
Numeracy as Social Practice

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What do we mean by “numeracy as social practice”? There is a growing body of research that has suggested that, similarly to literacy, what counts as numeracy and what it means to engage in numeracy cannot be understood apart from the social, cultural, and political contexts in which the mathematical activity is embedded (e.g. Harris, 1991; Hoyles, Noss, Kent, & Bakker, 2010; Lave, 1988; Mukhopadhyay & Roth, 2012; Nunes, Schliemann, & Carraber, 1993; Reder & Brynner, 2009; Saxe, 1991; Street, Baker, & Tomlin, 2005). The symposium brings together researchers who adopt a social practices approach to their research in numeracy, and those who are interested in the implications of this approach to numeracy for research, pedagogy, and policy.

Aims of the Symposium

In this symposium, we explore how a social practices perspective of numeracy can contribute some critical insights to understanding and engaging in numeracy research, numeracy pedagogy, and educational policy. A social practices perspective focuses on what people do with numeracy through social interactions in particular contexts, rather than focussing on isolated mathematical skills. Numeracy practices can only be understood in relation to the social, cultural, historical, and political contexts in which they take place. The aims of the symposium are to 1) survey the range of theoretical resources

and methodologies that researchers of numeracy and mathematics are using to research numeracy/ mathematical practices; 2) discuss methodological challenges that arise in researching practices; and 3) examine the practical and political implications of findings from social practices studies of numeracy in research, pedagogy, and policy in mathematics education.

Rationale of the Symposium in Relation to MES

MES is a forum for exploring the social, cultural, political, and ethical dimensions of mathematics education. Viewing numeracy as a social practice is one way of making explicit how people's uses of mathematics (what we would call numeracy practices) are socio-culturally contingent. This perspective acknowledges and indeed focuses on ways in which certain numeracy practices are deemed more worthy than others and legitimised in official curricula and policies, while other practices are not. This perspective explicitly takes into account questions about power relations: whose knowledge counts, as well as ethical questions about inclusion and exclusion of people's knowledge based on potentially arbitrary measures of legitimacy.

There have been many MES papers that have interrogated mathematics/ numeracy as social practices or through compatible lenses as the social practices perspective (e.g. Baker, 1998; Coben, 1998, 2010; d'Ambrosio 1998; Evans & Tsatsaroni, 1998; Kaner, 2002; Knijnik 2008; Matos & dos Santos, 2008; Mukhopadhyay, 2013; Tomlin, Baker & Street, 2002). Across the contributions from these papers, we see studies drawing on theoretical resources including New Literacy Studies, Literacy as Social Practice (LSP), socio-cultural activity theory, Gramsci, ethnomathematics and discourse analysis. The papers report on studies of numeracy/ mathematical practices in diverse contexts (e.g. children's and adults' numeracy practices, home and school numeracy practices, numeracy in social movements). The symposium will enable researchers who bring these and other theoretical resources and research contexts to come together to discuss how the studies they have undertaken and the methodologies they employed provide particular insights into numeracy as social practice. It is a forum for a critical reflection on the possibilities afforded by social practices studies of numeracy.

Proposed Conduct of the Symposium

The symposium will begin with a brief survey of previous MES contributions to the concept of numeracy as a social practice, and will focus on identifying the theoretical resources that these contributions have drawn upon. It will then outline methodological implications of researching numeracy as a social practice, and the significance as well as the challenges of ethnographic approaches. Examples of ethnographic approaches used in different contexts will be presented as discussion starters. Thirdly, questions of how social practices studies of numeracy can inform pedagogy and policy will be posed, and participants will be invited to discuss both the practical as well as the political implications of their responses.

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