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# Training field mapping geologists; the Council for Geoscience (CGS) Field School experience

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The general shortcomings of new geoscience graduates with respect to field experience is not a problem unique to South Africa, but is probably most acutely felt in a national geological survey where geological field mapping is core to many functions. The universities struggle with this aspect for a number of reasons, most notably large student numbers and shortages of resources, and a bridge is required between the training institutions and the project needs within the professional working environment.

The CGS recognised this problem and first embarked on running a Field School in 2005 with the aim of equipping the young geologists to be competent and confident field mappers. The objectives were to enhance fundamental mapping skills (preparing base maps, field observations, collecting geological data and preparing final reports/maps) as well as introduce project planning and logistics considerations. Outside of these formal learning aspects the school has included informal skills such as adopting a team culture and appreciating diversity. These are particularly relevant in terms of the in-house training that is being provided and preparing young geoscientists as they begin their careers.

Another advantage of the Field School being essentially internal is that the trainer: student ratio is low, and has been maintained at 1:3 since inception. Thus the training remains very hands-on and practical, and is able to be flexible and can be modified to deal with individual needs and capabilities. This aspect has become increasingly important as the nature of the students has changed over the last 10 years; from being totally sourced from, and expected to work within, the Mapping Competency, students now come from various competencies, often with different skill sets and expectations.

Since its inception in the geologically diverse northern Limpopo Province, the school has gone through a series of changes over the years, from being simply an introduction to field mapping, to a comprehensive full year's programme linked to the statutory mapping programme of the CGS, through to being a short though intensive course. This change has largely been in response to internal constraints within the CGS organisation, including a larger intake of interns and evolving project emphases. The positive spinoff has been that in order to expose the young graduates to a greater variety of rocks, the school has, through the introduction of a 'geotour' across the country's stratigraphy, been able to take advantage of the geological superlatives that South Africa boasts to broaden their outlook while maintaining a challenging and intensive mapping component.

The original aims of providing a solid foundation in the mapping and fieldwork techniques of traditional field geology have been preserved, even as we venture into modern digital mapping, and at the same time our new generation of field geoscientists are becoming increasingly aware of the environment we work in, from both the natural and community perspectives.