Editorial: The relevance of self-directed learning in 2025, 50 years after Knowles' classic definition

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The year 2025 commemorates 50 years since Malcolm Knowles presented his classic definition of self-directed learning. Knowles (1975:18) describes self-directed learning as "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources, choosing and implementing appropriate learning strategies and evaluating outcomes."

Knowles' definition came 5 years after the publication of Alvin Toffler's (1970) seminal and futuristic work, *Future Shock*. Toffler claims that "[t]he illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn" (1970:414). A brief look at educational trends since 1970 gives weight to this prediction.

Education in the 1970s was characterised by teacher-centred approaches and physical media in classrooms, such as, blackboards and paper-based resources. In the 1970s, films and overhead projectors were regarded as cutting-edge technology (Mohamed & Selian, 2025). In 1975 Knowles already realised that schooling and the world of work were going to change rapidly and exponentially. He makes reference to Alvin Toffler's book in the following statement:

> The simple truth is that we are entering into a strange new world in which rapid change will be the only stable characteristic. And this simple truth had several radical implications for education and learning. ... Thus, the main purpose of education must now be to develop the skills of inquiry. When a person leaves schooling he or she must not only have a foundation of knowledge acquired in the course of learning to inquire but, more importantly, also have the ability to go on acquiring new knowledge easily and skilfully the rest of his or her life. (Knowles, 1975:16–17)

The dawn of the World Wide Web in 1989 fuelled this exponential change (Jacksi & Abass, 2019). Banerjee, Sinha and Pandey (2024) describe this rapid change as a "revolution" that requires learners to take responsibility for and manage their own learning. The year 2025 has been characterised by advanced technology, artificial intelligence and different expectations of teaching and learning. These expectations include recognition of interactive and learner-centred approaches as well as the need to develop problem-solving, critical-thinking and creative-thinking skills – all attributes of self-directed learning (Mohamed & Selian, 2025). We claim that, 50 years after the classic Knowles definition, self-directed learning is more relevant than ever in navigating today's world of complexities and opportunities.

Self-directed learning has become a *sine qua non* in the complex landscape of the 21st century, characterised by rapid transformation and rapidly changing information. Consequently, learners should be assisted to develop the skills required to take responsibility for their own learning. Unfortunately, many classrooms and learning environments are still characterised by a transmission-mode pedagogy which does not enhance self-directed learning (Mentz & De Beer, 2019; Mentz & Oosthuizen, 2016). Even today, the focus on high throughput rates in summative assessments often results in the marginalisation of pedagogies such as problem-based and cooperative learning, both of which support the development of self-directed learning skills. An important concern is whether self-directed learning receives sufficient emphasis in both pre-service and in-service teacher education. A related concern is, therefore, whether teachers possess the knowledge and skills to use processes and provide contexts that develop self-directed learning abilities.

In this Special Edition we shed light on various themes related to self-directed learning across various educational contexts, including formal schooling (both primary and high school) as well as higher education (specifically pre-service teacher education). These themes provide insight into how the changes that Knowles and others predicted, have influenced the modern-day learning environment and how self-directed learning is even more applicable today than it was 50 years ago.

Artificial Intelligence (AI) has significantly changed the educational landscape offering personalised learning tools, immediate feedback and adaptive learning systems to enhance learning experiences (De, 2024). In his article, Maphalala (2025) explores how AI can enhance self-directed learning in open and distance e-learning. He shows how AI tools can enhance autonomy, self-monitoring and motivation, which are key attributes of self-directed learning.

Maipath and Zulu (2025) investigate how a mentoring culture between teachers with various levels of experience within professional learning communities could enhance self-directed learning. In their article, they explore how self-directed learning within professional learning communities can support teachers facing curriculum changes – an ongoing challenge in the current education system.

Oberholzer and Mestry (2025) investigate how mentoring could drive pedagogical change rather than leave educators in isolation – the latter causing a lack of confidence to move new initiatives forward. In their article, they discuss how the use of mentoring can drive significant change and promote self-directed learning.

Van Zyl and Bailey (2025) explore how technology-supported cooperative learning can facilitate deeper self-directed learning. To address the challenges of future careers, to adapt and to be resilient, and to face volatility, uncertainty, complex problems and ambiguity, Van Zyl and Bailey argue that learners need to take ownership of their learning needs and transfer existing knowledge and skills to solve problems in new contexts – all attributes of self-directed learning.

Özkul (2025) explores the connections between self-efficacy, self-directed learning and classroom-management anxiety among student teachers. This author shows that having self-directed learning abilities plays a significant role in reducing classroom-management anxiety among individuals with higher self-efficacy. The author advises educators and policymakers to prioritise the development of effective strategies to enhance self-efficacy and the self-directed learning abilities of education students in order to prevent or reduce their anxiety. Designing training programmes and instructional methods that support the professional development of pre-service teachers is crucial in this regard.

In the work of Roux and Du Toit (2025), teacher educators' knowledge, understanding and application of self-directed learning are juxtaposed with that of teachers in the Northern Cape province of South Africa. The article highlights significant differences between teacher educators' and teachers' awareness and application of self-directed learning. They conclude that the provision of training opportunities to foster self-directed learning may enable teachers to become more self-directed in their own professional development and eventually also as facilitators.

In their article, Uys and Chigona (2025) report on a longitudinal case study on the research-based learning of undergraduate students at a historically disadvantaged university in South Africa. From the findings, the authors highlight the affordances of establishing a self-directed learning environment where research activities are scaffolded by written reflections and a minimally guided approach.

Although slightly eclectic in nature, the importance of self-directed learning in a changing AI-driven society is emphasised in these articles. The golden thread is that, 50 years after Knowles' prediction of rapid change and his definition of self-directed learning, this pedagogy has become more relevant than ever. Additionally, although AI may enable personalised and adaptive learning experiences and assist learners to identify learning goals (De, 2024), it is now more important than ever to scaffold the attributes of self-directed learning in all educational sectors. In Knowles' words (1975:16–17): "To sum up: the 'why' of self-directed learning is survival – your own survival as an individual, and also the survival of the human race. We are talking about a basic human competence – the ability to learn on one's own – that has suddenly become a prerequisite for living in this new world."

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