Chapter 10

PROCESSES, ACTIVITIES AND TASKS

Why you might find this chapter interesting

We open this chapter by analysing the activity of designing to explain our dissatisfaction with the models that we had inherited at the outset of our work. We present an alternative view of the process that emerges in part through our use of designing as a ***pedagogic*** *vehicle rather than merely as a means of product development.*

This pedagogic lens through which we view designing has a number of crucial consequences. It enables us to see 'making' and 'modelling' in a particular light; it asserts the value of the portfolio as a device to underpin the meta-cognitive growth of learners; it enables learners to see themselves as in charge of their own learning; and it enables them to situate themselves through the eyes of others – specifically their clients. We conclude the chapter by analysing the nature of ***design tasks*** *using this explicitly pedagogic lens. How is the responsibility for task design to be shared between teachers and learners, and what are the consequences for the learning experience?*

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1. INADEQUATE MODELS OF PRACTICE

One of the recurring challenges of the last few decades – whilst we have been working on TERU projects – has been the need for clarity in what is involved in **doing** design & technology. We discussed in Chapter 5 some of the many attempts at describing the activity that proliferated through the

1970s and 1980s, all containing (broadly) the same features and all connected with sequential arrows representing (broadly) the same flow of the project. It was into this tradition that we were ourselves inducted, and it was these models of activity that we inherited when we launched *APU Design & Technology* in 1985.

Our difficulty with these process descriptions were many and profound, and arose even at the assumed starting point for activity; i.e. 'the problem'. The descriptions operated within what might be termed a 'problem solving' paradigm. But, for us, there are problems with the paradigm itself and three of the projects that we have described in Part Two illustrate our concern.

In Chapter 8, we described the two Design Council projects *Decision by Design* and *Design Skills for Work*. In the former, we had our own (Goldsmiths) graduate design students interacting with non-designers (school managers) and in the latter we interacted directly with design students and their tutors in many other design courses in higher education institutions. In Chapter 9, we described the Design Museum project *Designers in Action* in which leading-edge practising designers acted as tutors for design teachers in schools to help them to enliven their teaching of design.

Wherever we have observed the interaction of design practitioners with design & technology teachers in schools, we have noted the serious dislocation of their models of practice. In *Designers in Action*, the designers summarised their views in the following terms; design teaching in schools is not sufficiently **real**, nor sufficiently **questioning, nor sufficiently experimental**. The designers talked of 'wicked' tasks, 'risky' thinking, 'playing' with reality, 'imaging' possibilities and 'modelling' futures. By contrast the models of practice we inherited through the birth pangs of design & technology illustrate a pedestrian pursuit of 'solutions' to 'problems'. The cultures are worlds apart. As Buchanan (1995, p. 17) puts it, 'the problem for designers is to conceive and plan what does not yet exist' and this creative projection into the future is only very inadequately described as problem solving in the science-like school of inductive reasoning. Rather designers use exploratory and analytic heuristics.

This might be thought enough of a reason to throw out the notion of 'problem solving' as an appropriate paradigm for debating design. But there is a further reason, which is simply that not all design activity arises from problems. Sometimes opportunities arise that designers simply grasp and capitalise upon. The digital watch is an example. There was absolutely nothing wrong with analogue watches – they were (and still are) sought after and desired. But when a new technology presented itself it was just too good an opportunity to miss. Designers created all kinds of new watches, not because of a **problem**, but because an **opportunity** was available.