Design and Technology Planning for Learning at Key Stage 3

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The design and technology curriculum draws on the expertise from many areas particularly art, business education, craft design and technology, home economics and information technology. Teams of specialist teachers meet to develop, implement and review their curriculum planning. Such planning helps to ensure thorough prepararation for their teaching programme without having to undertake all the detailed planning individually. Planning for learning and assessment is a demanding, time consuming experience for all of us involved with this foundation subject.

Questions such as:
What is design and technology?
How can we plan for a team approach?
How can we develop a unit of work?
What will a key stage 3 learning programme look like?
What are our specialist roles within design and technology?
— have been and still are being posed for discussion in team meetings.

Specialist colleagues do need to consider the question, 'what is my role within this foundation subject?'

Non-statutory guidance B10 3.7 states:

> 'Design and technology is not an amalgam of existing subjects, but teachers from the named subjects have vital contributions to make. In some cases most of their teaching will be design and technology, in others they may be contributing to a number of subjects.'

Clarification of, 'What is my role?' could assist many design and technology teams in moving forward with their curriculum development work.

My advisory teacher colleagues and I have been working with primary and secondary colleagues during LEA Inservice programmes, helping to develop an understanding and interpretation of the subject Order; working towards the production of programmes of learning.

Considerable time has been given to explaining the role of the attainment targets and to help with this issue the curriculum support team identified the most important aspects of the design and technological process; we called them strands. Tracking the strands across the ten levels of attainment has helped many in their understanding of progression through process and broadened their understanding of assessing pupils' capability. Guidance on this aspect of design and technology can be found in:

NCC. Inset Resources, Planning for Design and Technology at key stage 3, section 15.

Support for Key Stage 3 in developing activities/tasks/units of work for the learning programme has been a challenge.

The programme of study and the statements of attainment are interrelated and together determine a school's design and technology learning programme. The challenge is how do we interpret the two elements to form a relevant, motivating, progressive learning programme?

How can we interpred the Order and move forward with this task?
How can they best develop their pupils' abilities in order to enhance capability?
How will the proportion of learning on a 'need to know' basis compare with structured, teacher-led learning?
Will some tasks be focused and some be more open?
Will focused tasks support and lead into open tasks?
How do we formulate tasks?
What do we mean by a theme-based approach?
Where can they get help?

Non-statutory Guidance C4 2.5 offers two approaches in preparing their learning programme.

> 'In preparaing a scheme of work, two general lines of approach are possible.
>
> First approach
> Begin with the programme of study and group items to form complete activities.
>
> This approach makes it relatively easy to cover the programme of study, but it can constrain pupils by requiring them to work with a particular medium, or to produce a particular result.
>
> Second approach
> Set the design and technology activity and analyse the elements of the programme of study which have been covered. The activities must be chosen carefully to ensure that the programme of study is covered evenly.

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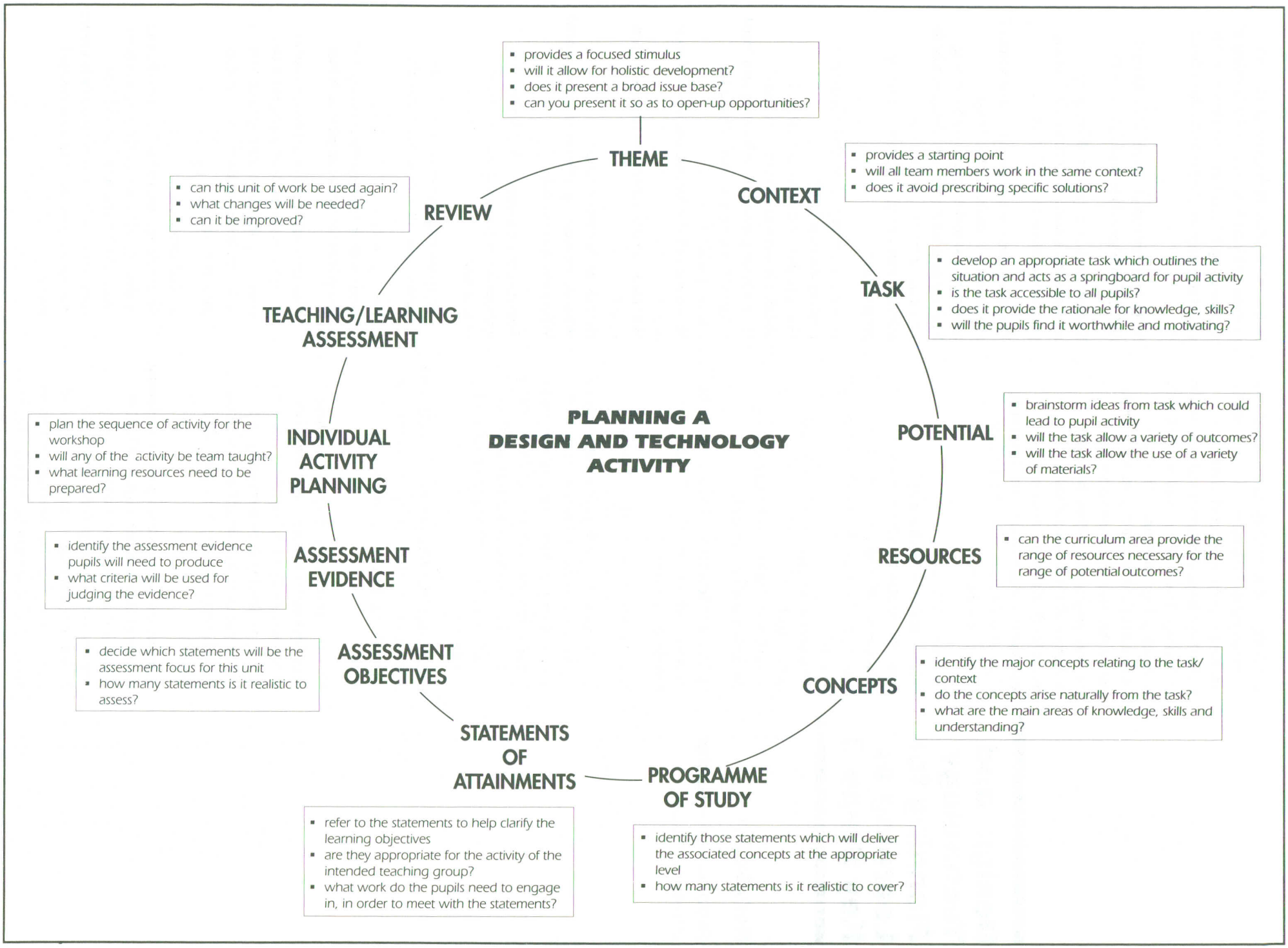

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NCC. Inset Resources, issues in Design and Technology, Unit 3 provides some useful information. It suggests we identify the types of tasks we feel pupils need to experience and categorise them.

This approach is further developed in:
NCC. Inset Resources, Planning for design and technology key stage 3, Unit 10.

The unit examines the relationship between contexts, themes, topics and tasks.

SEAC publications
Learning through Design and Technology, The APU. Model, Negotiating Tasks in Design and Technology, provide further support and guidance.

Primary DATA Volume 1. Number 1. Autumn 91. Getting Started. D. Sheffield. Education Inspector Solihull.

This article suggests an approach to developing tasks and building a primary learning programme. Many primary and secondary colleagues have found this article helpful.

Many design and technology teams are using a thematic approach to implement the curriculum. This approach needs rigorous planning and must be complemented by other teaching, which develops different aspects of skill and knowledge. Planning for the whole of the key stage is essential if coverage of the programme of study showing progression through key concepts is to be achieved. Working has been developed concerning thematic planning and teaching, to develop a model which provides a structure and can be followed to ensure that apsects of planning are addressed. Curriculum development work is on-going, and the planning model in use, is represented on page 50 in diagramatic form:

This model has proved most helpful as it has provided a focus for team discussion, and when planning, together, has enabled them to 'get up and running.' There is a need for more curriculum development support and guidance in order to explore and develop other approaches to planning for learning at key stage 3.

G. Hicks (1983) wrote in an APU newsletter;

> 'Teaching facts is one thing; teaching pupils in such a way that they can apply facts is another, but providing learning opportunities which encourage pupils to use information naturally when handling uncertainty in a manner which results in capability is a challenge of a different kind.'

Becoming capable in planning for, teaching and assessing this new foundation subject is a challenge to all design and technology colleagues. Tony Adamo, Head of Technology at George Dixon Secondary School, Birmingham describes how his department is taking policy forward into practice.

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