Learning by design: enhancing the digital literacy of adult learners in a blended learning environment

The context for my study is the postgraduate Diploma in Nursing Education offered by the Department of Nursing and Midwifery at the Health Science Faculty of Stellenbosch University. To attract a wider range of adult learners, the programme was adapted to a blended learning approach consisting of a combination of block contact and online learning. Low throughput, completion rates, and a lack of student engagement exposed the need to explore the challenges faced by adult students. The study aimed to identify these challenges and to investigate ways to employ technology to enhance adult learners' digital literacy towards effective learning, using the Integrative Learning Design Framework (ILDF).

My study found that no changes to the structure or course content were made after the adoption of a blended learning approach, although students expected online educational resources and support. The lecturers retained their teaching philosophies, had little interaction with students, and limited interest in integrating technology in modules. I investigated adult learners' experience, knowledge, expertise, needs and expectations and found that they expected the integration of technology to be intuitive, user-friendly, engaging, valuable and personalised.

The primary output of this study is the design of a series of interventions in Educational Design Research (EDR) namely: a technical guideline for a course structure, a generic template for redesign of modules, a customised digital literacy course, and a multimedia example in the didactics module. Digital technologies can be incorporated in teaching and learning through understanding adult students' social context and the variables that influence technology adoption. Jarvis's Experiential Learning Theory guided the research and its interpretation.

Finally, I conclude that the design principles in this study are feasible and enhance the student experience by adding the required resources to enable the digital literacy of adult students.

Zenobia Davidse Promoter: Prof Magda Fourie-Malherbe Co-promoter: Dr Antoinette van der Merwe