

A Cultural Mapping of the Design for Transformative Mobile Learning Framework to Facilitate Learner Agency

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The Design for Transformative Mobile Learning Framework utilises eight dimensions that draw upon the key affordances of mobile learning that enable learner agency. In this poster we introduce a ninth dimension to the DTML framework to illustrate a cultural mapping of the DTML. The Whakapiri (Engagement), Whakamarama (Enlightenment), Whakamana (Empowerment) framework introduced by Durie (2005) for indigenous Maori knowledge, shortened to WWW by Hurst (2017) has been utilised as a framework for reflection and practice in education. "Engagement, enlightenment and empowerment neatly describe the immediate, intermediate and ultimate concerns of education and are important markers for how effective education is practised. The concepts of transformation over information and learning as an all-of-person experience can be discerned across these three key terms" (Nichols, 2020, p28). Transformative mobile learning designs implement strategies to facilitate a move from a focus upon teacher-directed content (Pedagogy) towards student-determined learning or Heutagogy (Moore, 2020; Blaschke & Hase, 2019; Hase & Kenyon, 2007). This involves applying the Pedagogy-Andragogy-Heutagogy (PAH) continuum to mobile learning design (Authors, 2022) to facilitate learner agency. When put into a matrix, with DTML, PAH and WWW provides a mapping of how learners may transition into increasing self-regulation and learner-agency across the eight mobile learning relevant areas or dimensions. The elements of the DTML framework mapped to Whakapiri-Whakamarama-Whakamana and the PAH Matrix are summarised and illustrated in Table 1.

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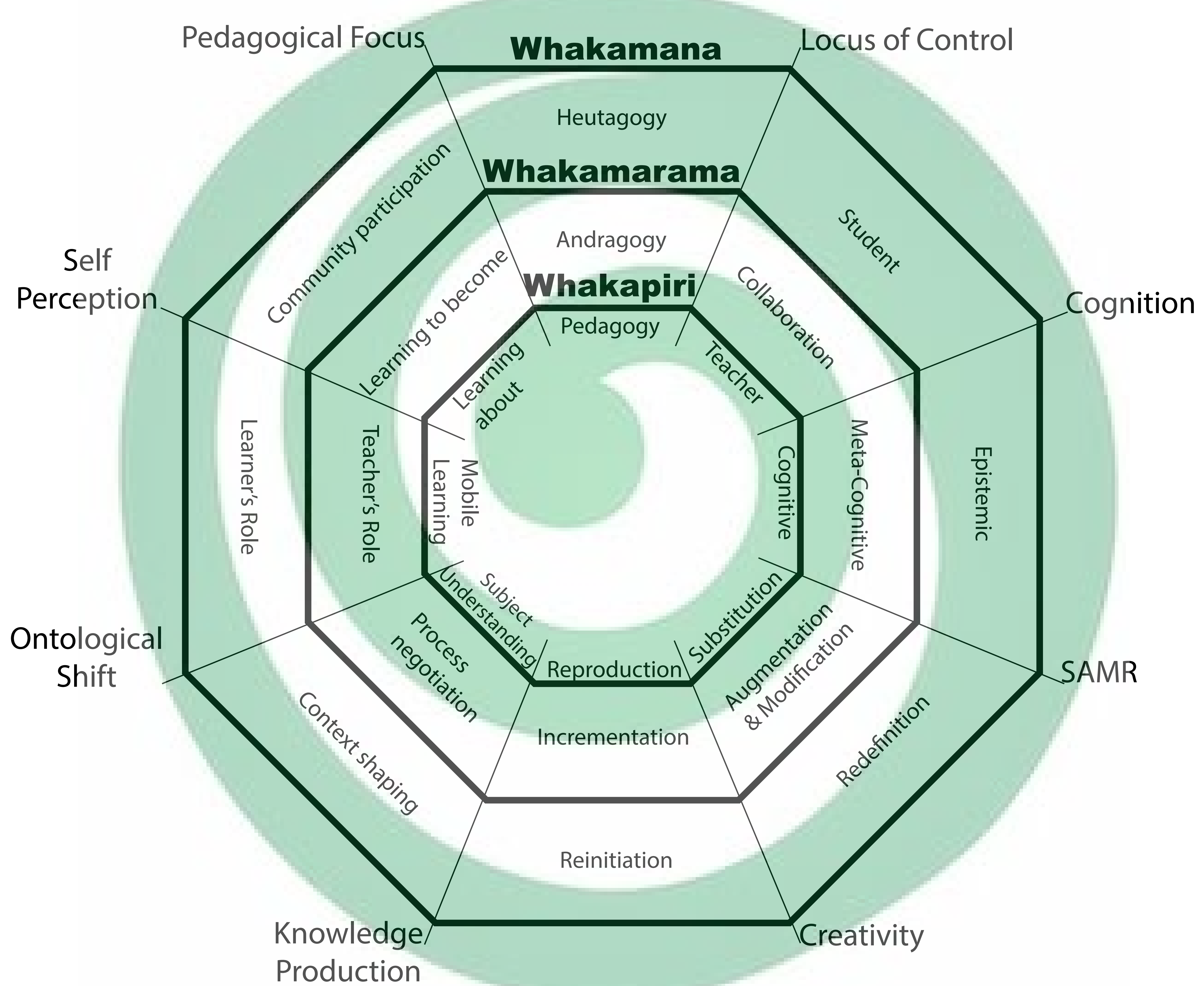


Figure 1: Mapping the DTML - PAH - WWW Frameworks Spider Graph

Table 1: The DTML-Whakapiri-Whakamarama-Whakamana Mapping: A framework for designing transformative mobile learning adapted from Authors (2017, p. 27).

Indigenous Knowledge	Whakapiri (Engagement)	Whakamarama (Enlightenment)	Whakamana (Empowerment)
Pedagogical Focus	Pedagogy	Andragogy	Heutagogy
Locus of control	Teacher	Collaboration	Student
Cognition	Cognitive	Meta-cognitive	Epistemic
SAMR	Substitution & Augmentation	Modification	Redefinition
Creativity	Reproduction	Incrementation	Reinitiation
Knowledge production	Subject understanding	Process negotiation	Context shaping
Ontological shift	Reconceptualising mobile learning	Reconceptualising the role of the teacher	Reconceptualising the role of the learner
Self-perception	Learning about	Learning to become	Active participation within a professional community