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Title Paper 4: The role of assessment in shaping knowledge engagement

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Abstract

This paper considers the nature and purposes of assessment, as understood by first year students in chemistry and chemical engineering. It takes a social practice theory approach to assessment, recognising it as a complex nexus of practices, shaped and bound by a variety of influences. In social practice terms assessment involves particular ways of engaging with knowledge that are shaped by students' perceptions of why they are being assessed and the nature of that assessment. Schatzki (1996, 2010) refers to these as the teleoaffective structures that help shape a given practice. I explore the different ways in which these students conceive of the purposes of assessment and the ways in which they relate these to their engagement with knowledge. The findings are discussed in relation to existing scholarship on assessment for learning (Sambell, McDowell, & Montgomery, 2013), sustainable assessment (Boud, 2000) and assessment for social justice (McArthur, 2016, Forthcoming).

Extended Abstract

Assessment shapes student learning and thus if we are interested in how chemistry and chemical engineering students engage with knowledge we need to explore the attitudes and approaches they have to assessment. This link between assessment and student learning is established across a broad range of literature under the umbrella of *assessment for learning* (Sambell et al., 2013; Taras, 2010). Here assessment is seen as conveying key messages to students about which parts of the curriculum are important. In addition, the activities of assessment are, it is argued, critical in shaping how students go about learning. Do they encourage an open disposition to knowledge, where the processes of working through problems and issues are as important as so-called right answers? Is there scope for complex forms of knowledge engagement, or is the assessment tied to processes of simplification for easier marking and grading?

The influence of assessment also extends beyond students' current learning and impacts upon their future learning and their longer term wellbeing (Boud, 2000; Boud & Falchikov, 2007). Thus assessment needs to be considered when seeking to understand the future professional lives of these students of chemistry and chemical engineering, along with their social wellbeing. This idea is taken further by the notion of *assessment for social justice* (McArthur, 2016, Forthcoming), which positions assessment in terms of its role in promoting individual and social justice. Here the focus is not simply on whether students believe their assessment experiences to be just, but on the extent to which the engagement with knowledge engendered by assessment promotes on-going dispositions and practices attuned with greater social justice. For example, are the technical aspects of disciplinary knowledge considered in their broader social context? Is the social application of specialist knowledge considered important when engaging with this knowledge?

To further explore these issues, this paper adopts a social practice theory approach to understanding how students think about assessment tasks, and the relationship to their engagement with

knowledge. Social practice theory is an umbrella term for a group of theoretical approaches to how we understand human actions and the potential for change. What they have in common is the focus on *practice* as the key realm of analysis for understanding human actions. Whereas other approaches might more commonly focus on a unit of analysis in terms of individual agency, cognition or social structures, here it is social practice that is the focus (Trowler, Saunders, & Bamber, 2009).

In this paper I particularly draw on the work of Theodor Schatzki, a second-generation practice theorist (Hui, Schatzki, & Shove, 2017). He describes practices as 'embodied, materially mediated arrays of human activity centrally organized around shared practical understanding' (Schatzki, 2001a, p. 2). A practice is 'a "bundle" of activities, that is to say an organised nexus of actions' (Schatzki, 2002, p. 71). Examples of practices can include management practices, policing practices, cooking practices, educational practices and assessment practices. Crucially, there are 'two overall dimensions' to any practice: 'activity and organisation' (71). Applied to assessment we can therefore understand assessment not simply as one event about which students and teachers have similar views, or indeed the same experiences. Instead, there are many aspects of assessment practice and many forms of assessment practices.

Schatzki outlines four concepts that enable the doings and sayings of a practice to 'hang together'. These are: '(1) practical understandings, (2) rules, (3) a teleoaffective structure, and (4) general understandings' (Schatzki, 2002, p. 77). In this paper I focus on Schatzki's notion of teleoaffective structure to consider the chemistry and chemical engineering students' attitudes to assessment. Teleoaffective structures embrace 'ends, projects, tasks, purposes, beliefs, emotions, and moods' (Schatzki, 1996, p. 89). Teleoaffective structures are hierarchical in nature, reflecting the different types of actions involved (Schatzki, 2013). This is important in an assessment context and provides a rich framework for analysing the different ways these students view the nature and purposes of assessment, while also making clear the link between these positions and the nature of their engagement with knowledge practices. If we think in terms of higher education, a teleoaffective structure can embrace many ends, such as: 'educating students, learning, receiving good student evaluations, obtaining good grades, gaining academic employment, and enjoying a successful academic career' (Schatzki, 2005, p. 472). Assessment, in turn, can be about motivating learning, checking learning, comparing students, engagement with knowledge, development of socially useful skills and knowledge and gaining official certification (and prestige) for future employment.

It is also important, however, to understand that in Schatzki's analysis the teleoaffective structures are 'properties of the practice and not the individual' (Schatzki, 2002, p. 80). They can, therefore, be 'unevenly incorporated into different participants' minds and actions' (80). This is represented in the diversity of responses from our student participants in this project. They highlight the ways in which there can be differences and even dispute around what is considered acceptable or appropriate in a given assessment practice, even though it remains identifiable as a specific practice. Furthermore, we have here powerful potential for change. If, for example, we wish to promote greater social justice through assessment practices then the ways in which students conceive the purposes of assessment provides one of the starting points for changing these practices. Similarly, if we wish to enhance these students' engagement with the disciplinary knowledge we need to understand the role they believe assessment plays in their own learning.

The preliminary findings from the first year of this study support the view that students are able to understand assessment as a complex set of practices, and can vary in the ways in which they conceptualise these practices and the ways they relate them to other practices within and outside university. These findings suggest some distinct disciplinary features about the ways in which assessment is understood, but also some broader themes of relevance to higher education more widely.

References

- Boud, D. (2000). Sustainable Assessment: Rethinking assessment for the learning society. *Studies in Continuing Education*, 22(2), 151-167.
- Boud, D., & Falchikov, N. (2007). Introduction: Assessment for the longer term. In D. Boud & N. Falchikov (Eds.), *Rethinking Assessment in Higher Education: Learning for the longer term* (pp. 3-25). Abingdon: Routledge.
- Hui, A., Schatzki, T. R., & Shove, E. (2017). Introduction. In A. Hui, T. R. Schatzki, & E. Shove (Eds.), *The Nexus of Practices: connections, constellations, practitioners* (pp. 1-7). Abingdon: Routledge.
- McArthur, J. (2016). Assessment for Social Justice: the role of assessment in achieving social justice. *Assessment and Evaluation in Higher Education*, 41(7), 967-981.
- McArthur, J. (Forthcoming). *Assessment for Social Justice*. London: Bloomsbury.
- Sambell, K., McDowell, L., & Montgomery, C. (2013). *Assessment for Learning in Higher Education*. London and New York: Routledge.
- Schatzki, T. R. (1996). *Social Practices: A Wittgensteinian Approach to Human Activity and the Social*. Cambridge: Cambridge University Press.
- Schatzki, T. R. (2001a). Introduction: Practice Theory. In T. R. Schatzki, K. Knorr Cetina, & E. von Savigny (Eds.), *The Practice Turn in Contemporary Theory* (pp. 1-14). Abingdon: Routledge.
- Schatzki, T. R. (2001b). Practice mind-ed orders. In T. R. Schatzki, K. Knorr Cetina, & E. von Savigny (Eds.), *The Practice Turn in Contemporary Theory* (pp. 42-55). Abingdon: Routledge.
- Schatzki, T. R. (2002). *The site of the social: a philosophical account of the constitution of social life and change*: University Park : Pennsylvania State University Press.
- Schatzki, T. R. (2005). The sites of organisations. *Organization Studies*, 26(3), 465-484.
- Schatzki, T. R. (2010). *The Timespace of Human Activity*: Lexington Books.
- Schatzki, T. R. (2013). A Primer on Practices. In J. Higgs, R. Barnett, S. Billett, M. Hutchings, & F. Trede (Eds.), *Practice-Based Education: Perspectives and Strategies* (pp. 13-26). Rotterdam: Sense Publishers.
- Taras, M. (2010). Assessment for learning: why, what and how. *British Educational Research Journal*, 36, 870-872.
- Trowler, P., Saunders, M., & Bamber, V. (2009). Enhancement Theories. In V. Bamber, P. Trowler, M. Saunders, & P. Knight (Eds.), *Enhancing learning, teaching, assessment and curriculum in higher education: theory, cases, practices* (pp. 7-15). Maidenhead: Society for Research into Higher Education & Open University Press.