Fostering Intrinsic Motivation and Self-Directed Learning through Cooperative Learning in Blended Business Education

Dorothea Lowes
Research Unit Self-Directed Learning, North-West University, Potchefstroom, South Africa

Christo van der Westhuizen
Research Unit Self-Directed Learning, North-West University, Potchefstroom, South Africa

Chantelle Bosch *
Research Unit Self-Directed Learning, North-West University, Potchefstroom, South Africa

Abstract

Introduction, Problem Statement and Research Questions: South African Technical and Vocational Education and Training Colleges (TVETCs) are mandated to equip a diverse, often marginalised learner population with workplace-relevant skills. However, these institutions face multiple challenges: learners demonstrate low levels of intrinsic motivation (IM) and self-directed learning (SDL), while access to digital infrastructure remains unequal due to persistent socio-economic disparities (Nhlongo, 2020). Although blended learning (BL) has been introduced to expand access and modernise pedagogy, its effectiveness is hampered by learners' limited digital competence, weak motivation, and passive engagement (Gaffoor & Van der Bijl, 2019; Magut & Kihara, 2019;).

In many TVET classrooms, conventional instructor-led methods limit opportunities for learner autonomy and self-regulation, thereby hindering the development of critical 21st-century competencies such as collaboration, problem-solving, and critical thinking (Nhlongo, 2020). To address these limitations, this study introduces the Cooperative–Self-Directed–Blended Learning (C–SD–BL) framework—a structured pedagogical model that integrates cooperative learning (CL) strategies into blended learning environments to promote intrinsic motivation (IM) and self-directed learning (SDL).

This study was guided by two central research questions:

1. How can cooperative learning strategies be effectively integrated into blended learning to enhance intrinsic motivation and self-directed learning in TVET business education?
2. What is the impact of the C–SD–BL framework on learner engagement, autonomy, and digital competence?

Methodology: This study employed a design-based research (DBR) methodology to iteratively co-develop, implement, and evaluate the C–SD–BL framework. A concurrent mixed-methods design allowed for triangulated insights. Participants included Level 3 Business Practice students ($n \approx 60$) from a South African TVETC, purposively assigned to either an experimental group (receiving the intervention) or a control group (traditional instruction). The experimental group engaged in CL tasks—such as rotating roles, peer teaching, and inquiry-based group projects—using Moodle as the primary BL platform.

Quantitative instruments included the Intrinsic Motivation Inventory (IMI), Self-Directed Learning Instrument (SDLI), Cooperative Learning Application Scale (CLAS), and the Community of Inquiry (CoI) survey (Garrison et al., 2000). These were administered pre- and post-intervention to assess changes in SDL and IM. Qualitative data from focus groups, interviews, and learner reflections were thematically analysed using Atlas.ti, with a coding schema based on both inductive and deductive categories.

Lecturers who facilitated the experimental group received training in CL facilitation, digital pedagogy, and autonomy-supportive teaching, ensuring the intervention's theoretical and practical fidelity.

Results and Conclusion: Quantitative results indicated statistically significant improvements in SDL behaviours, perceived competence, and engagement among learners in the experimental group. Thematic analysis identified four emergent outcomes:

- Learner engagement and peer collaboration: Learners felt more responsible, motivated, and engaged through structured group tasks and reciprocal feedback.
- Digital competence and equity: Peer mentoring enabled less digitally proficient students to navigate BL platforms, reducing participation barriers.
- Autonomy and agency: Learners demonstrated ownership over their learning, engaging in self-regulation and collaborative decision-making.
- Facilitator support and motivation: Educators played a critical role in scaffolding, affirming competence, and encouraging persistence through autonomy-supportive practices (Ryan & Deci, 2000).