

ASCILITE 2024

Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

The Learning Wave: A framework for increasing learners' motivation and application of skills

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Today's learners are immersed in engaging virtual activities such as video games, social media, and streaming services. These platforms set high expectations for user engagement, providing experiences that are user-centred and intrinsically motivating. Online learning must now compete with these digital environments for learners' attention, necessitating a transformation in its approach to increase retention and satisfaction.

The Learning Wave is a novel Learning Experience Design framework that addresses this challenge by two key psychological theories: Self-Determination Theory (SDT) and Flow Theory. SDT, developed by Deci and Ryan (2000), posits that intrinsic motivation is driven by three psychological needs: autonomy, competence, and relatedness. Flow Theory, introduced by Csikszentmihalyi (1990), is a highly functional state helping learners boost their academic performance through immersion in the activity and provides incentives for personal growth (Rodriguez-Ardura & Meseguer-Artola 2016).

By applying these theories, The Learning Wave generates learning experiences that positively impact learning behaviour through enhanced engagement and motivation. The framework applies strategies from digital and serious games, combining them with storytelling techniques and instructional design models to create a modern pedagogical approach to the design of online courses.

At its core, The Learning Wave utilises a three-phase pattern: learn, reflect, and challenge. This structure enables learners to progressively build understanding, review and reflect on their learning, and apply their knowledge and skills to real-world scenarios. The framework employs Semantic Waves (Maton, 2013) as a construction methodology, ensuring a thoughtful progression of the learner from basic understanding to advanced application of concepts, and facilitating the creation of Flow states by gradually increasing complexity to match learner skill development.

Complementing the learner experience is the use of storytelling. By incorporating narrative elements, the learning experience is enriched with contextual depth, diverse perspectives, and emotional engagement, factors known to enhance retention and application of knowledge (Landrum et al., 2019). This approach also supports the relatedness aspect of SDT, fostering a sense of connection to the learning material.

As a visual tool, The Learning Wave allows instructional designers to map out the entire learning experience, illustrating how learners progress through different phases. It incorporates a series of learning moments, points of reflection, and challenge events, charting the learner's journey from novice to competent problem-solver. The framework's flexibility accommodates both high-level designs and intricate, complex experiences.

The Learning Wave has been incorporated as the foundational pedagogy in the development of twelve postgraduate microcredentials at Western Sydney University, with qualitative and quantitative feedback showing learners are motivated and more confident with the knowledge and skills they are developing. Further analytics, articles, case studies, and publications are forthcoming.

This poster presentation demonstrates how The Learning Wave framework transforms online learning. It showcases the 3-stage pattern, alignment with storytelling techniques, and process of gaining strategic knowledge through information deconstruction and reconstruction. It highlights how this approach, grounded in educational theories and modern engagement techniques, can enhance learner motivation, improve knowledge retention, and lead to more effective online educational experiences in our digital world.

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