------------------------|--------------|--------------|----------------|
| Game time | 36m 54s | 37m 40s | 74m 34s |
| Ball in play time | 13m 53s | 17m 15s | 31m 8s |
| Ball out of play time | 23m 01s | 20m 25s | 43m 26s |
| % of total time ball in play | 37.6% | 45.8% | 41.8% |
| Activity Bout Range | 5s – 52s | 8s – 82s | 5 – 82s |

Physical Activity analysis - All-Ireland Club (Average of 5 players)

Direction Change

- Turn to left 10.6
- Turn to right 12.2
- Backwards 7.4
- **Total 30.2**

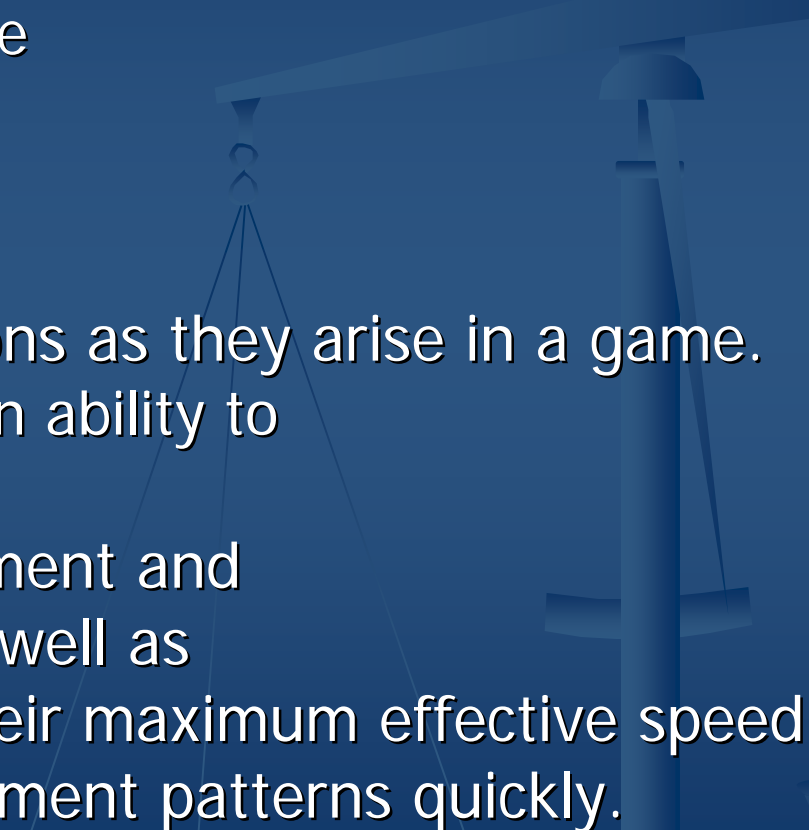
30 changes of
direction in 5
minutes

Accelerations (in steps)

- < 5 8
- 5-10 3
- 10-15 2
- 15-20 1
- 20+ 1
- **Total 15**

70% of
Accelerations
under 10 steps
(i.e. <15m approx)

Needs of the player

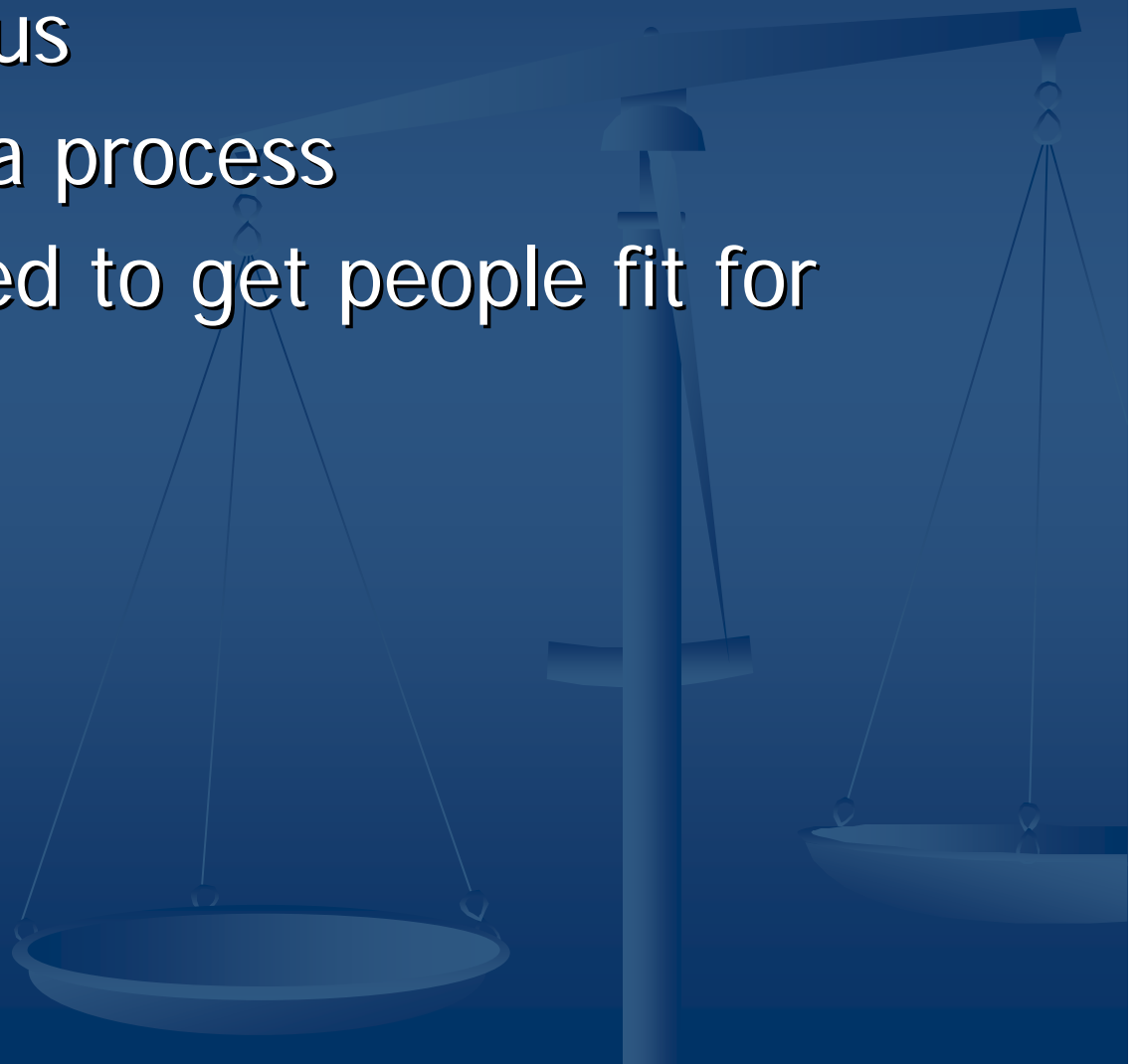
- Players need to be
 - quick,
 - sharp and
 - fastto cover situations as they arise in a game.
 - They need to train ability to
 - re-act,
 - initiate movement and
 - accelerate as well as
 - developing their maximum effective speed
 - Change movement patterns quickly.
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Plans

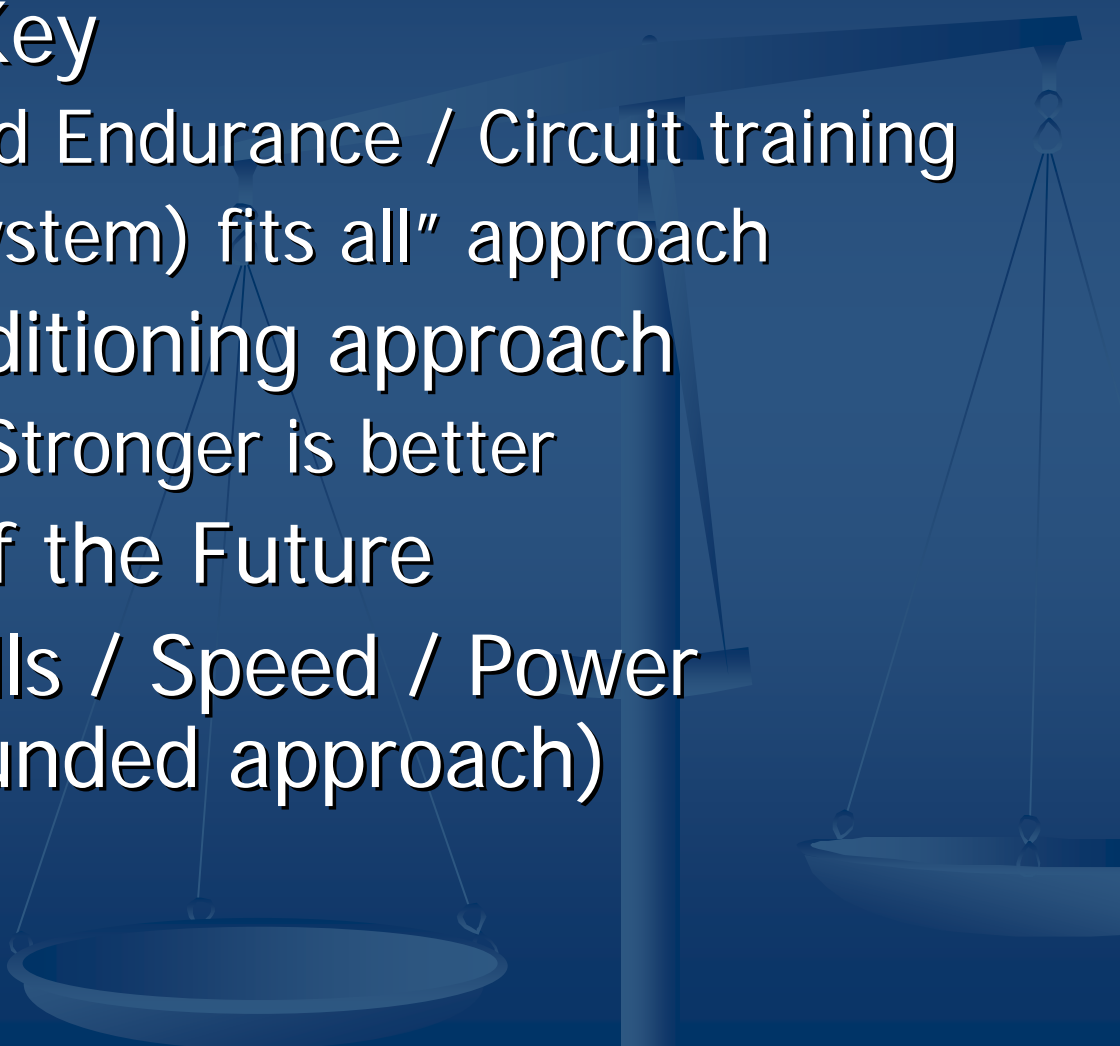
- We need to condition our players in a structured, step by step approach
 - Balance development
 - Awareness – timing & spatial
 - Manipulation development – co-ordination
 - Locomotion – movement techniques
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Conditioning Training

- Fitness is a status
- Conditioning is a process
- The method used to get people fit for their sport



Recent Trends

- Stamina is the Key
 - Running / Speed Endurance / Circuit training
 - “One size (or system) fits all” approach
 - Strength & Conditioning approach
 - Lift and train / Stronger is better
 - The approach of the Future
 - Movement / Skills / Speed / Power
(the rounded approach)
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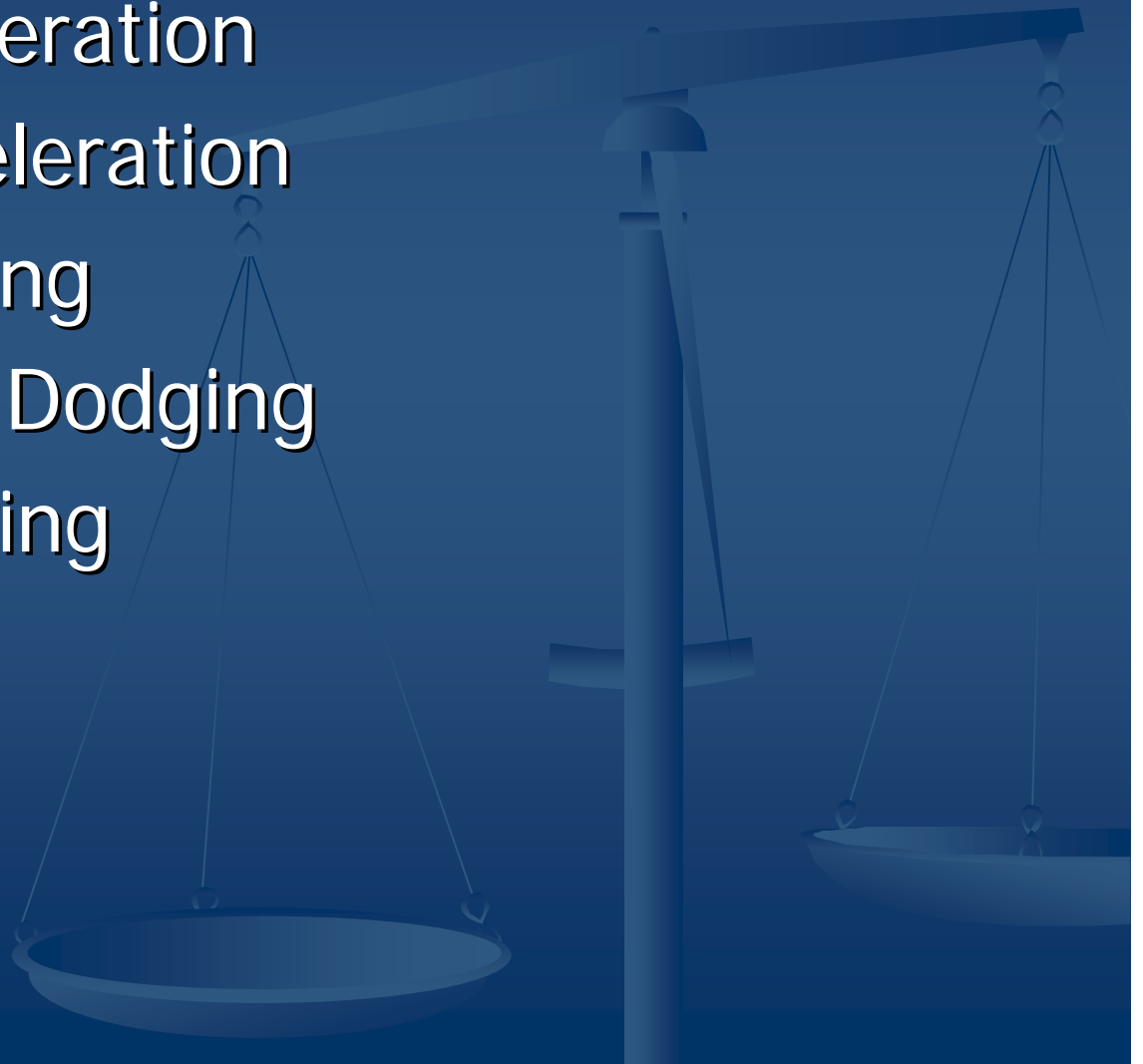
Importance of movement training

- Bloomfield et al 2003 showed how SAQ training added to general soccer training improved sprint acceleration over 20m.
- Using Cleans and Squats at 90% of 1Rm players improved 10 m acceleration time; and when sprint mechanics were combined the improvement was greater
- (Hennessy IRFU data 2004).

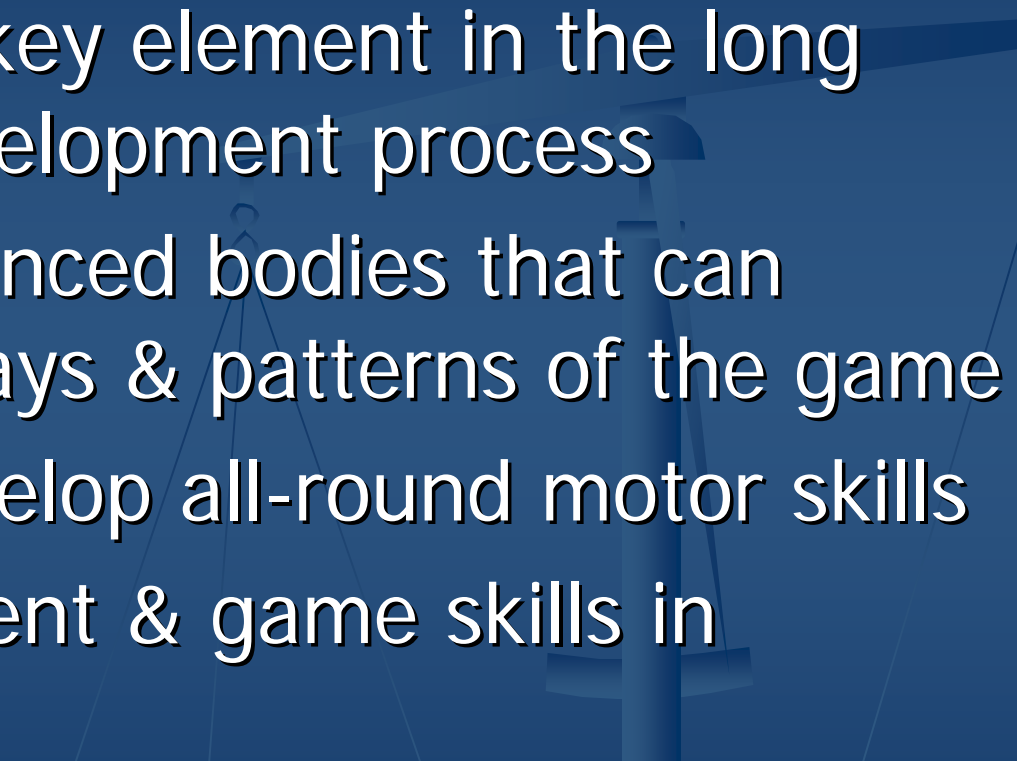


What is movement Training

- Starting - acceleration
- Stopping – deceleration
- Turning / Twisting
- Side Stepping / Dodging
- Tackling / Blocking



Long term player development

- Movement is a key element in the long term player development process
 - Developing balanced bodies that can adjust to the plays & patterns of the game
 - We need to develop all-round motor skills
 - Involve movement & game skills in practice
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Improvement from 1.72 – 1.67 sec in 10m acceleration from one week of sprint mechanics training. IRFU 2004 data.

