

Reimagining Work-Integrated Learning Assessment in Geomatics: A Multi-Theoretical Perspective

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SUMMARY

In today's higher education landscape, practical experience is increasingly recognised as essential for developing graduates who can navigate complex professional environments. Work-Integrated Learning (WIL) serves as a bridge between academic learning and industry demands, with the Cape Peninsula University of Technology (CPUT) exemplifying this through its Geomatics Diploma program. The Work Preparedness Program (WPP) for third-year Geomatics students has been restructured to strengthen employability through competency-based learning, digital engagement, and comprehensive skill development. Beyond technical training, the program incorporates emotional intelligence, ethics, and professional practice, aligning with broader higher education goals of preparing graduates with the knowledge, skills, and dispositions required for complex workplace contexts.

This paper reflects on the transformation of WIL assessment within the Department of Civil Engineering and Geomatics at CPUT. Moving beyond traditional logbooks, the program now integrates a structured WPP, a project-based Portfolio of Evidence (PoE), and oral presentations, providing students with opportunities for authentic, reflective, and socially situated learning. Grounded in experiential learning theory, authentic assessment, Constructive Alignment, Transformative Learning, and Social Learning Theory, this study examines the rationale, implementation, approaches to student engagement, and observed outcomes of the redesigned assessment. Key findings include enhanced student engagement, improved industry–university collaboration, and strengthened soft skills critical for professional practice. The paper highlights how this integrated approach supports the development of reflective, adaptable, and workplace-ready Geomatics graduates, meeting both academic and professional standards as affirmed by the Council on Higher Education (CHE) and the South African Geomatics Council (SAGC).

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