"Some problems are so complex that you have to be highly intelligent and well informed just to be undecided about them" Laurence J. Peter

The 'Wicked Problem'

When developing our project we used a third year BSc Sports Science student's assignment for an 'Applied Science and Football' module to encapsulate the key purpose of the project. The assignment is a reflective account of a work placement in a professional football club. In describing initial difficulties in adapting to an unfamiliar and culturally different environment, the student highlighted a reality gap between his course experience and his first days on placement. He went on to give a critically reflective account of his subsequent learning in terms of acquisition of craft and professional knowledge and skills of communication, working in a team, people management, innovation, leadership and sense of responsibility, "all tacit knowledge that could not be learned from textbooks and PowerPoint presentations". Importantly, in analysing what he learnt from working with skilled performers and experienced professionals, the student was able to draw on published literature and a taught module on reflective practice, "I now fully appreciate the value of reflective practice....it has allowed me to think deeply about myself, to learn about my strengths and weaknesses, my emotions, and my reactions to things".

We have used the assignment, and the authentic student voice within it, to illustrate the curriculum design challenges for the learning, teaching and assessing of 'wicked' competences, 'soft' skills, graduate attributes and complex achievements.

Some 'wicked questions'

- Prior to placement, what might have been the BSc Science and Football student's perceptions of his skills and expectations of working in a football environment?
- What dissonance was there between his perceptions and the reality of the situation?
- What was it about this student that enabled him to turn a potentially very difficult/challenging situation into one where he thrived?
- What role was played by personality and prior learning?
- To what extent was the placement integrated into curriculum and assessment design?
- How appropriate was the assessment design in terms of judging what learning had taken place?
- To what extent did it promote sustainable learning for the longer term?

These are the sorts of questions that we hope to explore and illuminate through the project. It's clear that the issue is not just about assessment, it is also about *integrative* learning and aligning assessment with curriculum.

How might students be better prepared for learning in what can be termed informal or non-deliberative learning settings that might dominate the rest of their lives, for example, home and workplace? How can teaching, learning and assessment practices take more heed of workplace needs and how can the workplace be better informed of HE objectives? HE, employers and students speak their own languages and one of the project's aim will be to promote two- way knowledge transfer that provides a means of bridging understandings (and reducing dissonance and misconceptions).

NTF Project 'Developing Learning and Assessment Opportunities for a Complex World' References

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