Scientific applications to coaching

Janet Vickers
J.Vickers@shu.ac.uk
Faculty of Health and Wellbeing

Description of learning and teaching approach adopted

The Level 6 students are set up as consultancy teams responding to a request for a multi disciplinary and interdisciplinary needs analysis to support a real life sport performer. Each student takes on an individual role in an element of sport science, coaching, or lifestyle to suit the needs of the athlete. The students work together as a consultancy team in a series of practical workshops which are based around identifying the needs and suggesting functional and user friendly recommendations to their performer. The performer is invited to attend their workshop sessions too!

The team present their findings and recommendations in an interactive and creative way using multi media skills. This occurs towards the end of the course. They are encouraged to present under a strong corporate banner, with a company name logo, mission statement and a strong consultancy identity, appearing in uniform professional 'coaching dress'. They are asked to embed supporting media items of their athlete in action, and provide a supporting training guide which is kit bag friendly and 'athlete proof'.

Employability objectives and intended learning outcomes

Sport Science students could further develop this work at Masters level study and towards BASES accreditation. Although limited, some employment opportunities are available working for such students in elite athlete support. With 2012 approaching more possibilities exist for employment supporting sport scholarship programmes within HE, FE and school gifted and talented initiatives - such as Talented Athlete Scholarships (TASS) and Junior Athlete Education (JAE).

Learning outcomes:
• analyse the role of a coach within a management team and the synergy of coach, athletes and sport science support;
• collect data to support the interdisciplinary analysis of a high performance within a chosen sport;
• identify and prioritise the interdisciplinary requirements of an elite level performer in a chosen sport;
• use appropriate presentation skills to disseminate information appropriately to elite athletes, coaches, and support staff;
• design, resource and deliver sport specific interventions to enhance high performance.

Description of and tips for good practice; lessons learned

We try to share good practice from previous presentations and athlete training guides - each year students have built on the work from before. This year one athlete (cyclist) attended the presentation and performed on a turbo trainer whilst his technical analysis was being discussed by the team.
As staff we both work with elite performers in and outside SHU, we have tried to bring our new ideas to expand our suite of practical workshops. We have built in a presentation rehearsal session for each group with staff verbal feedback. We give a presentation final mark verbally and in writing with two-way feedback at a meeting with each consultancy team just a week after their presentation.

**Key points of any feedback gathered or evaluation undertaken with students or staff**

Students enjoy this work and do well in the presentation and the individual write up that follows (mean 60%+). Our face-to-face student feedback sessions have been praised by the students - they do not always agree with us but welcome the chance to discuss their mark and how it was achieved.

Our external examiner was impressed by the sample of coursework including DVDs, CDs of slideshows and laminated athlete resource packs.

**Resources used**

1. Sport Science Analysis PC Applications: Dartfish (technical analysis), Netwisp (nutrition)

2. Laboratory, PC Laboratory and video analysis sessions, practical workshops on various generic performance themes: stability, speed and power, technique, nutrition, lifestyle, sport vision training, flexibility, posture, injury management.

3. Guest lectures from personnel were directly involved in elite athlete support.

4. Students have been encouraged to attend guest speaker 'lighting the flame' presentations - Tanni Grey Thompson, Matt Pinsent, Kelly Holmes, Brendan Ingle

This information can be made available in other formats. Please contact us for details.