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Up-skilling learners through story-telling: Introducing the Learning Wave

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The nature of work is changing as technology, economic, education, health, environmental, and geopolitical trends impact the skills required of the workforce. Generative AI, for example, is significantly impacting the labour-market as new jobs are created and existing jobs are re-shaped or no longer available (Li, 2022). In response to these trends, businesses are re-imagining their workforce strategies and investing in learning and developing their talent (*Future of Jobs Report*, 2023). Responding to the needs of industry and the skills gap, Western Sydney University (WSU) is pioneering a digital pedagogical model called *The Learning Wave*. Inspired by Karl Maton's Semantic Wave, The Learning Wave is a practical tool for designing digital educational experiences where learners are guided through real-world problems to construct knowledge, build industry relevant skills and reflect on their learning (Maton, 2019). Through the explicitly designed educational experience, learners use their knowledge and skills to solve real-world problems facing industry.

The Learning Wave is used to create educational experiences through activities focused on mastery (competence), meaning (competence and relatedness), community (relatedness) and autonomy (Ryan & Deci, 2000). To develop these experiences, The Learning Wave contains four smaller waves of engagement and motivation, knowledge, activity, and narrative:

- The **Engagement and Motivation** wave uses reward and feedback loops aligned with key educational moments. Inspired by the Octalysis Framework for Gamification and Behavioural Design (Chou, 2021), real-world relevant learning activities are designed to be intrinsically motivating and create positive learning experiences. The Engagement and Motivation wave aligns rewards and game mechanics to the self-regulated-learning phases of forethought, performance and self-reflection (Zimmerman, 2002).
- The **Knowledge Wave** focusses on the design, construction, and delivery of the knowledge-based content using Gagne's Nine Events of Instruction (Gagné et al., 1992)) and uses missions for learners to solve as they apply their knowledge and skills in the **Activity** wave.
- The **Activity wave** extends from the Engagement and Motivation wave, and the Knowledge Wave and focuses on experiential learning experiences that people learn from (Floor, 2023). A goal of the Activity Wave is to create a positive impact on the learning experience and provide learners with memorable experiences they enjoy.
- The **Narrative** wave uses storytelling and narrative driven approaches to present an engaging story comprising elements of tension, interesting characters situated in real-world settings to provide relevance and relatability to the course, and topics that evoke emotional responses. Narrative approaches to learning tell more than just the story – stories use different parts of the brain (Renken, 2020) and can be effective in solidifying abstract concepts and assist learners in shaping their ideas and views about what they are learning. (Yang et al., 2022).

These sub-waves are designed in alignment with the learning outcomes of the course to provide learners with agency to manage their motivation, cognition, emotion and behaviour – fundamental to self-regulated learning (Zimmerman, 2002) as they develop their skills in their industry-relevant field. As a novel pedagogical model, The Learning Wave is designed for learners to amplify impact and stay relevant in their field.

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