

Editorial

The first article by **Alant**, a science and technology educator and researcher interested in the experiences of young people who continue to learn science and technology in various relatively deprived contexts, engages with research that focuses on unearthing the inequities in science and technology education. **Alant** explores the role of the ESKOM Expo for Young Scientists as a particularly salient node in the constitution of young learners' identity as prospective participants in the field of science and technology. **Alant** argues that the institution of the ESKOM Expo, while undoubtedly useful as a means of opening up young learners' horizons of science and technology, is still not sufficiently flexible, both at a conceptual and an organisational level, for it to be the vehicle of technological empowerment it is intended to be.

Avalos, Téllez & Navarro reviews some of the problems faced by teacher education in general and in Chile specifically, focussing on the effects of six teacher education programmes on pre-service primary level teachers' learning of mathematics and mathematics pedagogy. This links directly to the third and fourth paper by **Van Putten, Howie and Stols** and **Essien** respectively which also deals with the preparation of pre-service teachers to effectively deal with the challenges of teaching Mathematics. **Van Putten, Howie and Stols'** paper centres on an investigation into pre service mathematics education students attitudes towards, as well as their level of understanding of Euclidean geometry. **Van Putten, Howie and Stols** conclude that the geometry module did change the students' attitude towards geometry, but did not bring about a sufficient improvement in their level of understanding necessary for the adequate teaching of geometry. **Essien** reports on an investigation into what teacher educators consider to be best practices in how to prepare pre-service teachers to effectively deal with the challenges of teaching Mathematics in multilingual contexts, and how what teacher educators consider as best practices inform their own classroom practice. **Essien** concludes by cautioning against the adoption of imported practices from other countries. **Essien** argues that in delineating practices that are more likely to work in the South African context, it is important to bear in mind the distinctive nature of multilingualism in South Africa.

Olivier, de Lange and Wood describe how they attempted to make teacher voices audible via an intervention based on participatory visual methodology. **Olivier, de Lange and Wood** argue that teachers who work in economically and socially disadvantaged environments have first-hand knowledge of the challenges that can impede teaching and learning, yet their voices are often ignored when researchers and policy-makers attempt to address such issues. **Olivier, de Lange and Wood's** article illustrates that teachers' lived experiences can be explored and made visible by means of participatory videos. The medium of participatory video allows teachers to be proactive in making their voices heard and the final product has the potential to influence other role-players in the education system.

In the phenomenon of xenophobia as experienced by immigrant learners in Johannesburg inner city schools, **Krüger and Osman** describe how xenophobia is experienced by a small selection of immigrant participants in five inner city schools in Johannesburg. Their findings make a compelling argument in support for the need for anti-xenophobia education in the schools under scrutiny.

In our seventh article, **Petersen and Henning** addresses the issue of the theory-practice divide in pre-service teacher education from the viewpoint of design-based research (DBR). Using the example of a course in service learning (SL), the authors discuss their reflection on a curriculum that failed to help the students convert declarative knowledge to procedures of pedagogy, or to internalise this knowledge to become part of their disposition as teachers.

Sung's paper reviews neoliberal and libertarian understandings of educational equality and democratic education and interrogates the rationale for the justification of markets in education. **Sung** is critical of the notion of possessive individualism as a principle of democratic education on the grounds that such a notion explains human action only at the individual level, as a matter of free will, and not as a part of the cultural and political struggle for nondiscrimination. **Sung** provides reasons why the claim to equal respect and recognition needs to be given more importance in education and argues for the social responsibility

to secure not only students' educational opportunities, but also their opportunity to reflectively consider what counts as equal value.

In our final article for this issue, **Ebrahim** examines the dominant discourses teachers in early childhood education (ECE) used to produce understandings of children and educational practice for them. The discourses of biology, development and difference are discussed. **Ebrahim** show that teachers unproblematically use dominant discourses which narrow possibilities for them to understand children. This in turn limits their capacity for shaping contextually relevant practice. **Ebrahim** concludes with a brief discussion on worthy areas to focus on in order to map a way forward for developing the skills and capacity of teachers in ECE.

Overall, the articles in this edition collectively do flag key issues, and implicitly set out an educational agenda that is both a call for change (to fight the damaging dimensions of discrimination), a call to work (to deepen the research that can examine teacher experiences), and a call to teach (mathematics, ECE, values).

Dennis Francis
Editor in Chief