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Physics in isiZulu: how far should we go?

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The language of physics instruction has long been an important and controversial topic – especially in South Africa. The author considered this issue in the refinement of a science show presented at Unizulu Science Centre. The show uses music and musical instruments to introduce students to topics around sound and waves. In previous presentations at SAIP conference, the author has reported on an extensive study of this show (conducted towards a masters degree) which measured what students learnt from the show and which revealed difficulties for students coming from rural schools when contrasted with those from urban and township schools. As an extension to this study (conducted towards a doctoral degree) the show was presented to the weaker rural group in isiZulu, while the survey instruments used were kept in English. Significant gains in student confidence and learning were measured, compared with that previously achieved by similar rural groups. While performed in the context of science shows in science centres, this study nevertheless has relevance to all educational interventions in physics. Whatever the challenges, it may be argued that mothertongue instruction is preferable wherever possible for maximising student understanding and engagement. The implications of these findings for presenting further Physics courses in isiZulu will be outlined for discussion.

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