

Using Kolb's Experiential Learning Theory to Assess Work Integrated Learning (WIL) in Geomatics

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SUMMARY

The Cape Peninsula University of Technology (CPUT) is the only University of Technology (UoT) in the Western Cape, Cape Town, South Africa. The Geomatics programs are offered in the Department of Civil Engineering and Geomatics, one of eight departments in the Faculty of Engineering and the Built Environment. In contrast with traditional universities, the third year of the Diploma in Geomatics contains a six-month experiential learning module in which students work under the supervision of a qualified mentor in the industry. The curriculum module is called Work Integrated Learning (WIL). The assessment of WIL students has traditionally involved checking that the students perform tasks aligned with knowledge areas prescribed by the South African Council of Geomatics (SAGC). It also involves checking that the student logbooks describe the tasks performed, the number of days relating to each task, and that the supervisor or mentor has signed each page of the logbook. This assessment approach has been important in ensuring students work under a mentor's supervision. It has also helped the university ascertain the type of work the students are engaged in. However, this approach has significant shortfalls, especially the limited opportunities for reflection on the part of the students. This study sought to apply Kolb's Theory of Experiential Learning (KTLH) within the WIL program at CPUT. Kolb's model highlights the importance of critical reflection of an experience in the learning cycle. Reflection allows the student to recount and evaluate their experience and then apply their experience to doing the task better. This study involved observing third students repeatedly perform a series of Geographical Information Science tasks whilst refining their methodology based on their experiences. Considering the practical nature of Geomatics, this study demonstrates a pedagogical for Universities of Technology to facilitate and examine student learning from experience.

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