Northumbria Research Link

"Illuminating and measuring personal development: the impact of this work on learning and teaching".

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Background

This short article gives an overview of a small-scale case study research project based on a 2nd year cohort of students from the Business Information Systems area of the School of Computing, Engineering and Information Sciences at Northumbria University. The aim of this employability module is to prepare students for the recruitment process for their placement year in industry and to inculcate proper professional attitudes and behaviour. The teaching strategy uses the precepts of PDP, and an eportfolio is the vehicle for learning and assessment.

The research project was designed to investigate how successful we have been in encouraging students to take control of their learning, to realise that learning is a skill that can be consciously improved, and that their 'learning power' can increase.

The difficulty with such a project is the identification of an appropriate measuring tool. The Effective Lifelong Learning Inventory (ELLI), which identifies 7 dimensions of learning 'energy', was developed by a team at Bristol University in response to the growing realisation that the instrumental approach to learning and teaching which has dominated formal education – an approach consisting of, typically, codified curricula and high stakes assessment in the form of tests of knowledge,

skills and understanding – was no longer relevant to the needs of the modern world.

In 2006, the Leitch Review of Skills pressed universities to lead in making the UK a world leader in delivering skills for work, again reminding HE of the inadequacy of codified curricula to meet the constantly changing needs of the modern global workplace. Staff in HE already implementing PDP to address these challenges recognised the potential of ELLI to both enrich the learning experience and provide a means of evaluating its effectiveness. Continuing research at Northumbria and elsewhere into the connection between ELLI and student achievement has established a very strong correlation between 2 of the ELLI dimensions, Critical Curiosity and Changing and Learning, and high student achievement. Strategic Awareness also showed a positive correlation to high achievement, although not statistically significant.


Methodology

The importance of reflection in the development of the deep approach to learning necessary for learning autonomy is widely recognised. Because of the personal nature of reflective writing and the commitment needed on the part of the students to produce good reflective writing, it was felt that the quality of the reflective writing could be used as a proxy for engagement with the process. A taxonomy for the assessment of reflective writing was therefore developed by members of the team, based on the work of Biggs and Collis, Hatton and Smith and Jenny Moon. Analysis was carried out to determine whether changes in the measured learning power of the students were mirrored by their reflective writing marks. Textual analysis of their reflective writing was undertaken to investigate their understanding of the learning process itself.

Findings

Comparison of ELLI 'scores' achieved during the first year of the degree course with those of the same students at the end of the second

year module with reference to reflective writing ability indicated that those who engaged with the PDP/e-Portfolio process – i.e. those whose reflective writing showed deeper thought – showed most positive change, whereas those who did not engage showed a decrease in learning 'power' in those dimensions identified as having a significant correlation with high achievement (Critical Curiosity, Changing and Learning and Strategic Awareness)

Our project in the context of the wider ELLI research now has to address some key questions. The Dispositions to Stay research has indicated that three specific ELLI dimensions are associated with academic success. (Critical Curiosity, Orientation to Change and Strategic Awareness). The next stage of the project will seek to identify ways to devise PDP and e-Portfolio structures and processes that encourage the growth and development of these dimensions.

Above average reflectors

Below average reflectors
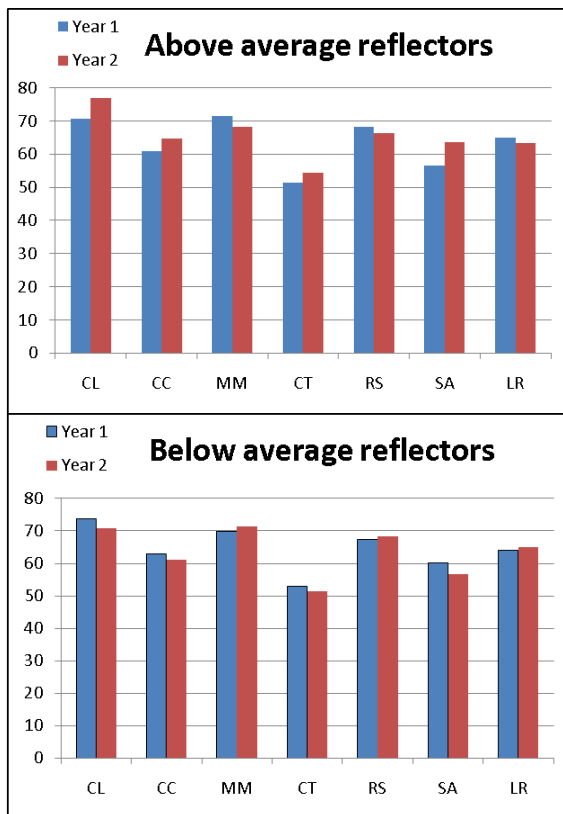
Textual analysis of student reflective writing showed that many students were becoming aware of learning as a process, as a skill that could be consciously improved with practice. Our analysis also indicated that ELLI constitutes a very useful way of increasing awareness of the PDP/e-Portfolio aims. Its novelty arouses curiosity, and its vocabulary helps students and staff to articulate their thoughts about learning itself.

Conclusion

Our experience suggests a way of understanding how ELLI has contributed to a synergy between PDP and e-Portfolio. We have evidenced that the language of ELLI and engagement with the tool has been a catalyst for reflection, self awareness and understanding. The language of ELLI and the dimensions it describes have also provided a useful framework for portfolio structure, and helped students to understand the process (and necessity) of becoming lifelong learners.