Phasing in Triathlon

Dr Malcolm Brown MBE
Dr Malcolm Brown BEd BA MA

Director of Sport: Edinburgh University
Queens University
Ulster University
Leeds Metropolitan University

UK Athletics Coach (Endurance) 1990 – 2000
Leeds Triathlon Centre Coach 2004 – 2013
British Triathlon Coach 2006 – 2013
British Triathlon Olympic Team Leader 2010 – 2012
World Triathlon Championships Results

Medals 2009 - 2013

UK (21) [Leeds 14]
Australia (11)
Germany (11)
Spain (11)
USA (6)
France (6)
Canada (6)
## Triathlon Training Centres

<table>
<thead>
<tr>
<th></th>
<th>San Diego (USA)</th>
<th>Leeds (UK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Climate</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Interest</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Population</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Sponsorship</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>World Champs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medals</td>
<td>6 (USA)</td>
<td>14 (21 UK)</td>
</tr>
</tbody>
</table>
Alistair Brownlee (age 24)

Olympic Champion 2012
World Champion 2011 and 2009
World U23 Champion 2008
World Junior Champion 2006
European Champion 2011 and 2010
Jonny Brownlee (age 23)

Olympic Bronze Medal 2012
World Champion 2012
World Sprint Champion 2011 and 2010
World U23 Champion 2010
World Junior Bronze 2008
Non Stanford (age 24)

World Champion 2013
World U23 Champion 2012
Tom Bishop (age 23)

World U23 Bronze Medals 2012 and 2011
World Junior Silver Medal 2010
David McNamee (age 25)

World U23 Silver Medal 2011
Leadership and Coaching
Jack Maitland
Malcolm Brown

- Experienced coaches and former athletes (know the business)
- Fundamental principles and values
- Little ego
- Empower athletes by encouraging decision making and autonomy
Leadership and Coaching
Jack Maitland
Malcolm Brown

• Education has priority in formative years

• Curiosity

• Cross sports experience: best practice knowledge

• Open inclusive philosophy

• Settled in Leeds: in it for the long haul
Training Environment: Structure

• Built over years (2004 – 2012)
• Low tech – Low cost
• Coach/Physiotherapist (2004 – 2006)
• Conditioning specialist (2007)
• Nutritionist (2008)
• Physiotherapist (2008)
Training Environment: Culture

- “earn” additional services/competitions/trips
- No culture of entitlement
- Group is vital
- Fun is important
- Learn from older athletes
- Leeds – cold, wet, hilly
Training Environment: Culture

• Grass is not greener elsewhere

• “Fast track” strategy from Junior to Senior
  • Establish sound biomechanics and skills
  • Increase training loads between ages 18-21 to world class threshold
Building the Core team: Strategic and Operational (2006 – 2012)

CRITERIA:

1. World class expertise or very close
2. Open, honest, trustworthy, discreet, loyal
3. No job too small inside or outside specialism
4. Ability to work across disciplines
5. Work beyond contract
6. Long term commitment
Alistair Brownlee

- 8 year plan age 16-24
- Clear vision and technical model
- Clear view of training methods
- Assess the athlete
- Assess the event requirements
- Clarify priorities at different ages and stages
Vision and Technical Model

- To run 10k in 28 minutes
  800m in 1:56:00
  200m in 26:0

Technical Model
- Posture
- Foot strike
- Rotations
- Hamstrings and Quads
- Drive
- Sprints versus endurance
## Progression

<table>
<thead>
<tr>
<th>Year</th>
<th>Age</th>
<th>Performance (T)</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>17</td>
<td>34:12</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>18</td>
<td>33:27</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>19</td>
<td>33:04</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>20</td>
<td>31:30</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>21</td>
<td>29:04</td>
<td>29:35</td>
</tr>
<tr>
<td>2010</td>
<td>22</td>
<td>30:00</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>23</td>
<td>29:50</td>
<td>29:15</td>
</tr>
<tr>
<td>2012</td>
<td>24</td>
<td>29:07</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>25</td>
<td></td>
<td>28:32</td>
</tr>
</tbody>
</table>
Percentage Distribution of Training

- Steady Run: 25%
- Swimming: 21%
- Steady Bike: 49%
- Race Pace Run: 1%
- Tempo Run: 1%
- Tempo Bike: 1%
- Race Pace Bike: 2%
**Alistair Brownlee**

**Typical training week Feb 2012**

<table>
<thead>
<tr>
<th></th>
<th><strong>steady/aerobic</strong></th>
<th><strong>tempo/hard/interval</strong></th>
<th><strong>S&amp;C/physio</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monday</strong></td>
<td>80 min steady run 120bpm</td>
<td>Easy Swim</td>
<td>Run session 30 mins hard 160bpm</td>
</tr>
<tr>
<td><strong>Tuesday</strong></td>
<td>Easy Swim</td>
<td>Easy swim</td>
<td>Easy swim</td>
</tr>
<tr>
<td><strong>Wednesday</strong></td>
<td>75 min easy run</td>
<td>Fast swim</td>
<td>3.5 hrs easy run</td>
</tr>
<tr>
<td><strong>Thursday</strong></td>
<td>60 min easy run</td>
<td>Easy swim</td>
<td>60 min easy run</td>
</tr>
<tr>
<td><strong>Friday</strong></td>
<td>S&amp;C 3.5 hrs</td>
<td>2 hr easy bike 20 min efforts within this</td>
<td>60 min easy run</td>
</tr>
<tr>
<td><strong>Saturday</strong></td>
<td>1 hr easy bike</td>
<td>3.5 hr bike</td>
<td>60 min easy run</td>
</tr>
<tr>
<td><strong>Sunday</strong></td>
<td>Track 15 mins hard 170bpm</td>
<td>60 min easy bike</td>
<td>60 min easy bike</td>
</tr>
</tbody>
</table>
## Training Zones Running

<table>
<thead>
<tr>
<th>Zone</th>
<th>Race Pace</th>
<th>minssecs per km</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; marathon (42k)</td>
<td>4:20 – 4:30</td>
</tr>
<tr>
<td>2</td>
<td>&gt; marathon (42k)</td>
<td>3:30 – 4:00</td>
</tr>
<tr>
<td>3</td>
<td>21 – 30k</td>
<td>4:20 – 4:30</td>
</tr>
<tr>
<td>4</td>
<td>12 – 15k</td>
<td>2:55 – 3:00</td>
</tr>
<tr>
<td>5</td>
<td>5 – 10k</td>
<td>2:40 – 2:50</td>
</tr>
<tr>
<td>6</td>
<td>3 – 5k</td>
<td>2:35 – 2:40</td>
</tr>
<tr>
<td>7</td>
<td>800m – 1500m</td>
<td>2:30 – 2:32</td>
</tr>
<tr>
<td>8</td>
<td>200m – 600m</td>
<td>0:30 – 1:30</td>
</tr>
</tbody>
</table>
General Preparation

Aerobic
Anaerobic
Speed (alactic anaerobic)
Drills
Strength and Conditioning
Technique
Altitude Tent
Specific Preparation

Aerobic
Anaerobic
Speed
Technique
Recovery
Drills
Strength and Conditioning
Race Preparation
Tempo Runs
Altitude Training Camp (St Moritz)
Lessons Learnt

1. Volume of Training

   (i) 3 Sports
       (a) Swim
       (b) Run
       (c) Cycle

   (ii) Cross Training: Bike - Run
        Run - Bike
        Swim
## Lessons Learnt

2. Frequency of Training (sessions per week)

<table>
<thead>
<tr>
<th></th>
<th>Triathlete</th>
<th>Athlete</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 x 3 = 21</td>
<td>7 x 2 = 14</td>
</tr>
</tbody>
</table>

excluding strength and conditioning, technique, physio and massage
Lessons Learnt

3. Content of Training

   Aerobic 98%    Aerobic 2%

4. Complexity of Training