

Chapter 4

RESEARCH

A philosophical position

Why you might find this chapter interesting

Our standpoint on research is rather more difficult to articulate in terms of our position when we first set out on the research journey with APU design & technology. For in truth we had – at that time – very limited experience of anything that might be described as research methodology, and yet we had won the contract in direct competition with many experienced research groups. Our approach was to see the APU research task as a design task, with all the concomitant ‘needs-to-know’ that flow from the positions we have articulated in the preceding chapters. And we designed our way through it.

In this chapter we relive some of the debates that enabled us to shape our position on research, using these to orientate ourselves with the research literature and with the pre-existing research traditions of the Assessment of Performance Unit. We emerge with a position that could barely be described as a paradigm, but that was – at the time – sufficiently clear to enable us to undertake the task and draw it to a successful conclusion.

We began our research careers with *APU Design & Technology*; with shared but tacit beliefs and practitioner skills from the classroom. In retrospect it is astonishing that the DES accepted our APU research proposal, since we had no established expertise in assessment research. We cut our teeth on that first project. Faced with the need to climb a steep research learning curve, and with our practitioner backgrounds, we explored a rich and scary terrain of methodologies and techniques, led instinctively by our beliefs about capability and learning, and being drawn towards approaches that seemed (intuitively) to fit with the task in hand. Where appropriate we relied on tried and tested approaches to such matters as survey design and compiling case

records, but equally the open vista of opportunities encouraged us to create some entirely new tools; not least the process-rich activities for assessing design and technological performance ‘on task’ that proved, in retrospect, to be the hallmark of the project.

At that stage we had no explicit thoughts about the ‘paradigm’ we occupied and, indeed, were intrigued when others viewed our approach and attempted to label it for us – notably as a ‘curriculum’ model of research. It was as our research experience, expertise and repertoire grew that we ourselves began to see an alignment with certain research approaches, although never finding a particular ‘camp’ with which we were entirely comfortable. Two of our critical concerns illustrate our emerging position and provide an illuminative backcloth to our conceptual framework for research, and what might loosely be termed our ‘paradigm’.

1. DESIGNING AS THINKING

First there is the intimate association between **designing** processes and more generalised **thinking** processes.

Design discourse seems to trade in various oppositions, such as design as an abstract reasoning or thinking process opposed to design as an embodied activity dependent upon tools and media (Coyne et al., 2002, p. 269)

We explored the tricky territory that surrounds the question ‘when is design & technology not design & technology?’ Designing something like an umbrella clearly counts as the former. But what about designing a play? Are characters like materials? Is a plot like a mechanism? Playwrights are creative thinkers who start with some raw ‘material’ and fashion new ‘products’. But is it design & technology? We arrived at a conclusion that highlighted the importance of creative thinking in terms of the ‘made world’ of objects, systems and environments. But we recognised that this was neither a watertight definition nor an entirely convincing way of distinguishing between design & technology thinking and other, wider forms of creative thinking.

Much of our subsequent work has been concerned with this interesting area and one of the projects that we report in Part Two was specifically designed to enquire into this connection and equally into the disconnection. What is unique about design thinking? Whilst that project did enable us to identify some distinctive features of what we might term ‘designerly thinking’, it is hard to claim that more generalised thinking processes might not in some cases, and with some people, and in some circumstances, contain these distinctive elements.