

# A J R M S T E

Special Issue: Socially responsible SMTE

What is relevant Science, Mathematics and Technology Education (SMTE)? What should be the focus of primary and secondary school SMT education? Should SMT education focus on preparing learners for future studies in SMT or should it provide learners with a solid background to address their current situation and prepare them for a life out of school? These have been questions of debate for a long time. We take the view that although SMT education has been seen as a driving tool for development, there are still questions about whether the way SMT is taught in schools in Africa and elsewhere provides learners with the knowledge and skills needed to take part in, and secure human development. We support a socially responsible SMT education, which as described by Kyle (2006 - International Journal of Science and Mathematics Education, 4, 1-18) drawing from the work of Habermas (1972), is an education that not only focuses upon development of learners' technical knowledge interests, where the aim is to understand nature, but also their emancipatory knowledge interests, where their experiences with science are self-involving and socially just.

The objective of this special issue is to promote the notion that one of the goals of SMT education should be to facilitate learners' ability to identify possibilities, to seek challenges, to use their imagination, and to transform. SMT education ought to meet the needs of both our global and local societies (Kyle, 2006). SMT education ought to expand learners' participation and

decision-making with respect to complex socio-environmental issues, as well as be responsive to learners in the context in which they live (Gray, Colucci-Gray, & Camino, 2009 - Science, Society, and Sustainability: Education and Empowerment for an Uncertain World, Routledge). Currently, SMT education in several countries is more concerned with transferring canonical knowledge than with facilitating students' conceptualization and understanding of relevant scientific knowledge for the purpose of community development and social transformation. As a result, in many cases, SMT education is perceived as irrelevant within most local communities, since it does not contribute to the knowledge necessary to transform and improve the local situation and address issues of sustainable development.

## Call for Papers

We invite contributions from researchers in this area. We encourage papers that discuss research findings, in particular those with an African perspective and with African solutions. Theoretical papers will also be considered. Contributions should follow guidelines of AJRMSTE. Kindly submit articles - indicating your desire to be considered for this Special Issue - to Fred Lubben, Editor AJRMSTE, [lubbenf@cput.ac.za](mailto:lubbenf@cput.ac.za) AND [fel1@york.ac.uk](mailto:fel1@york.ac.uk). The deadline for submission is **30 November 2010**.

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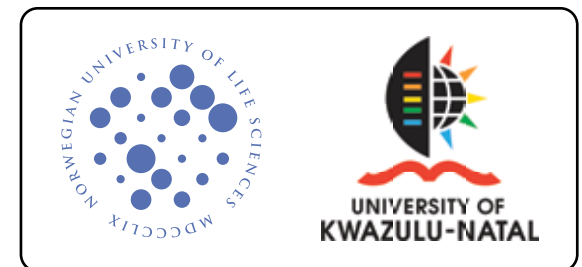
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# PROJECT SUSTAIN

## Sustainable Science and Technology Education



## What is Project SUSTAIN?

Project SUSTAIN is oriented towards sustainable Science and Technology education. The Southern Universities involved in the project are the University of KwaZulu-Natal and the University of Pretoria in South Africa, Chancellor's College in Malawi and the University of Zambia. The North is represented by the University of Life Sciences, the University of Bergen and the University of Oslo. By building capacity among science and technology educators, Project SUSTAIN aims to generate knowledge and research methodologies that explore and promote development of and access to a socially responsible Science and Technology Education.



*Use of Mathematics manipulatives in Malawi, Kasungu, Oct 2009*

## What are the objectives of Project SUSTAIN?

There are two main objectives to the project. **First**, it encourages joint research on various aspects relating to how more students can gain access into Science and Technology Education. **Second**, it seeks to explore new ways of making Science and Technology Education more relevant and socially responsible to students with various backgrounds and interests.



*Community gardening in Malawi, Kasungu, Oct 2009*

The Project builds on the notion that Science and Technology Education needs to be transformed in order to secure sustainable development and meet the needs of our global and local society. It also builds on the notion that the education of teachers and teacher education is crucial.

In total, the project has provided grants, supervision and courses to ten masters and eight PhD

candidates who are pursuing research and development endeavors relevant to the overall goals of Project SUSTAIN



*Project Sustain workshop in Grahamstown, Rhodes University, Jan 2009*

## For more information about the project, please contact

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