

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

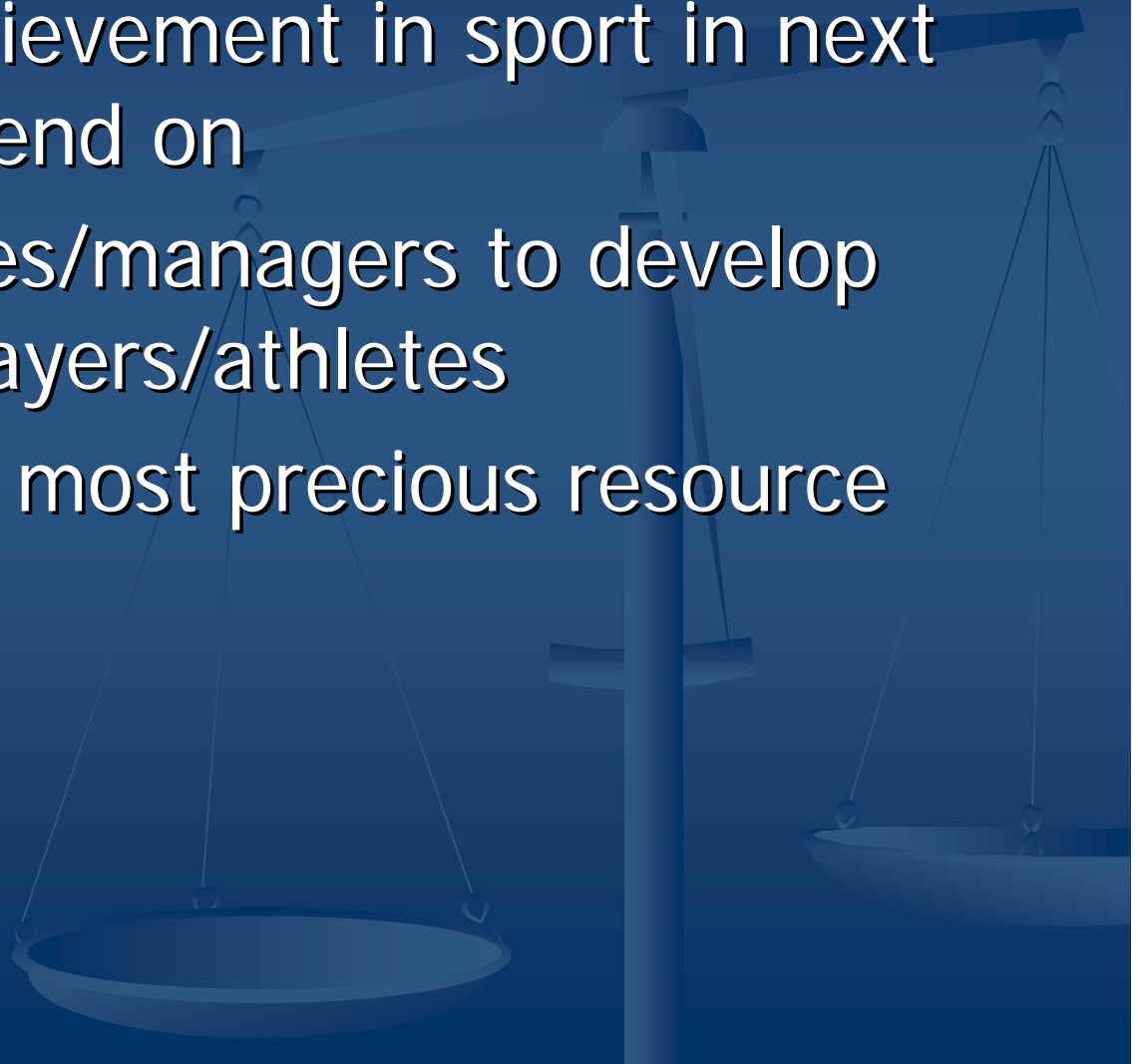
Jim Kilty

Philosophy

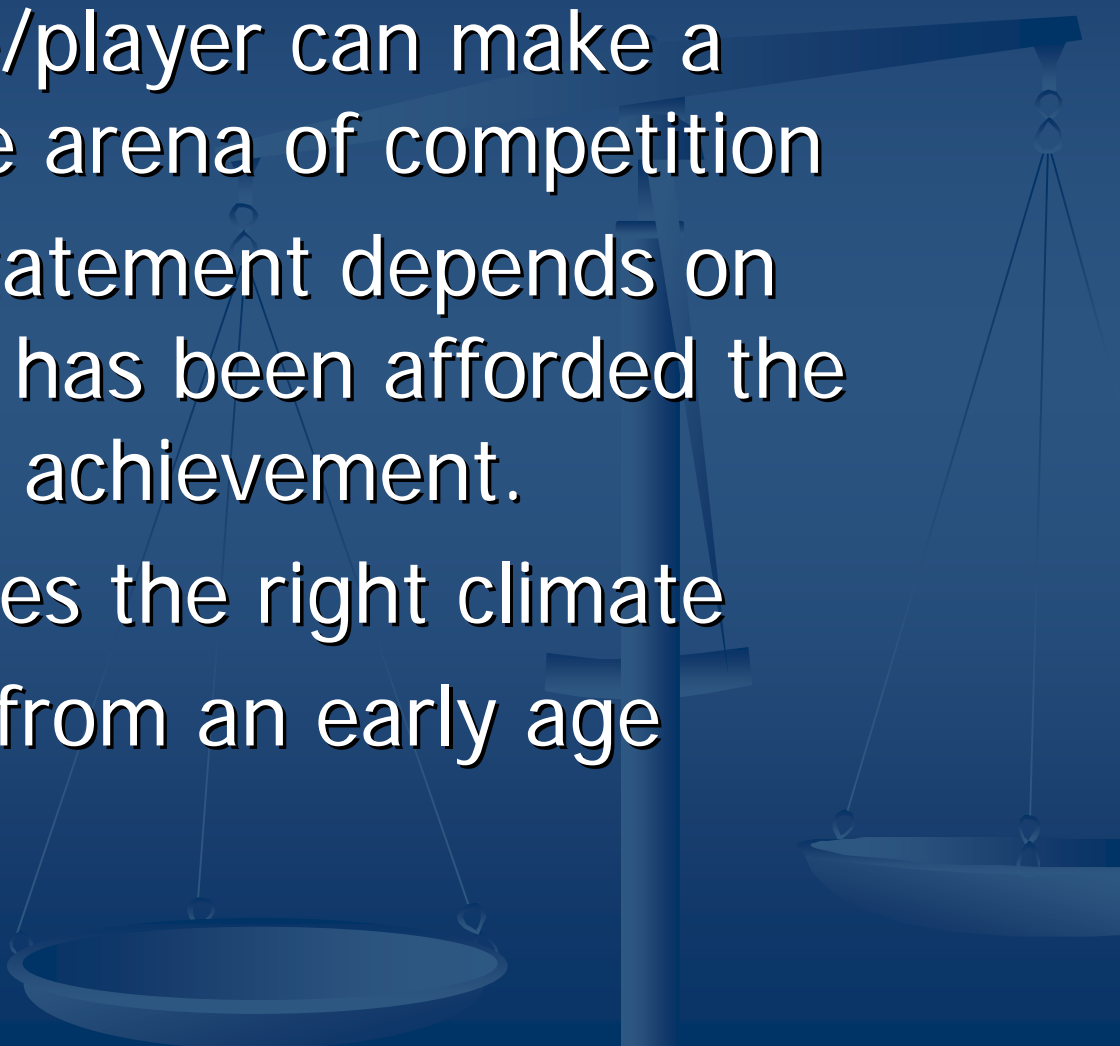
- Coaching is an art based on scientific principles
- Outside of Skill, Speed is a most important component of fitness for most sports
- Ability to apply/use speed depends on
 - Power and
 - movement skills,They play a significant role in developing speed (improving intra- and inter-muscular coordination)

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

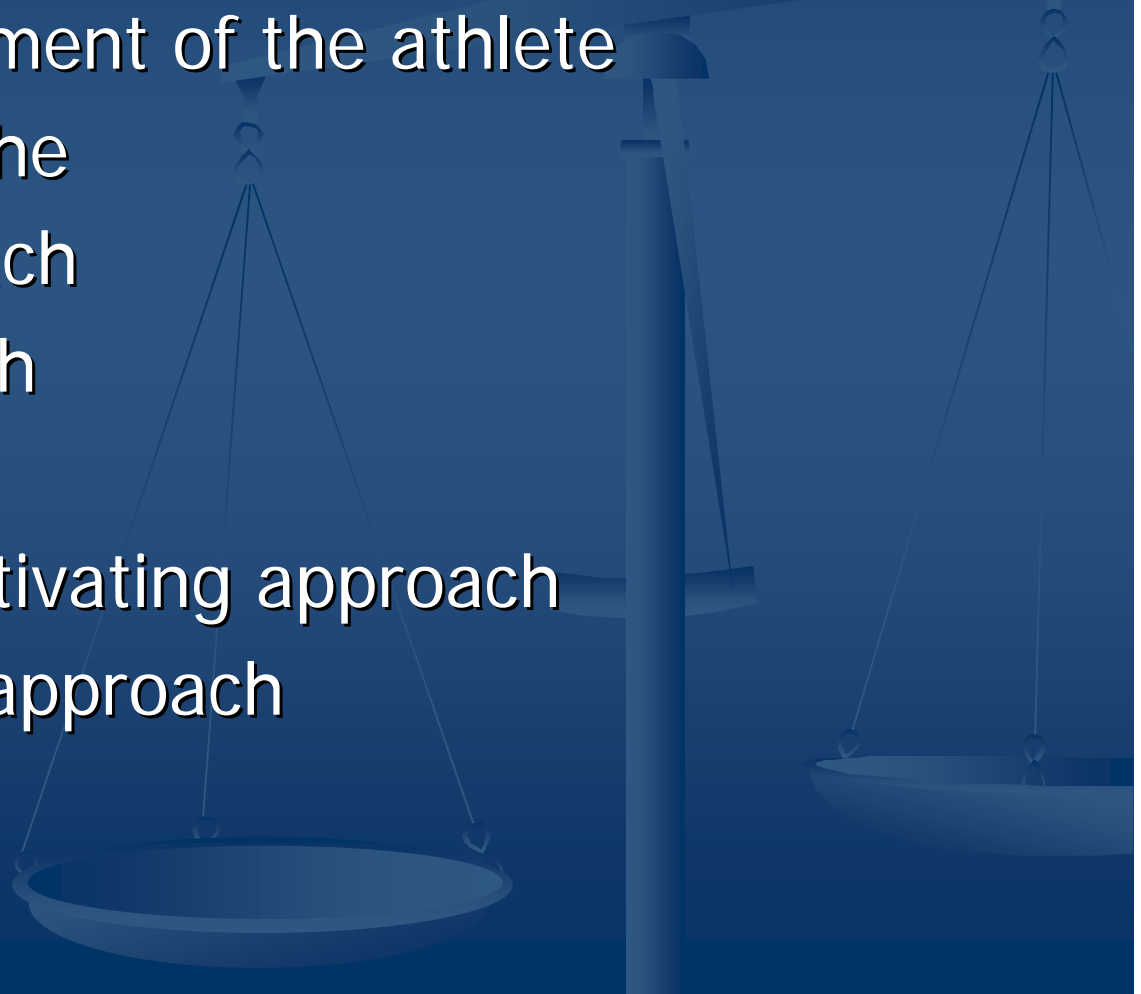


Performance Arena

- 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



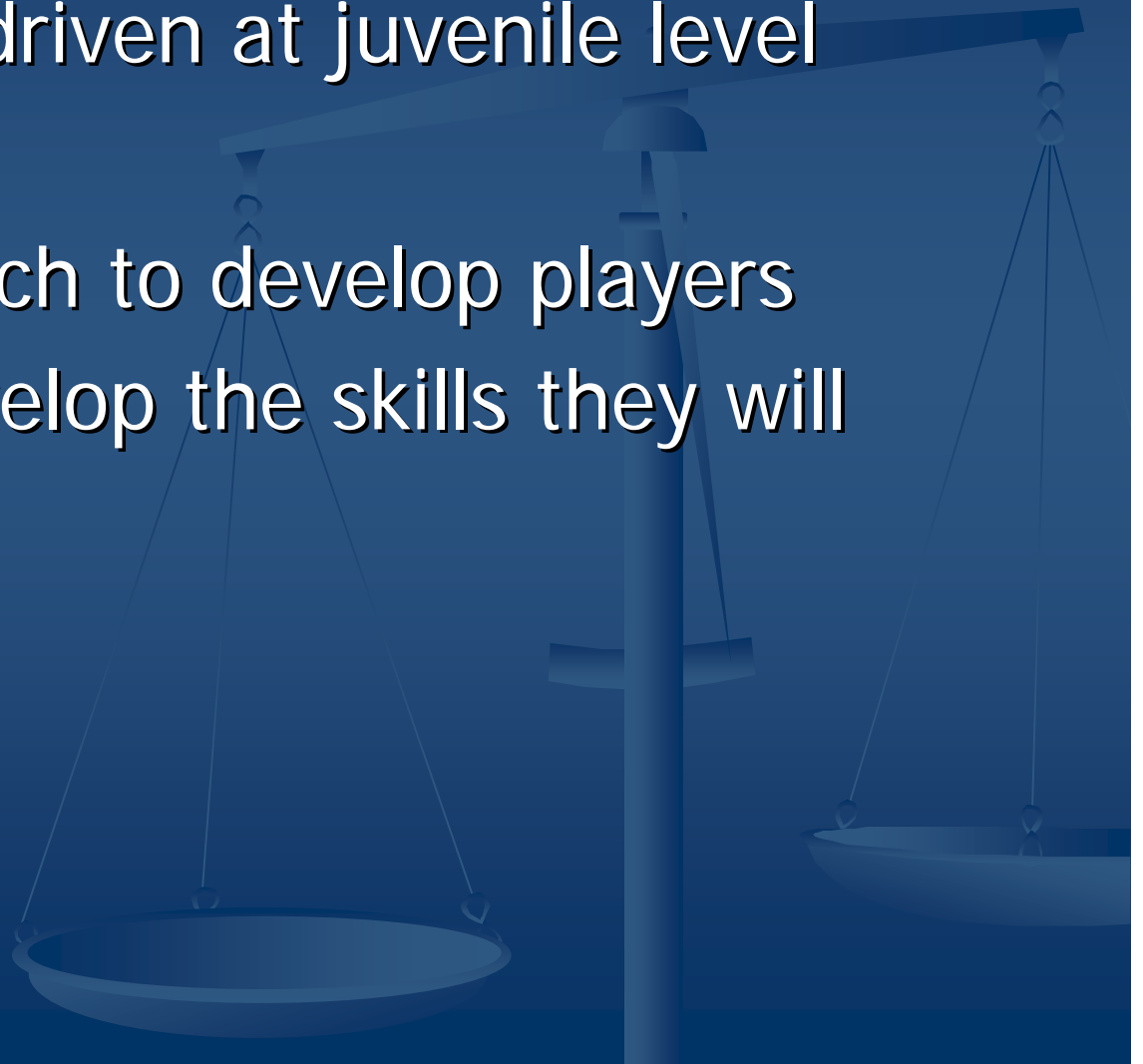
A Coach

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

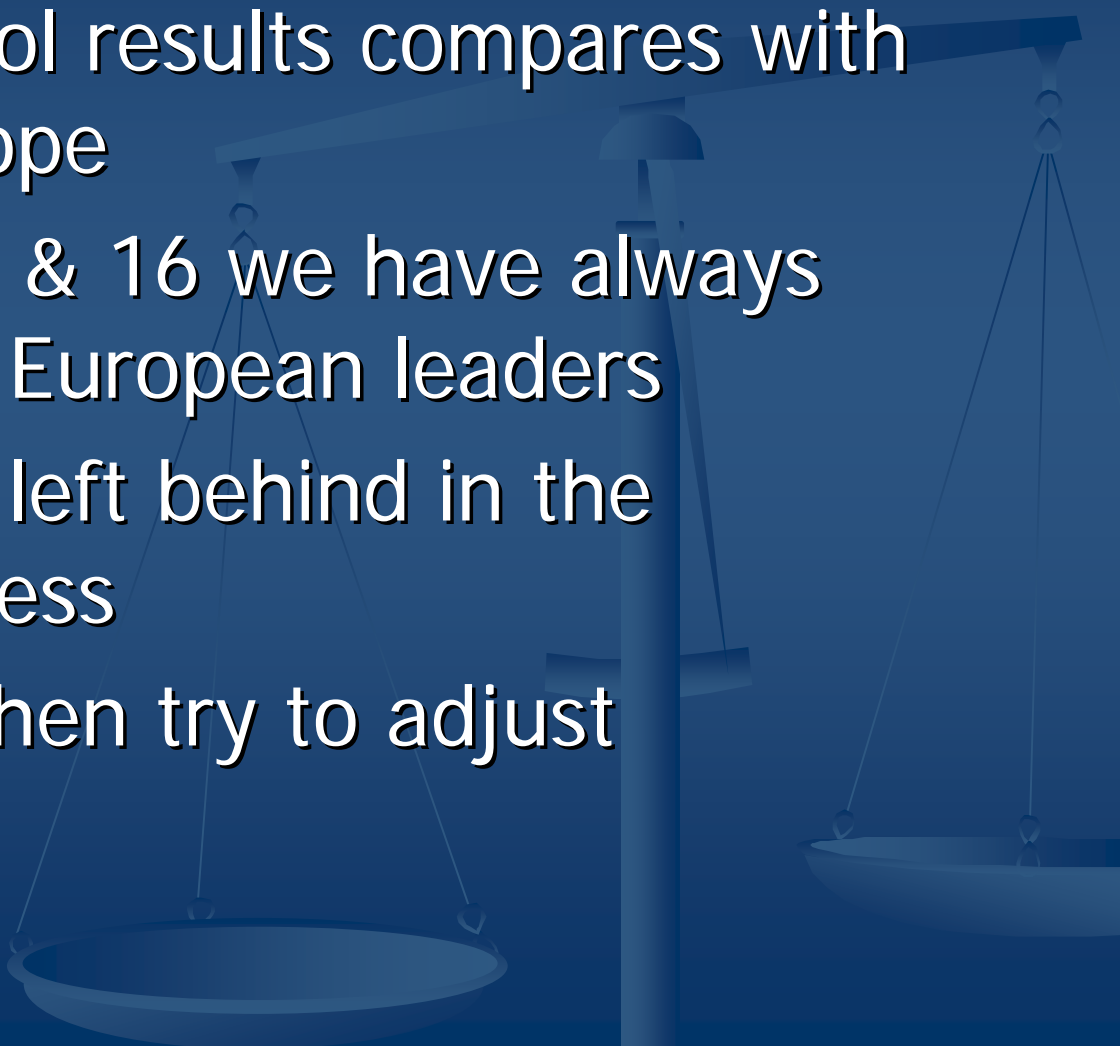


The Irish Approach

- 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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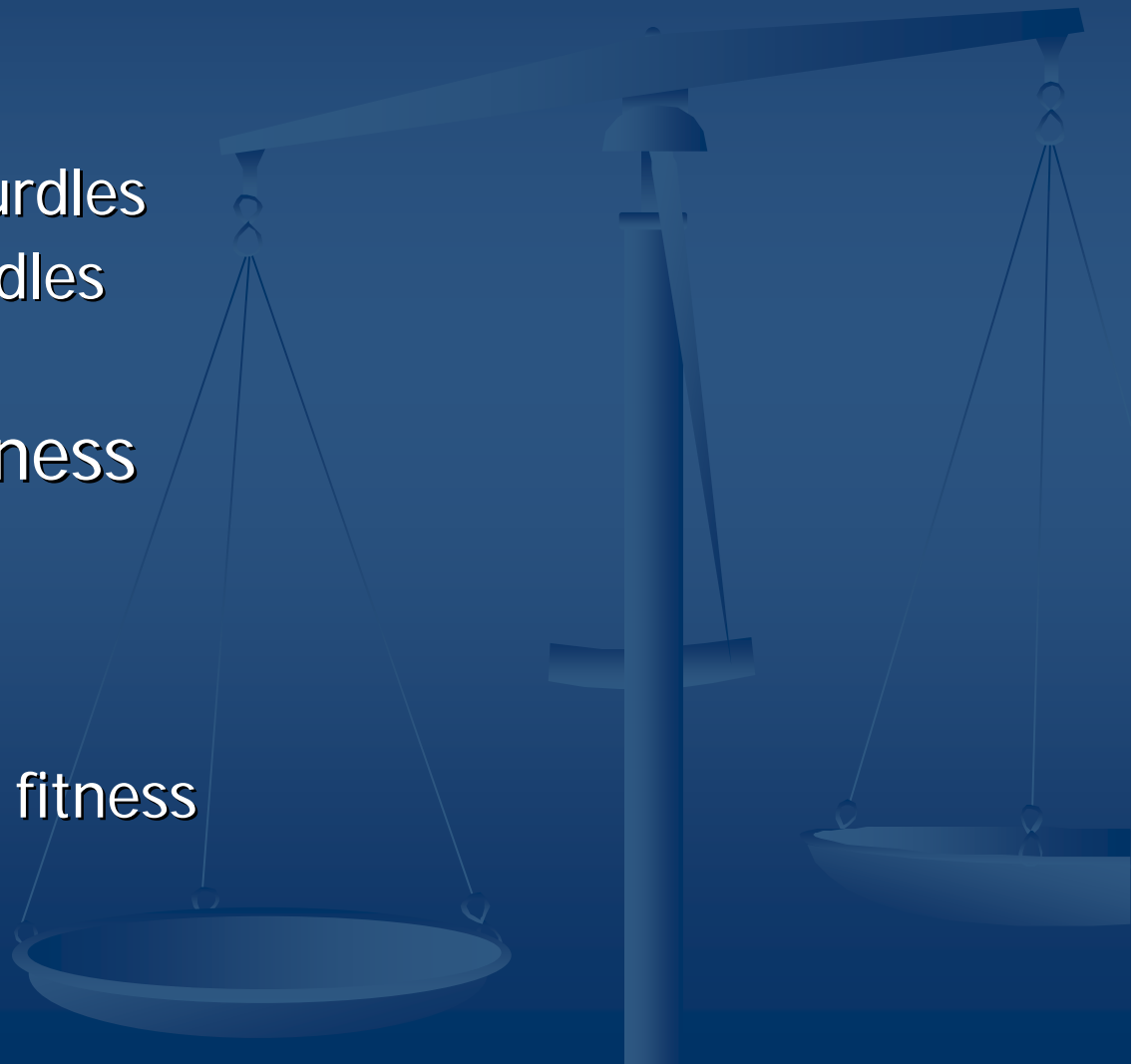
Coaching Philosophy

- 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

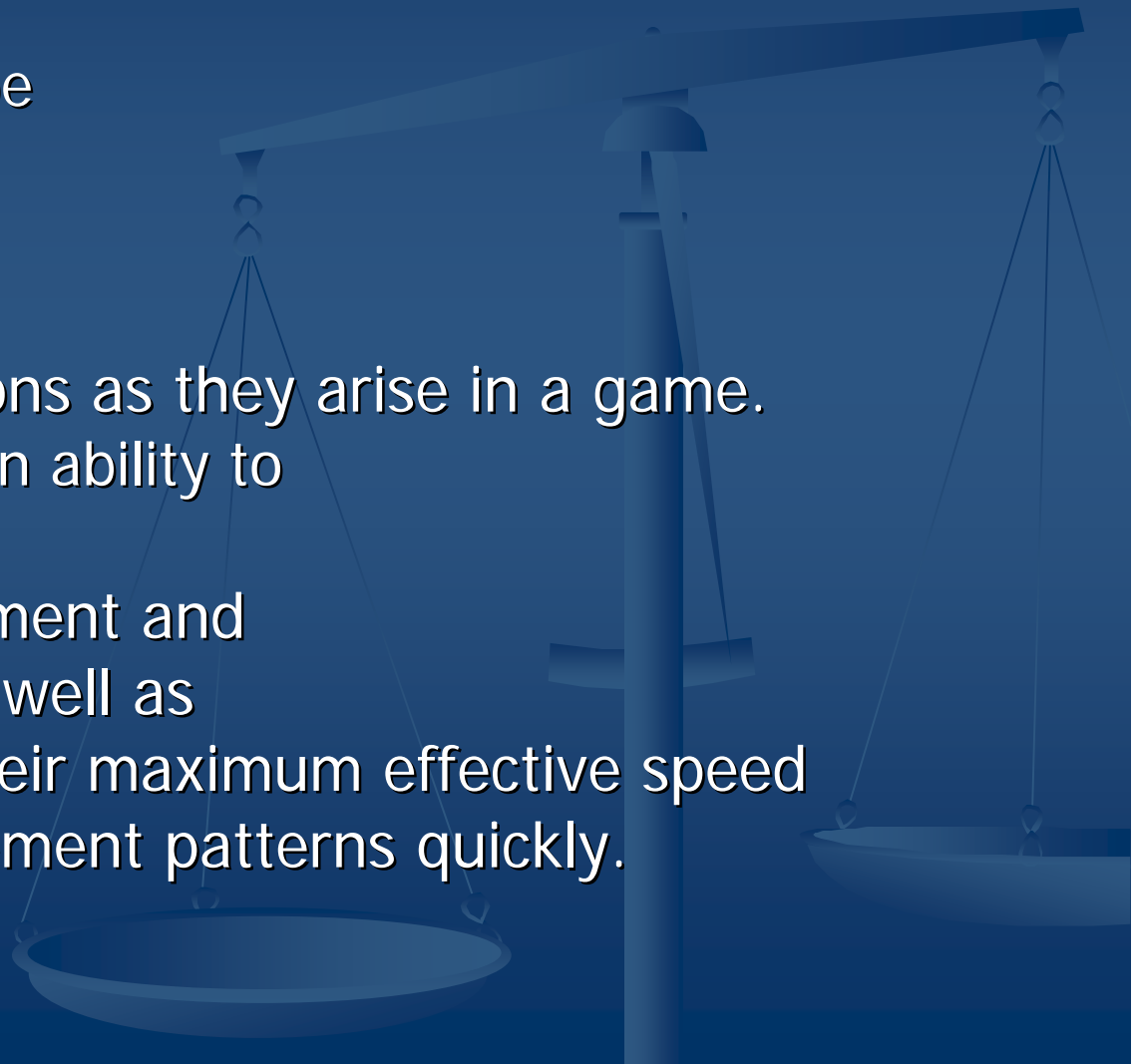
Accelerations (in steps)

- < 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.

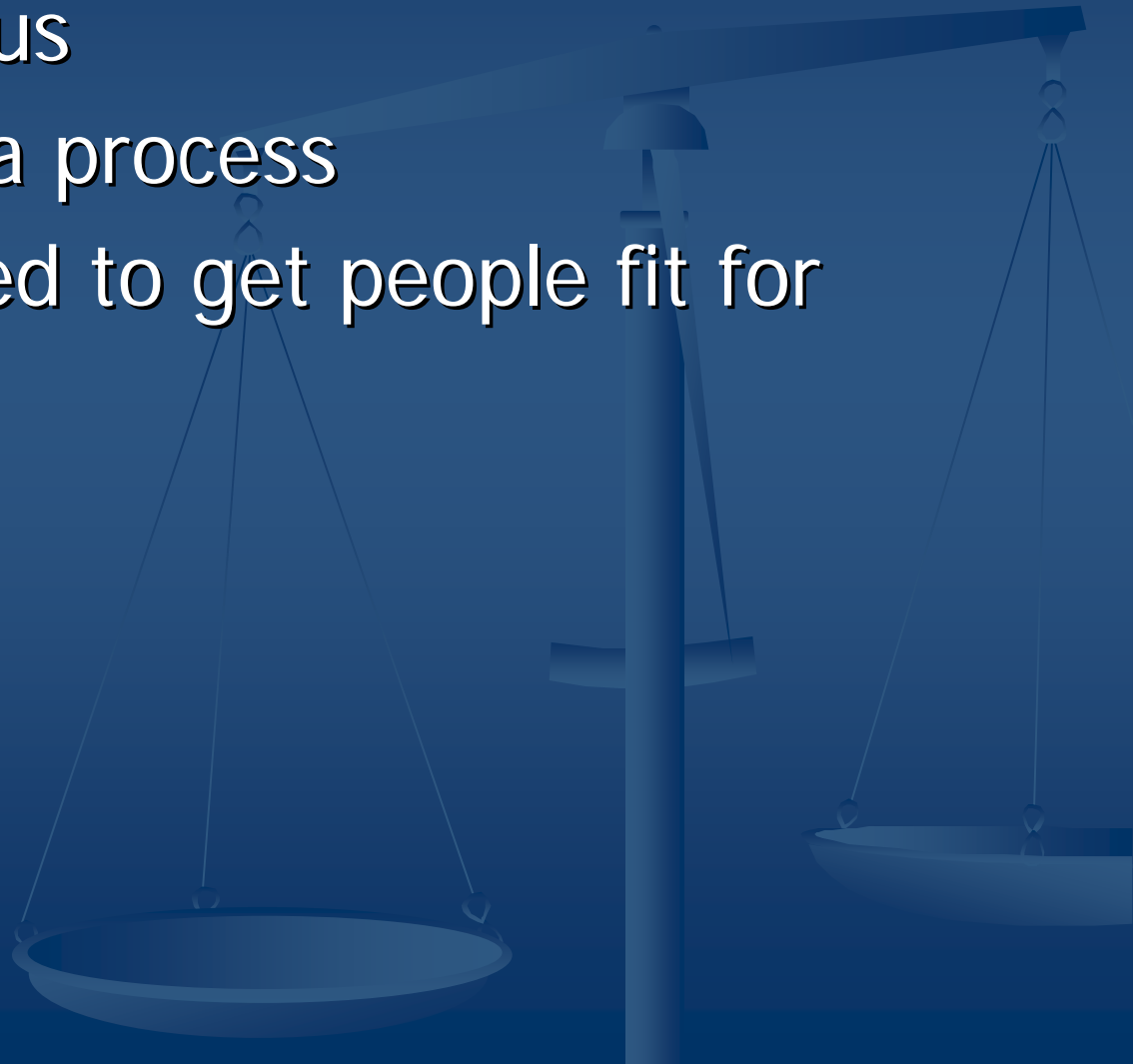


Plans

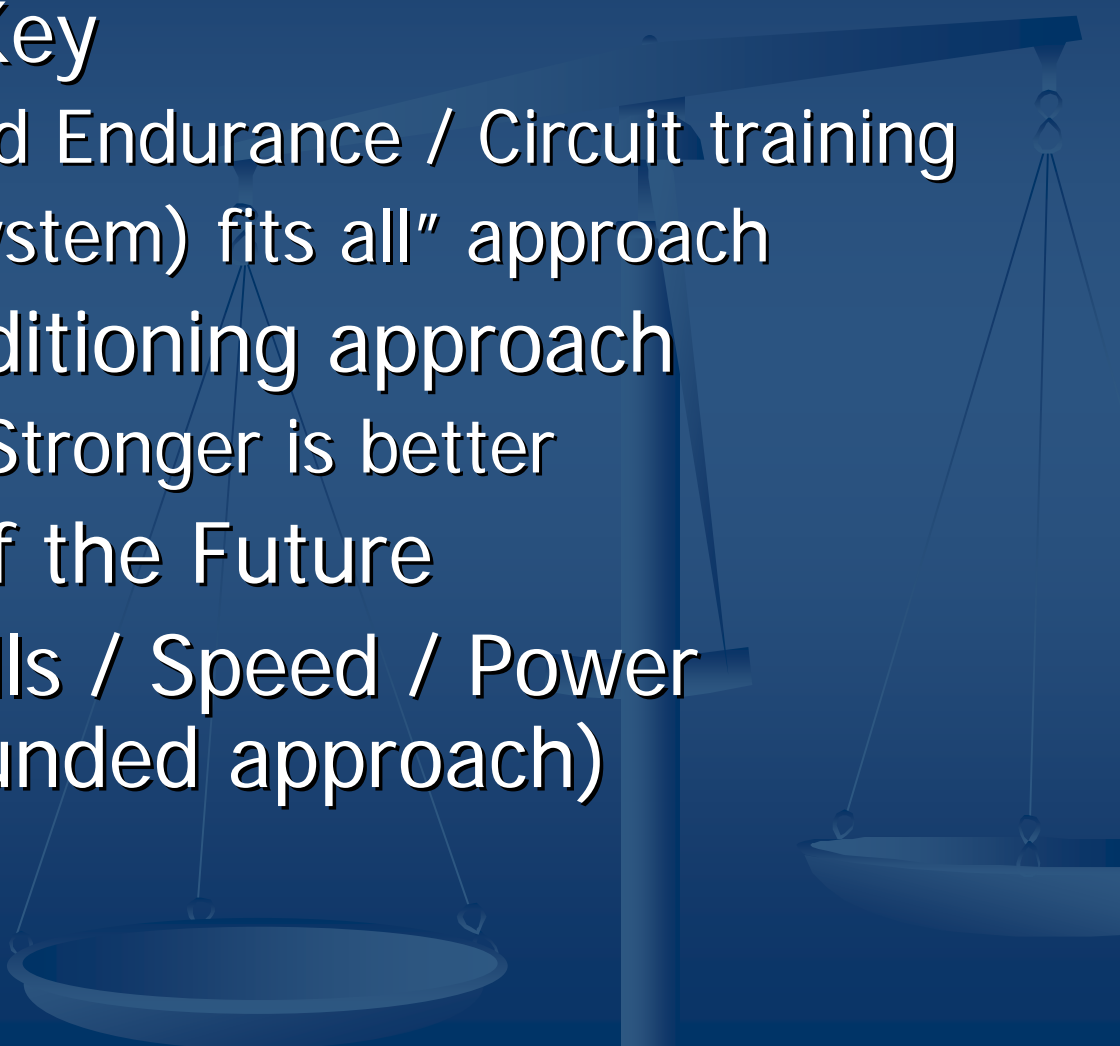
- We need to condition our players in a structured, step by step approach
 - Balance development
 - Awareness – timing & spatial
 - Manipulation development – co-ordination
 - Locomotion – movement techniques
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Conditioning Training

- 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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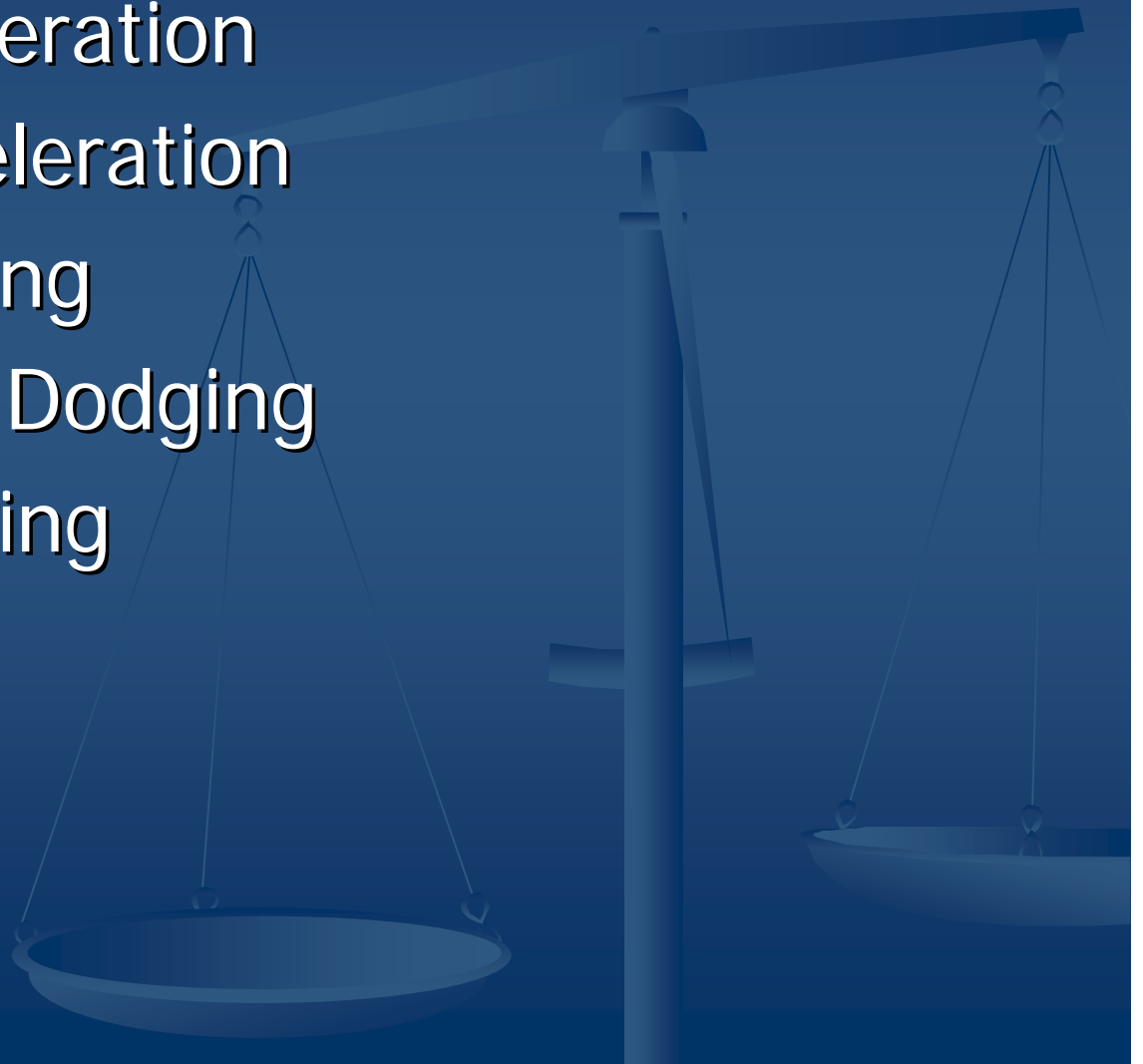
Importance of movement training

- 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).

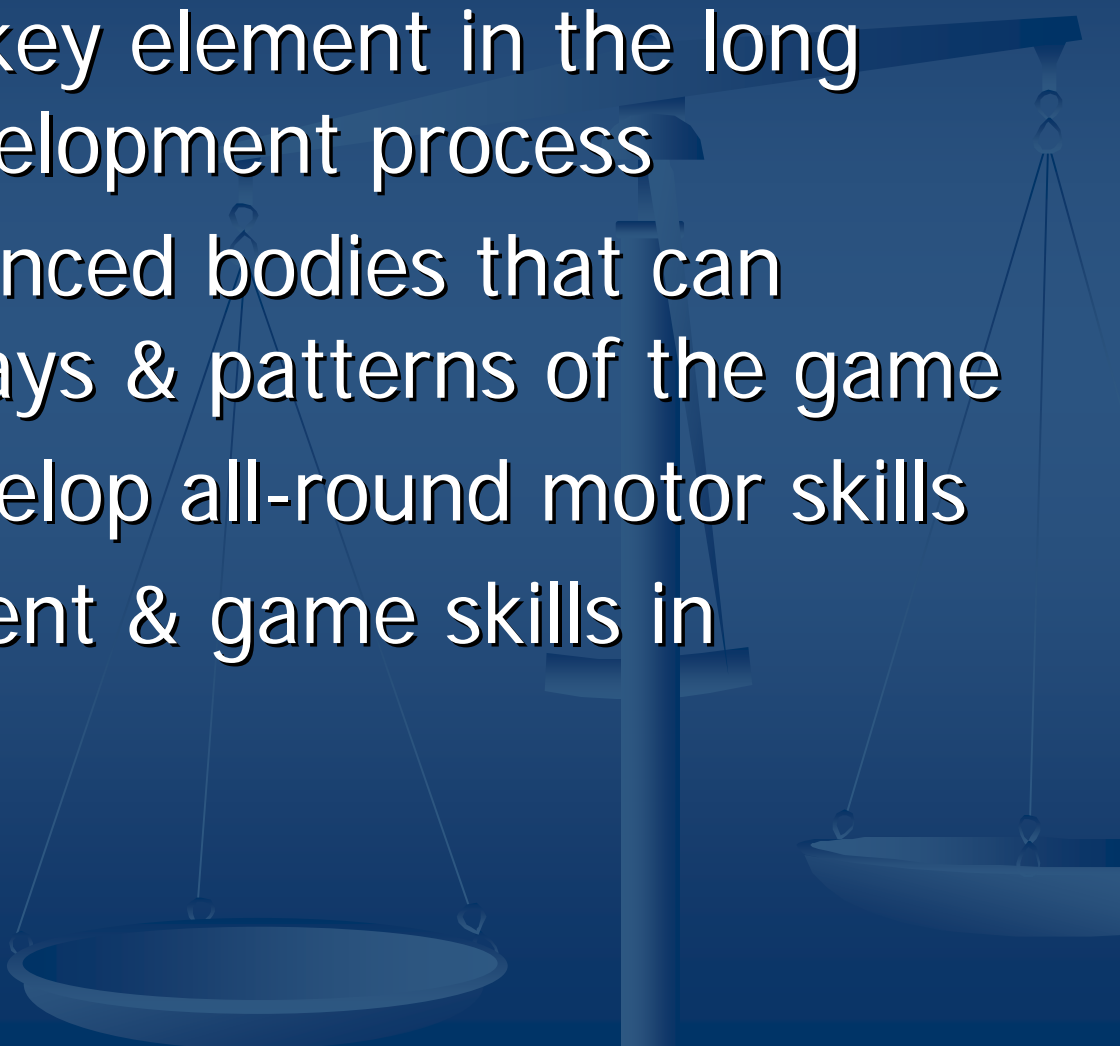


What is movement Training

- 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.

