An Analysis of a Sport Degree's Ability to Foster Deep Learning: A Case Study of One University Degree Programme **Claire Mulvenna, University of Bolton. Results - Graphs**

Introduction

Learning in higher education involves adjusting to new ways of analyzing information and constructing knowledge (Lea, Street, 1998). The analytical skills needed to study within a higher education environment are in line with the systematic study skills associated with constructive alignment. Constructive alignment is based on the constructivist principle of creating meaning through the engagement of both instructional design literature and learner activities and is a student-centered theory of learning aiming to foster 'deep learning' (Biggs, 2006).

Adopting a 'deep' approach to learning is preferable because it provides significance and relevance to the material being learnt and requires a greater depth of processing by the student (Marton & Saljio, 1976). A 'deep' approach to learning from students is more compatible with higher education aims and objectives due to the emphasis on interpretation, abstraction of meaning and holistic learning (Fowler, 2003). The consequences of not engaging in deep learning causes issues beyond stifled progression and achievement (Wandel, 2010) and can affect student retention rates on courses (Froyd & Ohland, 2005).

A learning environment can be managed to encourage constructive alignment (Biggs 2006) with selected teaching activities being chosen because of their ability to challenge students to investigate, interpret and process information (Biggs, 2006). This management of the learning environment can encourage a deeper approach to the learner in contrast to a surface approach to learning (Entwistle, 2000). This teaching approach however, assumes that a students arrives in Higher Education with both the ability and the will to adopt a deep approach to learning, as opposed to a surface approach to learning and the retention of facts (Entwistle, 2000).

Objectives

Sport students arrive at University with a preference for teaching to be group focused and practically based (Peters, Jones, Peters. 2008). But do methods of teaching and assessment on sport courses in Higher Education acknowledge these preferences alongside the requirement to assess student work that displays the skills associated with deep learning?

The underlying research questions were:

- Does the content and teaching methodology in semester 1 of first year undergraduate study on a sports course prepares students to acquire facts for subsequent use, to abstract meaning from information and also to interpret information as required by deep learners? - What teaching methods would be useful to assist students in semester 1 for first year undergraduate study to acquire facts for subsequent use, to abstract meaning from information and also to interpret information as required by deep learners? - Should the teaching content for semester 1 at first year

undergraduate study on sports courses include explicit teaching content on how students can acquire facts for subsequent use, abstract meaning from information and also to interpret information in an appropriate manner for summative assessment?

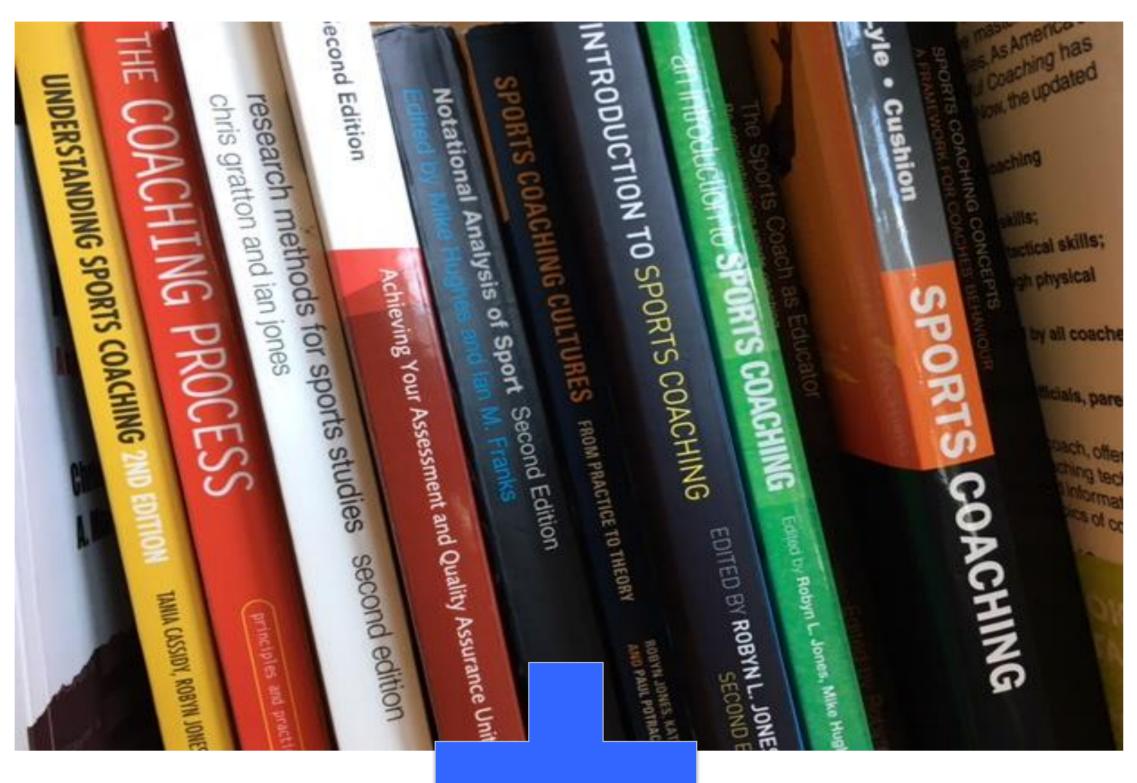
References

Biggs, J. (2006) Enhancing teaching through constructive alignment. Higher Education. October 1996. Volume 32. Issue 3. Pp 347-364. Biggs, J. and Collis, K. (1982) Evaluating the Quality of Learning: The SOLO Taxonomy. New York, Academic Press. Consumer Rights Act (2015) London. HMSO.

Entwistle N. J. (2000). Approaches to studying and levels of understanding: the influences of teaching and assessment. In J. C. Smart (Ed.), Higher Education: Handbook of Theory and Research (Vol. XV) (pp. 156-218). New York: Agathon Press. Froyd, J.E., & Ohland, M.W. (2005). Integrated engineering curricula. *Journal of Engineering Education, 94*(1), 147-164. Gill, Stewart, Treasure, Chadwick (2008) Methods of data collection in qualitative research: interviews and focus groups. British Dental Jouranl. Volume 204. No 6.

Marton. and Saljo. (1976) On Qualitative Differences in Learning — 1: Outcome and Process. Brit. J. Educ. Psych. 46, 4-11. Nelson. K. and Kift. S. (2005) Beyond curriculum reform: embedding the transition experience. In Brew, A and Asmar, C, Eds. Proceedings HERDSA 2005 28, pages pp. 225-235, The University of Sydney, Sydney, Australia. Peters, D.M. and Jones, Gareth and Peters, John (2008) Preferred 'Learning Styles' in Students Studying Sports Related Programmes in Higher Education in the United Kingdom. Studies in Higher Education, 33 (2). pp. 241-250. Sander. P., & Sanders. L. (2009) Measuring academic behavioural confidence: the ABC scale revisited, Studies in Higher Education, 34:1, 19-35

Wandel, Andrew P. (2010). Linkages between Courses: A Holistic Approach to Programmes. Paper presented at the Australasian Association for Engineering Education: Past, Present, Future, Sydney, NSW Australia. http://www.aaee.com.au/







Recommendation's – Skills for deep learning - Specific taught content



Introduction to Academic writing / research – how and where to acquire facts for future use. Where to find appropriate information and how to present this in assignments.

Method

The study was an open and explorative investigation in to the confidence and competence of first year sports undergraduate students to complete written academic assignments in semester one to the expected academic writing standards, with assignments displaying the skills associated with deep learning.

Focus groups were held with three members of staff from one undergraduate sport course and a second focus group was held with second year undergraduate students, who studied the same sport course as the members of staff taught on.

Current students in their first year of undergraduate study in sport were asked to complete an adapted version of the questionnaire for the Academic Behavioural Confidence scale (Sanders, Sanders; 2009) and second year undergraduate students in sport, were also asked to complete a separate adapted version of the questionnaire used for the Academic Behavioural Confidence scale (Sanders, Sanders; 2009). Finally the three members of staff who participated in the focus group were asked to complete a version of the questionnaire used for the Academic Behavioural Confidence scale (Sanders, Sanders; 2009) adapted to allow teaching staff to reflect on the students at first year undergraduate level and their academic confidence and competence.

Conclusions

The present study provided compelling evidence that whilst students have confidence in their own abilities to complete assessments there is a need for academic writing and research skills to be unambiguously taught. Both staff and students are in agreement that the skills associated with deep learning such as acquiring facts for subsequent use, abstracting meaning from information and interpreting information need to be known by students. The disparity between student and staff opinion lies in where these skills should be taught; in the curriculum or through extra curricular classes and support.

The pressure in the UK from the Consumer Rights Act (2015) and its application to Higher Education appears to show the rule that should be applied is if something is to be assessed it should be taught within the curriculum.

Transition pedagogy could offer the solution to embed the academic and research skills associated with deep learning in to curriculum design at first year undergraduate level. Transition pedagogy allows specific discipline knowledge and generic skills to be intertwined throughout a programme of study (Kift and Nelson, 2005).

The first year of study in a new environment needs to be customized to allow learners to develop to the new expectations both inside and outside the classroom and should be done through a rational, progressive and integrated programme (Kift and Nelson, 2005). Applying the concept of transition pedagogy to the study of sport it is the author of this research's proposal that discipline specific knowledge, industry related experience and the generic skills of research and academic writing been interwoven through out sport degree curriculum to allow industry ready professional to graduate with rigorous academic skills and high professional standards with two clear objectives for the

two semesters of first year undergraduate study.

Fist semester first year undergraduate

Introduction to academic writing / research – how to abstract meaning, interpret information. How to find meaning and explain information that has been found for assignments.

Sport & Society

Seminars focused on academic writing and research would have helped with assessments – Previous students – 91% Agree

Students can produce coursework at the required standard – Lecturers 66% not confident 34 % Not at all confident.

Undergraduate first year should include specific teaching on academic research and writing skills – Previous students – 100% Agree

"They (first year undergraduate students) should arrive with them (the skills to interpret information and abstract meaning)... the modules have so much content that's industry relevant, there's no time to spend week in week out on the how, it's all about the what"

"How can you be marked on something you're not taught? I mean that just seams harsh to me. At the end of the day we pay a fair bit and to not be taught how to write essays or interpret information like you should for stuff that's getting marked. I dunno just feels wrong, your being marked on it"

Lecturer

Second year undergraduate



Teaching Intensive, Research Informed

Second semester first year undergraduate