Reconciling research and teaching as learning in design

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Abstract:
As designers working in academia we often experience a conflict between teaching and research, both activities competing for time. Also, as a practice-oriented discipline, we do not sit comfortably with the understanding of knowledge being learned in theory and applied in practice. However, we may just need to rethink research and teaching as a learning practice for both, expert and novice practitioners, in order to turn these conflicts into a productive condition for us and for our students. Knowledge is understood to be shared within a professional community (Wenger, 1998), and it is represented in texts that can be ‘taught’ and ‘learned’. New knowledge (and representing texts) can be created through ‘research’. A core issue to our experienced conflict between research and teaching is the understanding of knowledge as an invisible substance accumulated as theory, mainly by mental activity and stored in the brain (and in texts), and applied through practice. This understanding of knowledge requires a separation of researching and teaching. In this understanding, as researchers we need to produce ‘new’ knowledge through research activities (creating texts). As teachers we are understood to ‘have’ that knowledge (read texts), which we then need to ‘give’ to the students so they may acquire this knowledge. In design, a further split that produces tension for us is the differentiation between theoretical knowledge (represented in texts) and practical knowledge (experienced in doing), understanding these to be different types of knowledge. The gap is for design insurmountable, with
design practice suffering from feeling disconnected from academic knowledge (Kolko, 2010).

However, understanding knowing as a material-reflective practice (Schön, 1983) undoes the split between theory and practice, as well as between research and teaching. Knowing is here understood as taking place in practice (Gherardi, 2012). Expertise and ‘having’ knowledge are conceptualized as subject positions of counting as more or less knowledgeable, taking up positions of more or less power (Alkemeyer, Buschmann & Michaeler, 2016). Learning is materially developed as a reflection-in-action (Schön, 1983). Texts and other research artefacts are understood as produced through reflection on practice. Design practice has a long tradition in knowing through material practice (Cross, 1982), and many design research projects are practice-based (Vaughan, 2017).

Design could be conceptualized as a practice of learning that reconciles theory and practice, and research and teaching. A difference between experienced and novice practitioners of design should be made – and used as a productive tension between collaborators – without differentiating the activities of learning that encompass ‘doing design’, ‘doing design research’ and ‘doing teaching’. The suggestion is to understand design practice as a practice of doing, thinking, learning design, taking place in different contexts (in education, in organizations), in which different subject positions can be taken up (as novices, as experts).

The relationship between practitioners in different fields of design can be rethought. Experienced designers from ‘practice’ and from academia both are experts. Novice practitioners are students and beginners in design. The relationship between experts and novices is subject to learning and teaching (in practice), and learning is effecting the changing of positions. Practitioners thus move from being less experienced to being more experienced designers. Design practitioners and their expertise can be conceptualized as being constituted through learning in practice, and a differentiation between practical and theoretical learning does not need to be made anymore.

Rethinking learning as taking place in a practice in which both experts and novices participate, invites the incorporation of research topics in this learning practice. Thus, research and teaching can take place at the same time in the same context with the same practitioners, as an added layer of activities. This conceptualization thus opens up design practice as a rich field of research, ready to be material-reflectively exploring the questions of research and documenting its findings in texts and other research artefacts. The full paper will illustrate this concept of learning in a practice-based design research project with three design student cohorts of varying experience and with design practitioners from both academia and practice.


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Ruth Neubauer researches design as a methodology of innovation and how it evolves in design practice. She explores design through the lens of material-semiotic practice. Ruth holds a PhD in Design Innovation from Loughborough University London; she originally graduated with a degree in painting and graphic art from the Academy of Fine Arts Vienna. She worked in the digital design industry in Vienna, London, and Brighton; she is now assistant professor in Human-centred Design at the New Design University in Sankt Pölten, and a lecturer in Strategies in Design at the University of Art and Design Linz.