

Chapter 9

EVALUATING CURRICULAR INITIATIVES

Why you might find these projects interesting

The implementation of National Curriculum massively increased the need for new schemes of work that would meet the radically new curriculum requirements. Agencies undertaking such developments were keen to evaluate their efforts and in TERU we received many evaluation invitations.

The first venture was for the new Mandela administration in South Africa. A learner-centred pilot curriculum operating in schools distributed across miles of bush in the North West Province potentially transforming the life-chances of many young black learners. Who could refuse that?

Thereafter, we evaluated two projects for the London Design Museum, one based on the learning value of their tantalising ‘mystery-box’ of weird objects, and the other on their scheme for getting real designers to run development sessions for design & technology teachers.

Three other projects centred on the challenges of embedding new technologies in the curriculum. Two of these projects focused on the most sciency and typically the least imaginative of the areas of design & technology (systems and control). We explored the BBC’s professional roboteers programme helping learners to design and build their own robots. A second project explored the power of LEGO for young learners working with programmable bricks on creativity projects of various kinds (including LEGO robots). The third ‘new-technology’ project – for the Design and Technology professional association – evaluated the impact of a new CAD initiative.

Finally, we discuss using our approach to assessment to evaluate a primary school initiative linking design & technology to functional literacy.

1. INTRODUCTION

From the mid-1990s onwards, there was considerable development of technology education, both in the UK and globally. These developments saw the introduction of a whole host of curriculum initiatives aimed at supporting more formal requirements. To gain some measure of the effectiveness of their initiatives, the agencies responsible were seeking ways of assessing their impact and TERU was asked to evaluate nine such projects between 1998 and 2004. This chapter revisits these projects and their evaluations, providing history and insight into a group of projects that all aimed at breaking new ground. For TERU, evaluating the impact of each project also provided research opportunities to further understandings of design & technological capability and of assessment, learning and teaching.

During this era, national and provincial governments across all continents were legislating for the introduction or development of technology education and the first evaluation we were invited to undertake was in such a situation in South Africa. The project, the *North West Province Technology Education Project*, was part of the much larger ‘Curriculum 2005’ initiative, developing the whole school curriculum in the newly democratic South Africa. In the UK, a number of initiatives emerged as we approached the Millennium, many in response to the climate created by the changes to the English and Welsh National Curriculum, through the ‘middle of the road’ revisions of 1995 to the more visionary Curriculum 2000. The Design Museum was a key contributor in this era, active in providing both resources and in-service courses for teachers. In 1997, they launched an *Outreach Programme* based around two sets of handling collections and associated resources. First came the *Mystery Box* and then the *Architecture and Built Environment* collection. A further initiative, *Designers in Action*, set up a series of workshops, in which leading design companies ran workshops at the Museum to share their techniques and practices with teachers. TERU was asked to evaluate the impact of each of these initiatives.

Within TERU we had a long-standing concern over the suppression of creativity in the curriculum (Kimbell, 2000). This concern was shared by a range of groups including the National Endowment for Science, Technology and the Arts (NESTA) who, in 2001, established a pilot programme to explore the use of LEGO products both to enhance creativity and to develop interest in systems and control technologies. TERU was commissioned to assess the impact that the project had in schools across the UK – the *Energy & Environment Evaluation* project. Other initiatives to help learners engage with ‘rapidly changing technologies’ (DfEE/QCA, 1999, p. 15) brought two further evaluations to TERU. The first was the *CAD-in-schools* project,