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Transformational Education: learning for life

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Abstract:

Our contribution focuses on the innovations in learning and teaching that have arisen from the outcomes of an interdisciplinary international research collaboration on critical thinking, aiming to enhance curricula and improve students' development as required by employers. This has culminated in the development of a critical thinking skills framework and toolkit designed to inform learning, teaching and assessment practice. Our transformative educational endeavours are illustrated in three posters. Collectively these highlight our approach to developing student's self-efficacy to master critical thinking and explore the challenges faced in leading students through 'conceptual gateways' to a more accessible way of thinking about information (Meyer and Land, 2005). Our key message is that to overcome such challenges we must as educators firstly transform ourselves by revising our own personal assumptions about learning and embrace a reflective and evidence-based exploration of our own methods of practice, I expectations of ourselves and of our students.

Keywords: Critical Thinking; Learning and Teaching; Student Engagement; Curriculum Development

Reflection

Transformation is a process of change, in the context of developing ourselves and our students as independent autonomous and critical thinkers. Prior knowledge and experiences constrain our perceptions of the world around us and our ability to avert the ideas and opinions of others. This can deny us the opportunity to make the most of our learning experiences.

Overt teaching of critical thinking (CT) skills builds self-efficacy, improves learning and enhances students' academic performance (Putwain et al.,2013). Kingston and St George's University has been at forefront of developing interventions to embed CT skills within undergraduate curriculum to equip students for academic success, and future employment. The outcomes of an interdisciplinary international research collaboration have informed the development of a CT skills framework and toolkit designed to inform learning, teaching and assessment practice. The toolkit, which is underpinned by the work of Abrahmi et al. (2015), operationalises our institutional adaptation of Facione's CT skills framework (Facione,1990). Containing 10 branded teaching tools, it offers a flexible framework of instructional guides and worksheets are tailored to a variety of learner levels and assignment tasks. With the aid of a small HEFCE Catalyst project fund the toolkit has been piloted within the first year of 5 undergraduate degree programmes across two diverse employment sectors (Business and Healthcare).

Our series of 3 posters builds a picture of our approach to the development and evaluation of CT skills. Our quest to enhance student's ability to independently and systematically analyse problems and make decisions, has uncovered the challenges faced by students and how they make sense of the concept of critical thinking. This has encouraged us to review personal assumptions and transform our approaches to learning and teaching. It is evident that there is

a need to identify effective methods that facilitate students' applied understanding of the required skills to be less subjective and more objective in their reasoning.

In transforming our students' way of thinking and enhancing their capacity for autonomous critical thought, as educators we must firstly transform ourselves by revising our own personal perspectives and modifying our working practices. Transformation starts with challenging the beliefs and assumptions we hold about how our students think, learn and behave, and understanding more about our students' critical abilities. In challenging our perspectives of how we facilitate learning, teaching and promote student engagement with the concept of critical thinking we can consciously work towards meeting the students' development needs, adopting and promoting best practice with revised critical insight.

It is here emphasis is placed on adopting an evidence-based approach; using data as a foundation for innovation in the development of critical thinking skills. Central to this is gaining clarity through the process of shared critical reflection through interviews with staff, student and employers, as well as investigating students current critical thinking abilities using a well-recognised instrument called the Watson-Glaser critical thinking test TM (2011). Using this research with data and evidence from the literature provides us with focus and direction; paving the way for effective learning, teaching, engagement and enhancement strategies.

To us transformation is empowering and emancipatory, our knowledge and understanding becomes actively constructed through collaboration and engagement with students and employers as partners in the process. We each gain metacognitive awareness; becoming consciousness of what is expected, and the steps to be taken personally and collectively to achieve these expectations. It is here transformation becomes strengthened, as we become enlightened and potentially liberated from previous assumptions and practices. Our engagement and partnership in understanding the development of critical thinking skills is the subject of our presentations at the Learning, Teaching and Student Engagement (LTSE) and Change Agent Network (CAN) conferences in 2018.

Module evaluations, student reference groups and appreciative inquiry workshops have enriched our insight and led to an iterative adaptation of the toolkit. The project is being further co-developed with colleagues from the Faculty of Science at Kingston University and it is hoped in time the toolkit will be utilised across both universities and within other institutions too. Our work has led us to gather material for a research informed Compendium of Good Practice; a series of staff and student generated impact case studies for dissemination internally and externally, as a means of promoting the adoption of good practice in relation to learning and teaching of critical thinking.

Moving forward we have plans to publish our findings and continue to inform on progress and outcomes through twitter @cttoolkit. We aspire to continue development and research using an action research multi-method approach, as our key challenge now is to fully understand students' engagement with the CT skills toolkit and how this and the teaching and learning activities transforms students to become active critical learners, appreciating the value and significance to their academic attainment and employment. We are keen to nurture our existing community of practice and empower students and staff to play an active part in research to inform transform and influence changes within practice.

References

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