A critical evaluation of the design of a Foundation Degree module

Ian Coleman
July 2012
Table of Contents
Evaluation framework........................................................................................................... 3
Reflection upon, and analysis of, the module........................................................................ 5
Curriculum mapping ............................................................................................................. 6
Alignment with the foundation degree PLOs........................................................................ 7
Alignment of assessment tasks (ATs) and learning outcomes (ILOs)................................ 8
Justification and amendment of the assessment process..................................................... 10
Assessment grading............................................................................................................. 11
Future developments in module ‘delivery’.......................................................................... 12
References ......................................................................................................................... 13
A critical evaluation of the design of a Foundation Degree module

Evaluation framework

The module entitled Introduction to Sport Psychology (ISP) is a 20-credit point, level one module, undertaken by all first year students on the Foundation Degree in Sport Coaching (FdSC) at South Nottingham College. The module aims to give students an understanding of how psychological factors influence sport performance as well as familiarity with a range of psychological assessments and interventions that they are likely to administer in their professional roles as sport coaches. The module runs over 30 weeks and is currently assessed by an essay and the presentation of a case study, a process that matches the BASES case study format required for professional accreditation as a sport psychologist. (Please see section A3 of my ePortfolio for a copy of the module handbook).

I intend to critically evaluate the design of the module within a framework based on Biggs’s model of constructive alignment (Biggs, 1996; Biggs & Tang, 2011). Constructive alignment is Biggs’s term for a theory that guides instructional design in the light of constructivist psychology, where learning, meaning and knowledge are seen as being actively constructed in the mind of the learner through activities, both social and individual, in which the learner engages (Biggs, 1996). Instructional design consequently becomes a process of facilitating students’ engagement in teaching and learning activities (TLAs) that are likely to result in the achievement of appropriate learning outcomes and ensuring that assessment tasks actually assess those learning outcomes (Biggs, 1999) Figure 1 illustrates the centrality of intended learning outcomes (ILOs) to this process.
Since the Dearing report in 1977, constructive alignment has been adopted widely by key organisations in UK Higher Education such as the Higher Education Academy (HEA) and the Quality Assurance Agency (QAA) and is reflected internationally in the Bologna process. However, constructive alignment is not without its critics: Jervis and Jervis (2005) agree in the value of establishing threshold learning outcomes and even in developing advanced learning outcomes for more able students but they suggest that it is neither possible nor advisable to identify all possible learning outcomes of a programme of study. In attempting to do so, we run the risk of failing to identify and reward gifted, original thinkers who, they suggest, are likely to develop learning and understanding outside the ‘confines’ of the intended learning outcomes. One possible solution to this would be to regularly review and amend ILOs to incorporate such ‘emergent’ learning outcomes, but this is still a reactive process, that does not recognize ‘unintended’ learning in the present. Houghton (2004) argues that it is highly unlikely that constructive alignment will be achieved anyway, without such frequent modifications of module descriptions to allow for changes to learning outcomes or the incorporation of emergent learning outcomes.

The FdSc programme team meets every July to reflect on and review the running of the course over the academic year, and proposals for the amendment of modules are submitted to the validating institution. This is the third time that amendments have been made to the ISP module as part of the ongoing review process and while Houghton (2004) argues that it is necessary to both improve existing and incorporate emerging outcomes in order to achieve alignment, in my own reflections I have wondered if this is
perhaps going too far (see blog entry 26th June). Jervis and Jervis (2005) indeed suggest that the incorporation of emergent outcomes could become a ‘recipe for continuous revision…to the point of absurdity’ (p.7)

Further criticism comes from Beetham (2007) who is concerned that by closely adhering to an aligned curriculum of learning goals and assessment tasks, students are actually more likely to develop a strategic approach to learning where they only value those tasks that are directly related to learning outcomes. As such it could be considered that basing the curriculum on ILOs could promote a superficial rather than the deep approach to learning that Biggs originally intended (Biggs & Tang, 2011). Please refer to my blog (June 24th) for reflections (albeit about level three teaching) that echo this concern. These are perhaps valid objections to the use of ILOs but there is more to Biggs’s model than ILOs and to encourage deep learning it is necessary to follow the description of ILOs with the three further steps in the constructive alignment process: creating the teaching/learning activities that address the verb; using assessment tasks that also contain the verb; and making judgements of performance based on grading criteria (Biggs & Tang, 2011, p100). Biggs’s also makes clear that, while students might have some preference for an approach to learning, it is the interaction between this and the teaching, learning and assessment environment that promote deep learning and my analysis of the module will take into account all four phases of the constructive alignment process.

**Reflection upon, and analysis of, the module**

Three separate lines of reflection have driven the further review of the ISP module. Firstly, one of the vehicles for capturing the student voice that feeds into the review involves the You Said We Did (YSWD) process, in which a senior member of staff from another department facilitates a reflective discussion with the student group to identify areas for improvement across the whole course. A copy of the 2012 YSWD is located in AA3 of my e-portfolio, where, highlighted in red for the purposes of this paper, are the comments
regarding the ISP module where one of the assessments takes the form of a group presentation. Clearly students feel that these assessments lack fairness because they fail to adequately identify individual contributions to group presentations. A commitment was made to the student group to address this issue by introducing an electronic method (wiki) that I learnt to use during the PGCHE. The second line of reflection is based on the module review carried out by the module leader (myself) which clearly indicates two separate issues: that of over-assessment identified by the External Examiner and that of the strategic, surface learning approach that students appear to be adopting in the module, possibly a result of the over-assessment. These lines of reflection indicate a need to review both learning outcomes (to encourage deep learning) and the assessment process. The third line of review emerged from the recent college-wide engagement with the Integrated Quality Enhancement & Review process carried out by the QAA, where the Summative Review clearly indicated the requirement to ensure alignment between programme and module learning outcomes. Race (2007) confirms the necessity of using learning outcomes and for the cross-referencing against assessment processes, instruments and standards required by QAA reviewers.

**Curriculum mapping**

As the module forms part of a Foundation Degree validated in the UK, this module audit will need to demonstrate alignment between the following levels:

- National framework for higher education qualifications (FHEQ)
- QAA National subject benchmarks
- NTU Level descriptors
- Bloom’s taxonomy of learning
- Module learning outcomes
- Teaching & learning activities
- Assessment tasks
- Grading criteria
For the purposes of this paper, I will assume accurate curriculum mapping (Spencer et al., 2012) of the programme against the FHEQ and the QAA subject benchmark statements as well as with the NTU level descriptors for Foundation Degrees, as the FD as the programme was developed using such a mapping process and validated by NTU. The audit will begin therefore by analyzing the alignment of the module ILOs with the programme learning outcomes (PLOs) that are actually identified in the contextual document as appropriate for assessment in the ISP module. Clearly these PLOs are drawn directly from the QAA Subject Benchmark Statements (QAA, 2007).

Alignment with the foundation degree PLOs

Table 1 shows the PLOs addressed in the module, together with the ILOs for the module. The first and second columns group the PLO verbs according to their level in Blooms revised taxonomy (Anderson & Krathwohl, 2001). The third and fourth columns identify the verbs used in the current ILO’s, again with their Bloom’s revised taxonomy level indicated. While it can be seen that the first three ILOs match the level of their corresponding PLO’s and they progress in level from the declarative ‘explain’ to the functioning ‘apply’ and ‘evaluate’, there are two PLOs at level 5 and three sets of professional skills that are not articulated at all in the ILOs of the module. In addition there appears to be an ILO (4) that is both redundant and poorly expressed: the requirement to ‘demonstrate an understanding…’ does not indicate the level of understanding required and is therefore unhelpful as a learning outcome (Biggs & Tang, 2011, p123).

In discussing the PLOs that do not appear to be aligned with ILOs it will be useful to refer not only to Bloom’s revised taxonomy (Anderson & Krathwohl, 2001) but to the Structure of Learning Outcomes (SOLO) taxonomy that will more effectively describe the intended development in knowledge and understanding that the module aims for. The PLOs involving a ‘review and synthesis of theories’ and a ‘reflection on practice’ are all activities (verbs) relating to functioning knowledge at the extended abstract level of the SOLO
taxonomy and could be argued to be at the upper limit of what may be required within a module at level 1 of the FdSc. The proposed ILOs 3 and 4 are intended therefore to both replace the original ILOs 3 and 4 and to encourage reflection upon the application of theory in practice implicit in the PLOs (‘apply’, ‘synthesize’, ‘reflect’) to which they correspond. In recognition of the need to appropriately ‘scaffold’ the learning of the students (Vygotsky, 1962), changes are also proposed to ILO 1 to focus on the implications of theory and thereby develop a deeper understanding of the declarative knowledge which will have functioning elements (Biggs & Tang, 2011). ILO 2 changes to incorporate an interpretive element that will scaffold the case study approach adopted in the assessment of the module.

Alignment of assessment tasks (ATs) and learning outcomes (ILOs)

Biggs is clear that while learning outcomes should state what the student will actually be able to do, the teaching and learning activities (TLAs) and the assessment tasks (ATs) should both provide opportunities for students to actually do those things. Rust (2002) also suggests that one of the key challenges for constructive alignment is to ensure that assessment is ‘authentic’ and that it encourages a deep approach to learning: student feedback, my own reflections, and the report of the external examiner, as mentioned above, indicate that over-assessment has led to students adopting a surface approach to learning in the module and this will need to be addressed. An additional challenge in ensuring aligned assessment tasks for the ISP module will be to incorporate the use of the professional skills identified in the PLOs: contribution to group activity, effective communication and use of case studies. These are particularly important as they derive directly from the QAA Subject Benchmark Statement for sport coaching (QAA, 2007), and, following Biggs’s (1996) emphasis on the social component of the knowledge construction mentioned in the second paragraph of this paper a social component to the assessment should remain in the form of the case study.
<table>
<thead>
<tr>
<th>Programme Learning Outcome</th>
<th>Level</th>
<th>Current Module Learning Outcome</th>
<th>Level</th>
<th>Proposed Module Learning Outcome</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge, understanding &amp; intellectual skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrate knowledge</td>
<td>2</td>
<td>1. Explain the psychological factors related to optimal sports performance</td>
<td>2</td>
<td>1. Discuss the implications of a range of contemporary theoretical approaches that seek to explain the relationship between psychological factors and sports performance</td>
<td>2/3</td>
</tr>
<tr>
<td>Show awareness of information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select appropriate information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apply understanding</td>
<td>3</td>
<td>2. Apply your understanding of motivation and behaviour change to develop a behaviour change programme in sport</td>
<td>3</td>
<td>3. Synthesise a range of theoretical approaches to develop and justify an intervention strategy that effectively addresses the issues identified in assessment of an athlete or team</td>
<td>3&amp;5</td>
</tr>
<tr>
<td>Provide analysis</td>
<td>4/5</td>
<td>3. Evaluate a range of psychological intervention strategies used in contemporary sport psychology</td>
<td>4/5</td>
<td>2. Interpret and evaluate a range of psychological assessment data</td>
<td>4/5</td>
</tr>
<tr>
<td>Evaluate and interpret</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and synthesise theories</td>
<td>5</td>
<td>Not addressed</td>
<td>N/A</td>
<td>3. Synthesise a range of theoretical approaches to develop and justify an intervention strategy that effectively addresses the issues identified in the assessment of an athlete or team</td>
<td>3&amp;5</td>
</tr>
<tr>
<td>Reflect on practice</td>
<td>5</td>
<td>Not addressed</td>
<td>N/A</td>
<td>4. Present and reflect upon the development of your intervention strategy, identifying potential alternative approaches</td>
<td>5</td>
</tr>
<tr>
<td>Professional skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contribute to group activities</td>
<td>N/A</td>
<td>Not addressed</td>
<td></td>
<td>4. Present and reflect upon the development of your intervention strategy, identifying potential alternative approaches</td>
<td>(5)</td>
</tr>
<tr>
<td>Communicate effectively</td>
<td>N/A</td>
<td>Not addressed</td>
<td></td>
<td>4. Present and reflect upon the development of your intervention strategy, identifying potential alternative approaches</td>
<td>(5)</td>
</tr>
<tr>
<td>Use case studies</td>
<td>N/A</td>
<td>Not addressed</td>
<td></td>
<td>4. Present and reflect upon the development of your intervention strategy, identifying potential alternative approaches</td>
<td>(5)</td>
</tr>
<tr>
<td>This ILO does not map to the PLOs</td>
<td>N/A</td>
<td>4. Demonstrate an understanding of the concept of motivation and its application to sport and exercise</td>
<td>2</td>
<td>ILO removed</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Table 1. Mapping of programme learning outcomes (PLOs) to existing and proposed module learning outcome (ILOs) indicating levels according to Bloom’s revised taxonomy (Anderson & Kratwohl, 2001).

Justification and amendment of the assessment process

I propose to continue with both the essay (assessment weighting 40%) and case study (weighting 60%) components of the module assessment but to make changes to each one in order to address the issues outlined above.

The essay previously required the explanation of psychological factors relating to sport performance (old ILO 1) and, with a word count of 3500 words, encouraged a very wide-ranging ‘coverage’ of material, leading to over-assessment. However, because case studies aim at facilitating functioning knowledge, they require students to have a strong foundation of declarative knowledge (Biggs and Tang, 2007) in order for them to be able to put the theories and concepts into practice within the artificial decision-making environment of the case study. Hassall et al. (1998) also suggest that, because of the emphasis on building functional knowledge and transferable skills, case-based learning is perhaps not the best TLA with which to teach ‘new’ areas of declarative knowledge and for this reason I believe that an essay to assess declarative knowledge is required prior to the case study assessment. However the essay will be aligned to the new ILO 1 that asks more specifically for ‘implications’ of theoretical approaches and consequently a reduction of the word count to 2000 words is justified in order to begin to address the over-assessment problem.

The case study is seen as a particularly valid form of assessment because by requiring students to apply functional subject knowledge, it encourages application of and reflection on this knowledge as well as demonstrating negotiation, time management, presentation skills and report writing skills that are useful across disciplines and are particularly valued by employers (UKCES, 2009). Furthermore, research into the use of case studies for learning and assessment (Kreber, 2001; Halsall et al., 1998) highlights the
importance of building group work into case-based learning TLAs. This provides further justification for maintaining the case study as a way of assessing the professional skills in the ILOs. However, Hassall et al., (1998) identify the management of inconsistent engagement and performance across the group and the fairness of assessment of the progress of individual students as problems associated with group learning activities. These are also problems identified through student feedback on the module and as a result of my own experiences and reflections during the PGCHE, I hope to address these through the development of a wiki for use during the case study (see blog entry 1 March 2011).

Biggs & Tang, (2007. p. 136) note that in a case study, students can be assessed on how effectively they work through the case study exercise and in this sense, the TLA and the assessment-related task can be identical. However, Biggs and Tang identify a practical problem with this, in that teachers may test how well students have responded to such activities by asking them to describe how they have applied their knowledge in a case study, rather than assessing them actively doing the applying: I have fallen into this trap with previous assessment of the case study and in order to capture process-based activity, I plan to use ‘PeerMark’ to facilitate formative peer feedback (see my reflective blog 13th June 2012). ‘Formative assessment’ is perhaps better termed ‘formative feedback’ because it serves the dual purpose of indicating to teachers how students are progressing while giving students an opportunity to enhance their learning (Rust 2002; Nicol and MacFarlane-Dick, 2004). Using online peer feedback has been found to improve learner engagement and foster a focus on process in assessment (Gikandi et al. 2011) and therefore will capture the doing of the case study itself.

Assessment grading

Grading is carried out using the NTU level 1 grading descriptors to ensure consistency with the generic ILOs expected for an equivalent level 1 student
at NTU. As programme leader, I am responsible for ensuring appropriate moderation of all FdSc modules in line with NTU assessment guidelines (ASQH, Section 15a) and the QAA Code of Practice, Section 6 (2006) and the rigour and transparency of our moderation has been highlighted as good practice by our External Examiner for the past two years. Moderation is performed on a sampling basis at a minimum of 25% of all assessed work in addition to any work that has been assessed at or below a 40% threshold (for examples of assessed work, see AA3 of my e-portfolio).

**Future developments in module ‘delivery’**

My use of inverted commas around the word ‘delivery’ in the subtitle of this section reflects my increasing discomfort with the conceptualization of pedagogy as a process of the ‘delivery’ or transmission of information. As highlighted by Brown (2011) educational institutions no longer hold the monopoly on information: students themselves can access the information that we might have once needed to transmit to them in a teaching situation. The key themes that emerge from the preceding analysis are the need to provide students with opportunities to: engage in the process of discerning the implications of theories, to evaluate and interpret data, and to develop and justify responses to problems. They should also be able to engage with this process in conjunction with their peers. To address these needs I am determined to significantly reduce information transmission by flipping my classroom (Bergman & Sams, 2012) in my teaching of this module. This will require the development of electronic resources such as virtual lectures to allow for ‘taught’ sessions to become ‘application sessions’ (see my reflective blog 24th June 2012). In the next paper I will discuss this further, along with my plans to use a wiki to enable students’ contribution to a group process to be fairly assessed.
References


BEETHAM, H. (2007), "Designing courses for e-learning". In Beetham, H. Rethinking pedagogy for a digital age, p.26


NTU ACADEMIC STANDARDS AND QUALITY HANDBOOK, 2010. Nottingham: The Nottingham Trent University. Available at:

Author NOTTINGHAM TRENT UNIVERSITY. CENTRE FOR ACADEMICS STANDARDS AND QUALITY (2010)


QAA (2008). *Subject benchmark statement QAA 207 12/07*. Quality Assurance Agency: Gloucester. Available at:


15