

## Submissions Abstract Book - All Papers (All Submissions)

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Can We Transform Critical Thinking Teaching in Higher Education? An exploratory study for staff

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**Research Domain:** Learning, teaching and assessment (LTA)

**Abstract:** This study aims to find a solution for how to teach critical thinking in Higher Education. There are multiple perspectives about what critical thinking is and how it should be taught (Tiruneh, De Cock and Elen, 2018). There are barriers, challenges and variations in definitions and no single truth about the best way of teaching critical thinking (Nicholas and Raider-Roth, 2016). Educators experience their own reality about critical thinking based on their experiences, disciplinary contexts and how they interact with their learning environments and students (Danczak, Thompson and Overton, 2017). This study explores how staff can be supported with the development of critical thinking in their teaching. It involved exploratory interviews which examined the beliefs, attitudes and behaviours of staff with regard to critical thinking teaching within their different disciplinary contexts, what barriers and challenges they faced and what support they needed to transform their critical thinking teaching practices (Jones, 2009).

**Paper:** Teaching and learning about critical thinking is messy, subjective and does not have one reality (Lloyd and Bahr, 2010). There are multiple perspectives about what critical thinking is and how it should be taught (Tiruneh, De Cock and Elen, 2018). There are barriers, challenges and variations in definitions and no single truth about the best way of teaching critical thinking (Nicholas and Raider-Roth, 2016). Educators experience their own reality about critical thinking based on their experiences, disciplinary contexts and how they interact with their learning environments and students (Danczak, Thompson and Overton, 2017). This is further supported by the *specifist* view of teaching critical thinking where its development is specific to the disciplinary context in which it is situated (Moore, 2011). Critical thinking is not a generic skill and quality which can easily be transferred to any set of problems or any disciplinary contexts (McPeck, 1981). Development should not occur within stand-alone modules, but should be immersed within the courses which students are studying (Moore, 2011). Critical thinking teaching is interlinked within learning and teaching contexts and cultures, and the social practices of differing learning environments (Danvers, 2016). This can also be influenced by staff's backgrounds, previous experiences and knowledge (Riddell, 2007). This begs the question of how staff can learn how to teach critical thinking in order to overcome these challenges and barriers and transform their practice.

This paper argues that Transformative Learning could provide a solution. Transformative Learning is defined as a change of perspective which might take place through an individual experiencing a disorienting dilemma. (Mezirow, 2000). It involves understanding your existing meaning and frames of reference, then critically reflecting on these in order to learn new frames of reference. By doing this you transform your habits of mind and points of view. It involves more than a change in what you know, but how you come to know it, which may result in a change in perspective (Kitchenham, 2008). This theory could provide a lens through which to examine the beliefs, attitudes and behaviours of staff with regard to their critical thinking teaching practices in the classroom. It could help frame how staff become aware of its importance and define critical thinking teaching within their different disciplinary contexts. It could help identify what knowledge, skills, resources and developmental support staff need to transform their critical thinking teaching practices (Jones, 2009). This could involve a shift in staff's mindset about their learning environments and how they teach within the context of their disciplines, demonstrating a preparedness to critically evaluate their practice, and engage in lifelong learning (Barnett, 2012). In short, for staff to encourage students to develop higher order thinking skills, they must be prepared to be critical thinkers themselves (Shpeizer, 2018).

This study aims to find a solution to the practice-based problem about how to teach critical thinking in Higher Education. It explored how staff can be supported with the development of critical thinking in their business and healthcare teaching. The initial study involved 12 in-depth exploratory interviews which examined the beliefs, attitudes and behaviours of staff with regard to critical thinking teaching, how they defined it within their different disciplinary contexts, what barriers and challenges they faced and what support they needed to transform their critical thinking teaching practices (Jones, 2009). Purposive sampling (Teddie and Yu, 2007) was used to select six staff who had experience of teaching critical thinking within the business, nursing and paramedic science disciplines. Staff also completed a reflective journal every time they used critical thinking in their teaching. The methodological approach was informed by Transformative Learning (Mezirow, 2000) to enable staff to make meaning from these experiences, challenge their existing values and beliefs and affective states and critically reflect on their practice in order to make new meaning about how they teach critical thinking.

The initial study results highlighted that all staff recognised the importance of defining and explicitly teaching critical thinking within the context of their discipline. However, they were hesitant when asked to specifically define critical thinking, which mirrors the debates in the literature. They recognised that many assumptions were made about students' existing critical thinking abilities both by themselves and by colleagues. Time and workload were seen as key barriers to developing new critical thinking teaching methods as well as departmental cultures, varying learning environments and external pressures from the NSS. It was universally agreed that support within the culture of the department was crucial in encouraging staff to learn new ways of teaching, and preferred methods were experiential, peer based and interdisciplinary. The need for flexible teaching resources tailored to the needs of the discipline, and developing a common language of critical thinking between staff and students within these resources, were also highlighted.

By critically reflecting on the meaning of critical thinking, staff recognised that they perhaps did not know enough about what it meant and, while they recognised it was important to teach it, they

identified that they needed help and support to do this. This might be the disorienting dilemma which Merizow (2000) discusses, which could trigger a change in how staff perceive their role in helping students to develop criticality within the context of their discipline. However, all staff recognised that while they have changed their own perspectives about teaching critical thinking, institutional barriers and challenges do exist. External pressures like the NSS, disciplinary cultures and pressures from workload might make it difficult to affect staff attitudes towards changing their critical thinking teaching practices. Peer support, interdisciplinary learning and support from experts within supportive continuous professional development may however provide practical solutions. In addition, teaching resources which are clear and simple to use and can be tailored to the language of the discipline and to student needs, may also provide an answer. Further research is planned using focus groups and questionnaires in order to provide a wider and deeper perspective from different disciplinary perspectives.

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