Digital Affordances: A Developmental Learning Model to Prepare Students for the Future of Work

RMIT UNIVERSITY   QUT   UTS

This learning model was developed as part of the Australian Technology Network of Universities (ATN) funded project *Digital work practices: where are the jobs, what are they, and how prepared are graduates?* The project's purpose was to develop and evaluate a learning model, which will help prepare students for digital work practices in employment settings. It was led by RMIT University with Queensland University of Technology and the University of Technology Sydney.

Digital Descriptors for practice domains (e.g., Data) were developed and defined through a multi-method and iterative process that included analysis of graduate data, literature review, industry roundtables, student and educator surveys, educator reflections and workshops.

Digital Capabilities Descriptors: Development and refinement for sample disciplines
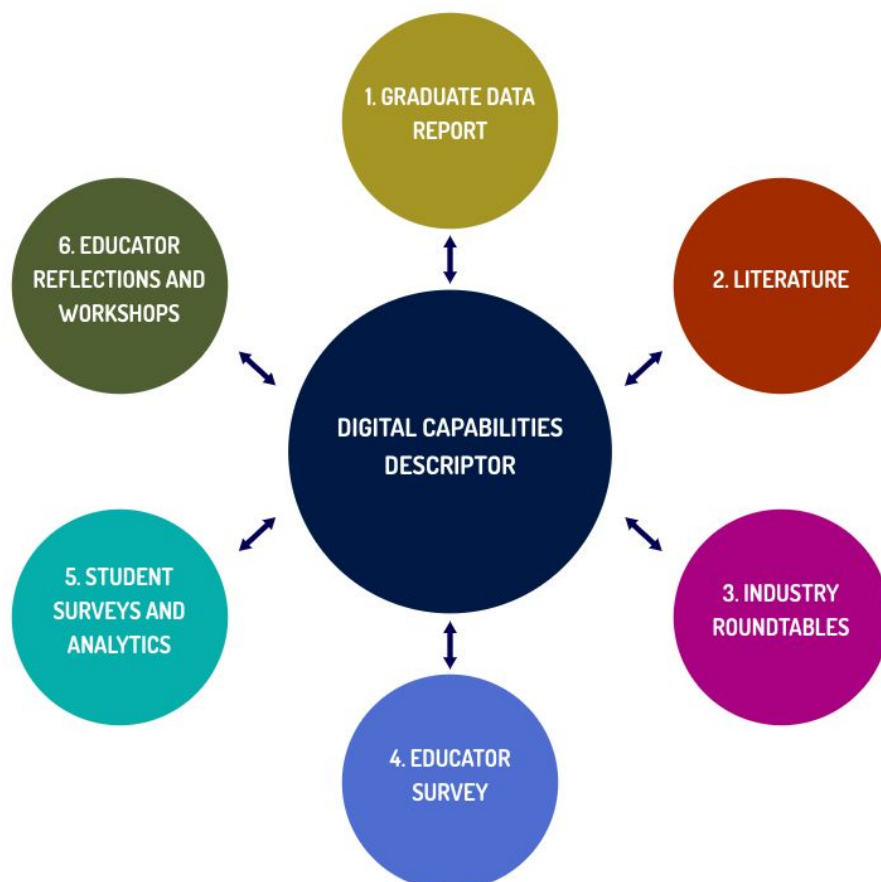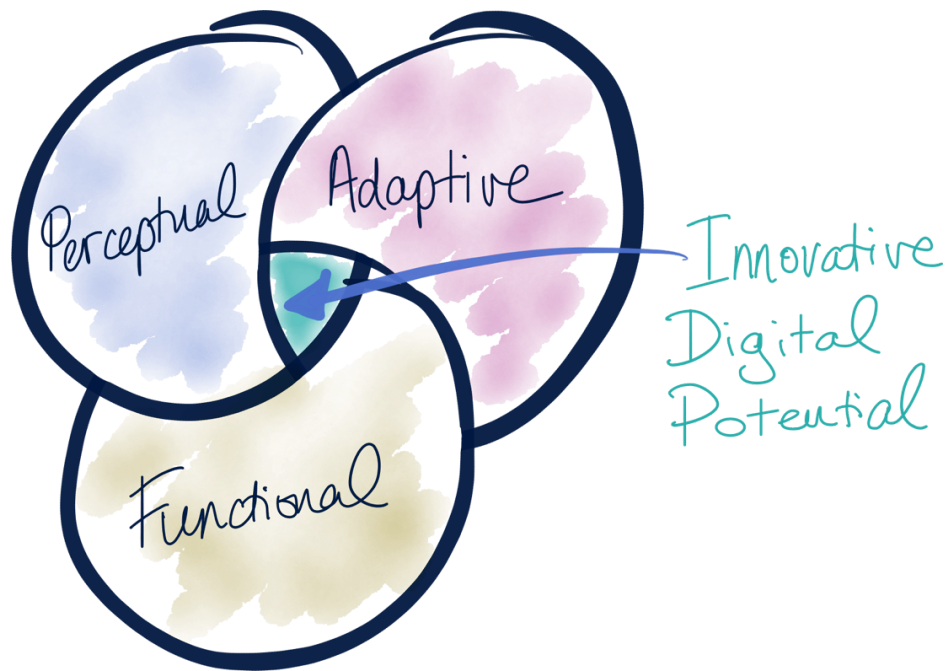
'digital capabilities' include the knowledge, skills and attributes required for a user to interact productively with technology.

Digital Affordances Developmental Model
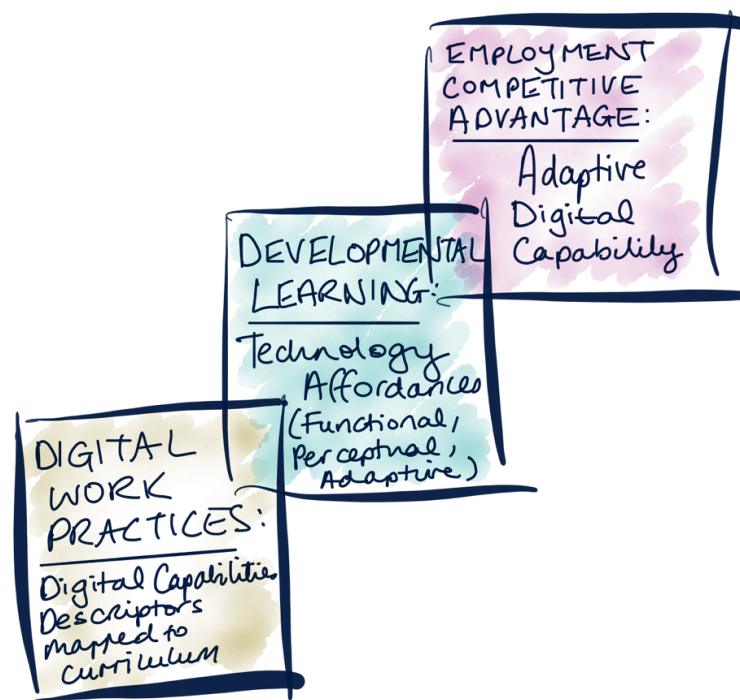
Digital Affordances

Functional affordances relate to the operation of technology; this includes naming, knowing and operating the features of a technology/technologies to perform tasks.

Perceptual affordances relate to interpretation and being discerning about technology tools and practices for their suitability and in-context operation for outcomes in **known contexts.**

Adaptive affordances relate to imagining, adapting and extending technology use in previously **unexplored and emerging contexts** for innovative outcomes; this requires some functional knowledge/skills and perceptual experience.

(Source: adapted from Best 2009; Evans et al. 2017; Fray et al. 2017)

Digital Capabilities Descriptors

Digital Capabilities Descriptors have been developed for Design, Journalism, Engineering, and Music Industry. These Descriptors interpret affordances in sample domains – categories of practice and related capabilities for particular jobs or roles.

Some capabilities are general and transferable (e.g. online collaboration); while other capabilities are specialised (or interpreted specifically for specialist contexts). In Journalism, for example, one of the domains is Data and includes a focus on Statistics, which is interpreted for specialist journalism contexts in the table below.

We can translate capabilities in the domains by looking through functional, perceptual and adaptive affordance lenses, for learning and professional practice.

Using Descriptors: affordances could be interpreted as illustrated in the following example, to guide new program development/renewal, OR to guide learning activities and assessment for existing curriculum:

Digital Capabilities and Work Practices		
JOURNALISM: Data Domain, Statistics Focus		
Functional Affordance	Perceptual Affordance	Adaptive Affordance
Name basic statistical concepts and perform basic statistical calculations	Interpret statistical findings to identify news value; use statistical findings in support of stories	Select appropriate statistical tools to investigate data sources, to identify news value and to illustrate news value in innovative ways

Reflection-in-Action For Building Adaptive Capability
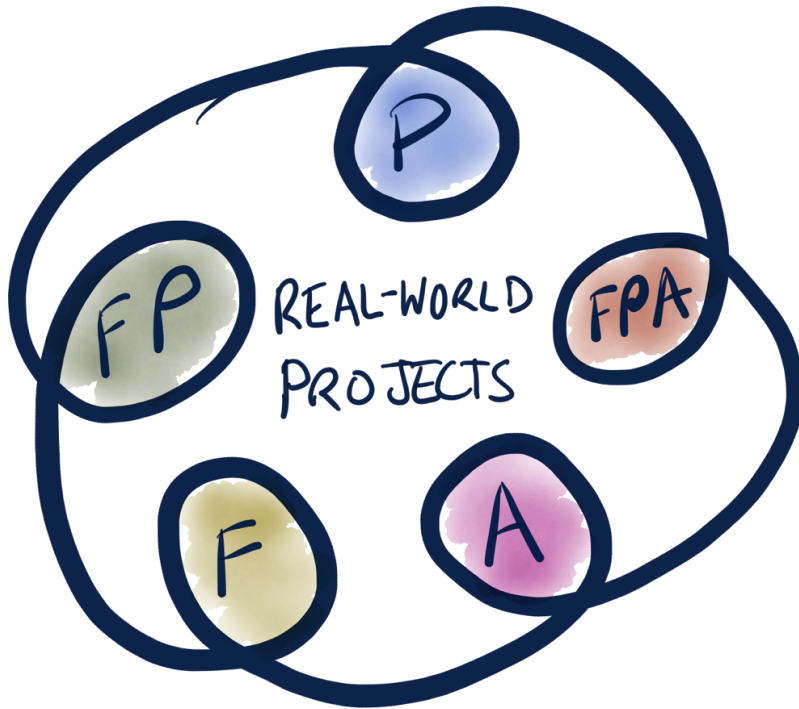
Digital affordance developmental learning model in action