

An excerpt from: Learning by Design: Knowledge Processes

Kalantzis, M & Cope, B. (2005). *Learning by Design*. Melbourne: Victorian Schools Innovation Commission.

Conceptualising

... involves the development of abstract, generalising concepts and theoretical synthesis of these concepts.

.... Conceptualising occurs in two ways:

- Conceptualising by Naming

... is a Knowledge Process in which the learner learns to use abstract, generalising terms. A concept not only names the particular; it also abstracts something general from that particular so that other particulars can be given the same name despite visible and situational dissimilarities. In child development, Vygotsky describes the development of concepts in psycholinguistic terms. Sophisticated adult thinking equally involves naming concepts. Conceptualising by Naming entails drawing distinctions, identifying of similarity and difference, and categorising with labels. By these means, learners give abstract names to things and develop concepts. Expert communities of practice typically develop these kinds of vocabularies to describe and explain deep, specialised, disciplinary knowledges based on the finely tuned conceptual distinctions. Conceptualising is not mere a matter of teacherly or textbook telling based on legacy academic disciplines (a tendency of mimetic education), but an Knowledge Process in which learners become active concept-creators, making the tacit explicit and generalising from the particular.

- Conceptualising with Theory

... is a Knowledge Process by means of which concept names are linked into a language of generalisation. Theorising involves explicit, overt, systematic, analytic and conscious understanding, and uncovers implicit or underlying realities, which may not be immediately obvious from the perspective of lifeworld experience. Theorising is typically the basis of paradigmatic schemas and mental models, which form the underlying, synthesising discourse of academic discipline areas. Conceptualising with Theory means making generalisations and putting the key terms together into theories. Learners build mental models, abstract frameworks and transferable disciplinary schemas. In the same pedagogical territory, mimetic pedagogy would lay out disciplinary schemas for the learners to acquire (the rules of literacy, the laws of physics and the like). In contrast, active Conceptualising with Theory requires that learners be concept and theory-makers. It also requires weaving between the experiential and the conceptual. This kind of weaving is primarily cognitive, between Vygotsky's world of everyday or spontaneous knowledge and the world of science or systematic concepts, or between the Piaget's concrete and abstract thinking.