

Learner Perceptions of Inquiry in Science Fair Projects: A Case Study of a Regional Science Fair in South Africa

Mdutshekelwa Ndlovu

*Stellenbosch University Centre for Pedagogy (SUNCEP), Private Bag XI,
Matieland 7602, South Africa
Telephone: +27218083484, Fax: +27218083000, E-mail: mcn@sun.ac.za*

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ABSTRACT The purpose of this study was to compare 334 learners' experiences of scientific inquiry in science fair projects and science classrooms. A mixed methods design was used involving a survey questionnaire with closed and open-ended items. The closed items measured the extent to which learners experienced inquiry in science fair projects and science classrooms. The open-ended items identified the main sources of science classroom and science fair project support. Findings were that the science fair projects were perceived to have offered significantly more inquiry experiences than the classroom. Internet and laboratory access, teachers, middle-class parents and public facilities such as libraries, Internet cafes, and science centers were the main sources of support. Recommendations are that science fairs should be reconfigured to allow for mass participation. School laboratory, library and IT infrastructure must be expanded to reduce inequalities in learners' cultural capital. Inquiry-based professional development support should be offered to teachers.