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# THE ENHANCEMENT OF SELF-DIRECTED LEARNING THROUGH THE ENGAGEMENT IN PROBLEM-BASED LEARNING ACTIVITIES DURING A PROFESSIONAL DEVELOPMENT PROGRAMME ON INDIGENOUS KNOWLEDGE FOR TECHNOLOGY TEACHERS

#### Abstract:

The aim of this qualitative case study was to explore the affordances of a short learning programme to sensitize Technology teachers towards self-directed learning regarding the infusion of indigenous knowledge in the curriculum. The short learning programme on indigenous knowledge was structured according to the steps of problem-based learning. Technology teachers participated in this short learning programme as part of their continuous professional development. Among others, the national curriculum accentuates active learning as well as the appreciation of indigenous knowledge as a valued resource of history and culture. It is essential that Technology teachers are supported to acquire indigenous knowledge themselves and enable them to effectively guide learners in this regard. Accordingly, a short learning programme was developed and implemented for the purpose of the training of Technology teachers. Qualitative data was collected through reflective sheets, a focus group interview, as well as photographic artefacts, in order to generate an integrated qualitative dataset. During meticulous thematic qualitative data analysis, using protocol coding (a priori coding) data was organised and grouped into related themes. The emerging themes not only provided evidence for the acquisition of problem-based learning skills, but also revealed the inherent ability of problem-based learning related to indigenous knowledge, to enhance self-directed learning abilities among Technology teachers.

## **Keywords:**

indigenous knowledge, problem-based learning, professional development, self-directed learning, technology teachers

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