



## **TSG 54**

# **SOCIAL AND POLITICAL DIMENSIONS OF MATHEMATICS EDUCATION**

### **The Organizing Team**

Chair: Paola Valero, Stockholm University, Sweden

Co-chair: Kate le Roux, University of Cape Town, South Africa

Members:

Andrew Brantlinger, University of Maryland, USA

Murad Jurak, American University of Beirut, Lebanon

Xuhui Li, California State University, Long Beach, USA

### **Framing the TSG**

The Topic Study Group “Social and political dimensions of mathematics education” was first formed in ICME-13. Out of the group there came two publications (Jurdak & Vithal, 2018; Jurdak, Vithal, Freitas, Gates, & Kollosche, 2016), one providing an overview of important trends in the research in this topic, and another collecting a series of papers presented in the conference. The work of the group in ICME-14 will take as a point of departure the previous work at ICME-13 and will move forward the discussions on research and practice connected to the area of this working group.

That mathematics education practices and research are social and political is now an accepted statement in the international mathematics education research community. As Jurdak and Vithal (2018) noted, the sociopolitical understandings of mathematics education are moving from the periphery to the centre of attention. Such a move is seen in, for example, the explicit naming of this area as a strand in mathematics fora and publications; the use of sociopolitical approaches in other areas of mathematics education, as existing understandings in the latter fall short in explaining current experiences of the multiple participants; and the adoption of sociopolitical perspectives to “interrogate” explain and develop mathematics education, not just in contexts and education systems considered to be marginal, but also in those considered relatively affluent or dominant.

This move, however, does not mean a unified agreement on the ways the “sociopolitical” is conceptualized in research and how it is unfolded in practice. But what seems to be a common understanding is the idea that mathematics education is intricately connected with the governing of education through educational policies, the distribution of value and resources in society, and the

inclusion and exclusion of different types of students according to their performance in mathematics. It is also agreed that to understand mathematics education as political requires us to bring into operation theoretical frameworks that allow researchers and teachers to think about power and politics in/through the practices of mathematics education and mathematics education research. In other words, a sociopolitical understanding of mathematics education invites us to look at the relationships between practices of teaching and learning in mathematics and the conditions which position mathematics education as important in society.

Since the last ICME-13, there have taken place unexpected events in the world that evidence a series of deep changes, which constitute a new re-configured context for education in general and for mathematics education in particular. The French philosopher Bruno Latour (2017; 2018) proposes to understand those apparently disconnected events and changes as inter-connected trends. The advance of right-wing, nationalist parties in elections around the world, the increase in economic, racial, ethnic, gender inequalities that threaten justice and democracy, the increase in migrations and people mobility due to war as much as to economic reasons, and the systematic denial of global warming by economic and political actors are all part of the current “climate change”. Climate change, Latour argues, is not simply the alteration in climatic patterns. “Climate” refers, in a broad sense, to a new configuration of the “relations between human beings and the material conditions of their lives” (Latour, 2018, p. 1). In other words, climate change is a whole new geo-economic-political configuration that brings together human beings and non-human beings in ways that transform and put at stake their very same conditions and forms of existence.

Latour (2018, p. 2) argues that in this “new landscape”, we need a “map” of the positions imposed by it. His thoughts offer a provocation to think about and study mathematics education as sociopolitical in this landscape and at this moment in history. In different countries in the world the events mentioned above have already had direct or indirect manifestations in mathematics education. The overall question that can be asked is: *How does the recent development of mathematics education relate to such “climate change”?*

### **Aims and guiding questions**

The main aim of the work of TSG 54 for ICME-14 is to revisit the advances reported in ICME-13 in the light of the current landscape of climate change. The following guiding questions indicate relations that need further mapping and interrogation:

- How do national and global economic and political interests relate to the changes in material conditions in which mathematical and mathematics education practices take place?
- What are the relations between policy and the directions they steer and mathematics education practice and research?

- How does the meaning of key concepts used in sociopolitical research - such as access, equity, quality, inclusion, etc. - emerge in particular space and time configurations? How might these be different at this time, and why?
- What do theories and methodologies of sociopolitical research offer to understand the articulation of mathematics education and the current “climate change”?
- How do activism and action connect to the questioning and/or promotion of mathematics education in the current “climate change”? Which forms of action or activism can emerge?

### **Call for contributions**

More concretely, the TSG calls for contributions that explore the guiding questions through related topics such as the following:

- The impact of the current geo-economic-political configuration on the material conditions in which mathematical and mathematics education practices take place.
- The role of national policies in mathematics education practice and research.
- Responses of mathematics educators and education to poverty, migration, racism, segregation, etc.; responses of people in situations of poverty, migration, racism, segregation, etc. to mathematics education.
- Mathematics education and processes of inclusion and exclusion of different types of students.
- Theoretical frameworks and methodologies that allow researchers and teachers to think about power and politics in mathematics education.
- Meaning of the ‘sociopolitical’ in particular temporal-spatial-cultural contexts.
- Activism and action to question and promote mathematics education in the current geo-economic-political configuration.

Proposals can address either the broader guiding questions or the related topics. We invite authors to think about how their mathematics education research and practice relates to the configuration of “climate change” in their localities and out of them. An explicit signaling of how the proposal advances existing research or practices in the new landscape of “climate change” is appreciated. Proposals that identify other questions and topics of relevance for the aim of the TSG are also welcomed as far as they are justified - the questions and topics listed here are not exhaustive, but indicative of the framing of the TSG. Finally, all proposals should follow the ICME guidelines for submission.

### **References**

Jurdak, M. E., & Vithal, R. (Eds.). (2018). *Sociopolitical dimensions of mathematics education: From the margin to mainstream*. Cham, Switzerland: Springer.

Jurdak, M. E., Vithal, R., Freitas, E., Gates, P., & Kollosche, D. (2016). *Social and political dimensions of mathematics education*. New York: Springer.

Latour, B. (2017). *Où atterrir —comment s'orienter en politique—*. Paris: La Découverte.

Latour, B. (2018). *Down to earth: politics in the new climatic regime* (English edition. ed.). Cambridge, UK: Polity Press.