Personal Perspective: Programmes of study – are they being taught?

Introduction

It is a widely held view in the educational profession that a well-planned lesson is an essential component of good teaching. In a national climate where the raising of educational standards prevails, it is not surprising that rigorous curriculum and lesson planning features on the high school agenda.

The current National Curriculum requirements for design and technology have been in schools for more than two academic years, and by now the curriculum, lesson planning and the transference of clear planning into practice should be expected to stand close scrutiny. More specifically, from my observations of planning using the programmes of study for each of the key stages, I question whether enough attention is being given to the *individual* programmes of study, not just for planning lessons, but also as a focus for teaching and assessment.

From my examination of many schemes of work in design and technology, in particular for Key Stage 3 pupils, I have observed, amidst the variations, a similar pattern of planning emerging whereby programmes of study are identified generically and then mapped accordingly against individual design and make assignments (DMAs) usually in the long term plan or the overview of the key stage. On further examination of more detailed medium or short term planning for the same DMAs, however, I frequently find the same programmes of study listed as in the long term plan, usually, on this occasion, written down as a group or block, e.g. 1abc, 2abc, 3d, 3e, 3f, 4a, 4b. These are explained by the teachers as programmes of study 'covered' during the DMA. Further discussion usually reveals two things: firstly, that the references to the programmes of study tend to become substitutes for the actual statements, and the meanings or interpretations of individual programmes of study are assumed or not considered; and secondly, and perhaps more importantly, that often there are no specific details on which of the programmes of study listed will be taught either before or during the DMA. Individual programmes of study are invariably not being used effectively as a focus for teaching.

This lack of planning detail is also evident in some of the literature now available to support the delivery of design and technology. Programmes of study are frequently referred to as being 'covered' or 'addressed'. At first glance this may not appear to be a problem but on further reflection I question whether terms like these are now being used as substitutes for the activity of *teaching*. Furthermore, unless we are careful, using terms like these can too easily and unintentionally result in paying lip-service to individual programmes of study , which, as we know, should be targeted and taught for each DMA.

By now all those involved in the promotion of design and technology in our schools will be conversant with the opening statement in the National Curriculum booklet preceding the Programmes of Study, which states:

"Pupils should be *taught* (my italics) to develop their design and technology capability ... in order to design and make products."

Thereafter it is repeated that "pupils should be *taught*" before each of the designing and making and the knowledge and understanding sections.

In September 1995 SCAA published two documents, one for Key Stages 1 & 2, and one for Key Stage 3, entitled "Design and Technology: the new requirements". There are two clear messages which for the purposes of this article I would like to extract from the planning section.

Firstly, it is clear in the framework for planning that while some aspects of the programmes of study will be addressed in every unit or assignment, it is also necessary to *focus on specific aspects* for purposes of progression. Or to put it another way, the planning of assignments or units requires the identification of clear and specific learning objectives that have to be *taught* (the focus), in addition to addressing or covering some of the recurring aspects of the programmes of study.

John Chidgey

Inspector for Design and Technology, Durham It is worth reminding ourselves that teaching is inextricably linked to learning. If the intended learning is each and every one of the statements encompassed by the programmes of study, as the order states, then the teaching must also be intentional, and specific to each of the statements' meanings. The planning and subsequent teaching of programmes of study need to be as specific and systematic as possible to assist with progression towards capability, both within and across key stages and phases.

Secondly, both of the documents give clear examples throughout on ways to proceed for each one of the programmes of study, emphasising their individual contribution towards capability. Under the heading of generating ideas and clarifying the task in Key Stages 1 and 2 for example, it suggests, alongside the appropriate programmes of study, that children pose such questions as:

- What could we do?
- How could we do this?
- What do we need to know?
- Who could we ask?
- What does this product need to do?

Clearly, if these are questions that children need to ask in order to generate ideas and clarify tasks successfully, then they will have to be taught the appropriate skills, knowledge and understanding associated with the questions above. It is therefore crucial that teachers identify in their planning very clearly and specifically what has to be taught during the project as well as what might be covered to ensure that all pupils are being given the skills, knowledge and understanding, to progress towards capability. Teachers might also find it helpful for purposes of differentiation to discuss each programmes of study statement carefully and plan the questions or activities needed to support the learning of pupils of different abilities. The focused practical tasks (FPTs) should be, in part, the activities and methods that support these learning objectives, although as Richard Kimbell et al have identified in Understanding Practice in Design and Technology, p 112: "FPTs merge imperceptibly with the DMAs as the focus gets progressively less sharp".

My own experience of running INSET courses for teachers over many years has demonstrated time and time again that if the induction inot the practice of design and technology is accompanied by clarity of purpose and direction then the levels of confidence and achievement improve enormously.

This problem of clarity with planning for teachers of design and technology is possibly a throwback to an attempt to use the discredited statements of attainment from the previous orders. The process of transition from ticking boxes against meaningless statements of attainment to the analysis and the teaching of individual programmes of study in the current orders is not yet complete. Raising levels of pupil performance in design and technology, consistently, and across key stages, necessitates, among other things, rigorous and systematic planning using the individual programmes of study as learning objectives, which are in turn, effectively taught and assessed. Every unit of work throughout the key stages needs to have no more than a few programmes of study identified in the medium or short term planning for specific teaching and assessment purposes. Thereafter focused programmes of study will become generic and identified as being covered. Teaching may well be a method used for *covering* the programmes of study; my question is: 'Are all programmes of study that are listed as covered being taught?'

References

Kimbell, R et al (1996) Understanding Practice in Design and Technology, Buckingham: OUP SCAA (1995) Design and technology: the new requirements, London: HMSO