

Abstract

The paper asserts that the National Curriculum subjects of 'art and design' and 'design and technology' have a fundamental connection that has not been fully recognised or exploited in primary schools. The two subjects help children to develop important skills of aesthetic awareness, discrimination and critical thinking and that they could do this through a common rationale and approach to the development of visual literacy.

The paper goes on to review the term 'visual literacy'. A new term – 'visual field' is offered as a way of connecting objects and artefacts of both broadly functional and broadly aesthetic natures. Pedagogic frameworks in current use by primary teachers intended to promote critical discussion are analysed with reference to the visual field. It is concluded that each framework has a different emphasis yet each is concerned with and therefore connected by the visual field. The paper concludes that a coherent strategy to ensure all children have the opportunity to become visually literate should be developed.

Introduction

Can you think of two subjects in the primary school that have more in common than 'art (craft) and design' and 'design and technology'? Both are foundation subjects which pupils and teachers enjoy and see as a contrast to 'academic' subjects. 'Making' activities are central to each subject, indeed it is sometimes difficult to define an activity in subject terms. Both subjects are struggling to maintain curriculum time in the face of the introduction of new and apparently time consuming 'strategies' in literacy and numeracy.

"the two subjects facilitate development in children important, life enhancing skills such as observation, aesthetic awareness, discrimination and critical thinking"

You might say that the similarities identified above are simplistic or superficial. I am going on to argue in this paper that art and design and design and technology have a fundamental connection that has not been fully recognised or exploited. We see both subjects battling for their very existence in a primary curriculum increasingly dominated by two 'core' subjects. Now is the time to make a claim in the strongest terms – that between them, the two subjects facilitate development in children important, life enhancing skills

such as observation, aesthetic awareness, discrimination and critical thinking and furthermore that they could and should do this through a common rationale and approach to the development of visual literacy.

Aims

In this paper I therefore hope to achieve the following:

- to define and offer a rationale for the inclusion of visual literacy within the primary curriculum
- to explore the connections between pedagogic frameworks currently in use to support the development of visual literacy skills in design and technology and art contexts.

So what is it to be visually literate?

"Young people who are visually literate have more control over their own work and are better able to understand, enjoy and discriminate between images and objects that appear both in familiar environments of the home and neighbourhood, and in less familiar places such as galleries and museums."

DES 1991 para 3.19

In the 1995 orders for art, craft and design we have:

"In order to develop visual literacy, pupils should be taught about the different ways in which ideas, feelings and meanings are communicated in visual form."

DFE 1995

Visual literacy is a somewhat problematic term. It is often taken as a shorthand for the capacity to 'read' or 'interpret' or to 'find meaning in' the visual as opposed to textual world. Yet the analogy would suggest that the ability to manipulate a visual language to make images and artefacts which communicate meaning or message is also an aspect of visual literacy. Visual literacy will therefore entail thinking *critically* about the visual and perhaps making use of the information to inform one's own making activities.

Language has a broadly accepted 'correct' usage, whereas a whole set of valid alternatives are possible, and are yet to be possible in visual communication. Raney (1999) suggests that:

"Coupling 'visual' with 'literacy' does two things. First, it introduces the metaphor of language, provoking debates about the value of linguistic metaphors for getting to grips with visual things...second. 'Literacy' suggests entitlement or

Alan Howe

*Senior Lecturer in
Primary Education,
Bath Spa University
College*

necessity, and the need to seek out deficiencies and remedy them.”
p41

Raney claims that by using the term, status is attributed to the visual in a word dominated world.

“[visual literacy] implies that the entire visible world is the purview of visual literacy...art education becomes a subcategory of visual education, art becomes a subcategory of visual culture, and visual literacy is what is needed to navigate around it.”
ibid. p44

In the same terms take design and technology as contributor to visual education so design becomes a subcategory of visual culture.

Visual awareness is another term in use. This does not go far enough. To be aware is a passive act, whereas within visual literacy there needs to be an active phase. It involves also the creation of the artefact.

Neither term is present in the latest versions (QCA 1999) of the National Curriculum for art and design or design and technology. The fact that a term is absent from these slim, vestigial documents should not be taken as a reason for thinking it unimportant. What we do find are a number of references in the curriculum documents to important aspects of education such as the need to encourage ‘critical reflection’, ‘evaluation from a variety of perspectives’ and ‘exploration of meanings and interpretations’. Pupils should be ‘engaging critically with a rapidly changing culture’, developing an ‘understanding of aesthetics and function’ and ‘asking and answering questions’. I will not provide you with exact references here – if you can work out for yourself which subjects are the source of each quote, then my argument for common ground between subjects is perhaps not a good one.

Let me clarify for the reader what I mean by this problematic term.

My usage of ‘visual literacy’ will encompass all the below. I would say that a visually literate person, when experiencing something that is primarily visual – would be able to say, in response to an artefact or art work:

- I am curious about this and I can learn something from examining this in a variety of ways.

This statement relates to the asking and answering of questions, of evaluating from a variety of perspectives.

- This relates to other things that I have seen.
- There are ways that I can describe and ways to classify this.
- The artist/designer/maker seemed to have these intentions.
- The artist/designer/maker will have been working under certain constraints or influences.
- The artist/designer/maker has worked in these ways.

These statements relate to the application of knowledge and understanding, of the aesthetic and functional in order to investigate roles and intentions.

This visually literate person would then go on to say...

- I have a reasoned opinion on this – this is what I have found out and what I think.
- The visual can affect the way I feel – this is how I have been affected.
- What I have learnt can inform my own work.
- I could interrogate my own work in some similar ways.

These statements relate to the application of knowledge and understanding, the affective domain and to critical thinking

To illustrate this, carry out the following exercise:

Mentally (or actually) choose a sculpture that you know well, and a textile artefact such as some clothing you are wearing, and apply to them the statements below.

The above ideas and insights are, I shall argue, important, worthwhile and relevant to the primary school child. Furthermore, there is potential to develop such skills in a number of subject areas, or in a cross-curricular way.

Why should the development of visual literacy be worthy of considerable curriculum time?

“Young people need to be visually literate ... pupils can become visually literate by employing visual perception in the solution of a range of practical tasks and through regular reference to the work of others ... Pupils’ understanding of the possibilities of visual language and of the variety of forms of expression available is significantly expanded through the study of the work of artists, craftworkers and designers.”

DFE 1991 Para 3. 17

Visual Literacy in an art context – looking at a sculpture

I can examine this sculpture in a number of ways such as...

I can learn about the material, the process of making, the artist/maker, myself.

I can describe this sculpture in terms of formal elements, materials and techniques used in its creation, similarities with other works I have seen.

It seems that the maker was concerned with ... intended to...

The maker may have been influenced by others working in a similar way and constrained by the limitations of the material.

The sculpture has a certain effect on me – it has given rise to these thoughts and feelings.

I have enjoyed looking at this sculpture and learnt something new.

The knowledge I have gained can be used in my own work.

We are in danger of over emphasising in our schools a limited number of ways in which we communicate and come to understand. The Qualifications and Curriculum Authority (QCA 1998) demands a 'broad and balanced' curriculum yet time available to teach subjects beyond the core curriculum seems to be in practice reduced with the current emphasis on the core subjects through the introduction of numeracy and literacy strategies.

“We are in danger of over emphasising in our schools a limited number of ways in which we communicate and come to understand.”

The recent report from the National Advisory Committee on Creative and Cultural Education (DfEE 1999) has found that:

“opportunities to promote creative and cultural education are being increasingly restricted by the cumulative effects ... of the National Curriculum”,
para 112

The report goes on to argue that now, more than ever, it is vital to encourage all areas of young people's intellectual and personal capabilities and to recognise that doing this is not at odds with their academic development.

Many have argued that visual literacy is a 'basic' requirement if one is to understand the made world in the broadest sense, to include the built environment, art, artefacts, design, visual communications (graphics, advertisements) etc.

Visual literacy in a design and technology context – looking at a textile artefact

I can examine this textile in a number of ways such as...

I can learn about the material, the process of making, the designer/maker, myself.

I can describe this textile in terms of form, function, materials and techniques used in its creation, similarities with other artefacts I have seen.

It seems that the maker was concerned with ... intended to...

The maker may have been influenced by others working in a similar way and constrained by the limitations of the material.

The textile has a certain effect on me – it has given rise to these thoughts and feelings.

I have enjoyed looking at this textile and learnt something new.

The knowledge I have gained can be used in my own work.

In *Datanews* (January 1999) there is a call that the National Curriculum should:

“Enable pupils to become discriminating citizens and customers ... by having a better understanding of products and the associated values.”

The article goes on to say that through design and technology pupils will:

“develop skills in product analysis and evaluation and combine this with associated values related to social, environmental, spiritual, moral, aesthetic and economic aspects of products and systems.”

Meanwhile the National Society for Education in Art and Design, in their recently published 'Manifesto for Arts in Schools' (Swift and Steers 1998) demand that there should be a clear rationale for the inclusion of the aspect of art education known as Critical Studies based on 'cultural transmission, real critical thought and reaction'.

Critical studies can be seen as a combination of studies in art history, art production, aesthetic, critical and contextual studies of art and design practice (Thistlewood (ed.) 1989) approached in such a way as to enrich children's own making. Taylor (1992) explains that:

“The Critical Studies in Art Education (CSAE) Project demonstrated that this close relationship between the study of artists' work and pupils' own practice can open up a wide range of possibilities, rather than cause young people to produce

predictable art because it was done in imitation".
page 27

Other projects such as 'Art in the Built Environment' (Schools Council, 1982) and Arts 5-16 (Arts in Schools, 1990) added weight to the shift in thinking and practice in order to include in the curriculum the so called 'missing element' of critical study of art and artefacts. Arts 5-16 noted that:

"Best practice in primary as well as secondary schools gives equal weight to developing young people's critical understanding of other people's work and their knowledge of different cultural practices and traditions."

The above initiatives were among the influences that resulted in the shape of the National Curriculum. A critical studies approach to teaching art at Key Stages 1 and 2 was implicit in the curriculum and the development of visual literacy one of its aims.

The connections between the disciplines of art critical studies and design and technology's 'investigation, disassembly and evaluation activities' (DfEE 1995b) may be clarified by reference to Michael Baxendall's (1985) book *Patterns of Intention*. In the book he writes about two very recognisable products of the modern era – the Forth Bridge and Picasso's *Portrait of Kahnweiler*, drawing fascinating parallels between these two products of human imagination and endeavour. Crucially he seeks to explore the artist's or designer's intentions through analysis of the artefact or art work as a product its time, place and culture.

"Both are purposeful objects and are not necessarily different. The differences seem more of degree and of balance, particularly the balance of our interests and of our critical priorities."
page 40

Baxendall (1985) argues that in coming to understand the two objects, and ultimately the mind of the artist or designer from another time or culture, a common process of coming to an understanding is evident. Baxendall uses a structure to frame an analysis of the work of bridge builder Benjamin Baker, principle designer of the Forth Bridge, which can be summarised as:

The charge

In the case of the Forth Bridge, the charge, quite evidently was 'Bridge the Gap'.

The brief

The brief, which depends on specifics such as the location of towns, nature of traffic to use the bridge and the local weather conditions that a structure will need to withstand.

Causes of form

A certain number of solutions to a problem are usually possible. Baxendall describes these as 'cultural facts' i.e.

- physical media available at the time, in this case steel as a new alternative to wrought iron
- historical precedence – designs, successes and disasters
- aesthetic taste – e.g. monumentality, elegance, decorative elements
- the decision-maker – the designer's preference, experience and knowledge.

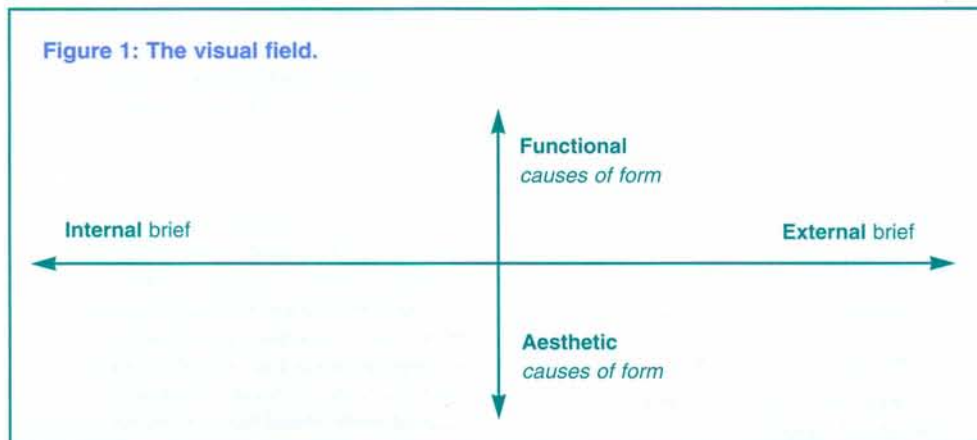
Baxendall concludes by saying that given a three cornered relationship between the solution, the problem and the possibilities then we can determine the intention of the 'decision maker'.

Turning to the work of Picasso, and a cubist portrait entitled *Portrait of Daniel-Henry Kahnweiler* (1910), Baxendall applies similar thinking. In some respects there are clear parallels. Causes of form, in the case of the painting would be items such as the pigments and colours available (media), a new way of representing objects introduced by Cezanne, knowledge about African sculpture from a recent exhibition and the critical reception of Picasso's earlier work *Demaiselles d'Avignon* (precedence), a reaction against the pre-occupations of the impressionists (aesthetic taste).

The charge and brief are more elusive to identify. In Picasso's era, the charge and brief were personally constructed within a cultural framework. In other words – no client is involved, no negotiation with others is needed and yet Picasso's contact with his society, his circle of friends and critics, the long tradition of painting as a human endeavour, will influence his work. Of course many artists do not have the luxury of constructing an entirely personal brief. More often concerns such as critical acclaim, commercial appeal, even the demands of a client will feature in many artists', craftworkers' and designers' work.

We have seen that objects as diverse as a bridge and a portrait can be understood using the same framework and by asking the same questions. In individual cases the concerns of the viewer may be different and the information that the object reveals will differ. To link them, can these objects be located

Figure 1: The visual field.



along a continuum? At one end the output of the archetypal western 20th century artist working alone in his or her garret, via an individual commission produced by an artist or designer working for a client on to a craftsperson producing traditional functional ware. A more sophisticated model might be a *visual field* in which artefacts and art works are located according to axes of brief (from internal to external) and causes of form (aesthetic to functional) (see Figure 1). It seems reasonable to suppose that objects or artefacts that can be located within this field can be interrogated using a common framework, although the location of the object and the interests of the interrogator will determine the parts of the framework that will be used.

Do we have a framework to interrogate objects within the visual field that can be used in primary school?

A brief review of some published frameworks offered to primary teachers to allow children to interrogate objects reveals the scope and limitations of current advice. Taylor (1986 and 1992) offers a framework of four types of questions that can be used with and by children. The four areas of concern represented are content, form, process and mood. They can be summarised thus:

- **Content** e.g. what is the work about? What is its subject matter? Was the subject matter observed, remembered or imagined?
- **Form** e.g. how has the work been arranged? Is this in keeping with its content? What kinds of colour schemes have been used? Are there recurring shapes, lines, forms etc.? Is the work pleasing in parts or as a whole?
- **Process** e.g. how was the work made and what was it made with? What materials, tools, processes, and techniques were

used? Where did the artist start? How long did the work take?

- **Mood** e.g. does the work affect you? Does it capture a mood or feeling or emotion you have already experienced?

Taylor's approach has now reached the status of 'tried and tested'. In my experience it is effective in 'scaffolding' children's thinking and learning to aid the development of their knowledge and understanding of art (Howe 1995 MA dissertation, Bath Spa University College). Although very applicable for use by the generalist primary teacher the framework does not cover aspects of social, historical and cultural understanding but rather elicits a personal response drawing implicitly on prior experiences. It can be an effective springboard for the introduction of new knowledge by the teacher to move into socio-cultural analysis.

Taylor claims to have devised this framework in response to, among other things, another prevalent 'way of looking' – that of Feldman's (1970 – see Taylor 1992) Description, Analysis, Interpretation, Judgement model, seen as hierarchical and rigid. Taylor stresses that his model is not hierarchical, that each category might carry equal weighting or a judgement may be made about selecting categories to emphasise.

In Ritchie (1995) a framework of questions for design and technology contexts has headings of:

- Function.
- Process of making.
- Human factors (with values implicit).
- Aesthetics.
- Future developments (including evaluation of design success).
- Future evaluations (and connections with own making).

Approaches derived from Investigative, Disassembly and Evaluative Activities evident in DATA (1996) *The Primary Coordinators File* and DATA (1998) *Planning into Practice* can be summarised thus:

- relate to children's experiences
- focus discussion of artefacts/collection:
 - on form related to function
 - on variation of design solutions
 - on application of technology
- encourage investigation of components, elements of system
- allow children to develop for criteria for own design.

Susan Morris (1989) in *A Teachers Guide to Using Portraits* advises teachers to focus in turn on:

- **Within the portrait**
 - Costume
 - Expression
 - Pose
 - Background
 - Accessories
 - Colour
 - Size
 - Abstraction/caricature
 - Flattery
- **Presentation of the portrait**
 - Frame
 - The 'Hang'
 - Alterations
- **The process**
 - Medium
 - Techniques
- **Social context**
 - Prevalent aesthetic taste.

So what does each framework emphasise?

We can see that each framework investigates different aspects of the made world and emphasises different concerns, yet I argue that the artefacts they focus upon can all be located within the visual field defined in Figure 1. Taylor's framework is concerned with visual arts whose 'causes of form' are generally aesthetic in nature. Functions might be couched in terms of visual communication. Brief may be internal – as in fine art, or external in the case of book illustration. The intended scope of Taylor's framework in relation to the visual field can be represented thus (Figure 2):

Morris's framework investigates elements of functional and aesthetic causality. Portraits are traditionally a compromise between the personal and the external brief. There is acknowledgement of the complex interaction between client and maker. Ritchie's list is concerned primarily with the functional/external quadrant of our field, yet there are aspects of the aesthetic and internal. DATA's concerns are primarily functional and leading to an 'external' design brief. In some respects this is limiting and the framework needs to be refined and extended if aesthetic aspects of design are to be given due consideration (Figure 3).

We can see the frameworks have emphases and limitations yet none are mutually exclusive. They are each capable of facilitating enquiry in the visual field and thus informing action.

Conclusions

The first aim of this paper was 'to define and offer a rationale for the inclusion of visual literacy within the primary curriculum'. To know through the visual is a powerful way of knowing. Activities that develop visual

Figure 2: Locating Taylor's framework in the 'visual field'.

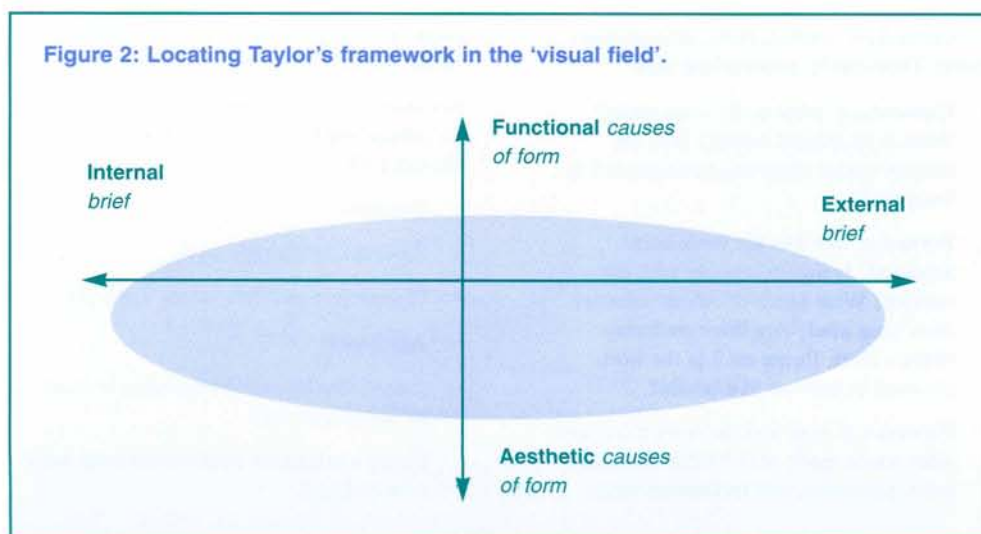
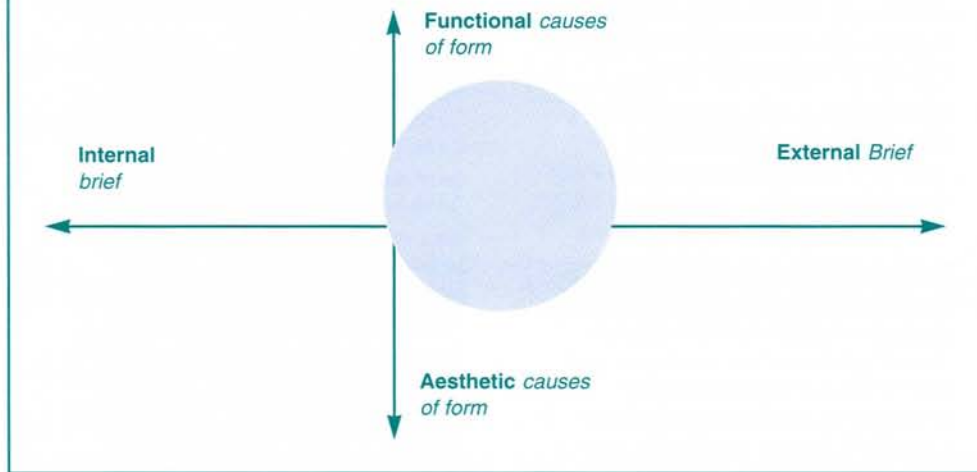


Figure 3: Locating DATA publications' concerns in the visual field.



literacy are worthwhile and desirable in a primary curriculum that purports to be broad, balanced and relevant. We have seen that such activities, such learning objectives, cannot be confined to a single subject in the National Curriculum. If we are to help children to understand how the way they feel is connected or even *controlled* by those that can manipulate environments and artefacts we must go beyond subject boundaries. Critical, discriminating and questioning individuals, empowered to contribute to the made world should be the eventual outcome.

The second aim was *'to explore the connections between pedagogic frameworks currently in use to support the development of visual literacy skills in design and technology and art contexts'*. A number of initiatives and curriculum developments have led to a variety of ways in which the made world, in its broadest sense, can be interrogated. All can be seen as belonging to a 'collection of strategies' that examine artefacts located within the visual field' as defined. All rely on the skill of the teacher in their selection and application and are based on open-ended questioning in order to facilitate careful observation and the gaining of knowledge and understanding through engagement with the made world through the visual. A prerequisite of all is the need for children to draw on experiences of similar encounters with art and artefacts.

The strategies have emanated from two 'camps' or 'cultures'. I have attempted to show that there is much common ground between these with regards to visual literacy. There is no 'fault line' between art and design and technology teachers in primary schools – they are usually one and the same person. If there is a discontinuity it is because the

common features of approaches in design and technology or art have not been recognised. Educators and advisers need to help primary teachers identify the merits and appropriateness of the various strategies on offer. Integration is possible, if based on the notion of enquiry within the visual field. Yet ultimately, the teacher herself must reconcile advice that emphasises different concerns consistent and progressive teaching is to ensue.

Where next?

One question remains – how do we move forward from here? Gardner (1990) neatly sums up an educational approach that is difficult to argue against:

"If one wants to enhance an individual's understanding, the most likely route is to involve her deeply over a significant period of time with the symbolic realm in question, to encourage her to interact regularly with individuals who are somewhat (rather than greatly) more sophisticated than she is, and to give her ample opportunity to reflect on her own emerging understanding of the domain."
Gardner (1990) page 17

If we were to take Gardner's advice, it seems a number of things need to happen.

1. 'Visual literacy' needs to remain in the primary curriculum. It should not be left out or until a later phase. The current trend to reduce the National Curriculum requirements of the foundation subjects seems to put this at risk. Those that believe such activity to be relevant and worthwhile need to continue to promote its importance. That will include advisers, subject organisations, such as DATA and NSEAD, and primary teachers themselves.

2. There needs to be a regular opportunity for children to consider the made and the visual in a structured way and to become familiar with different ways of looking and knowing. Any future statutory curriculum will need to be clear about this.
3. Children will need to be supported in developing their visual literacy by 'somewhat more sophisticated individuals' (the primary teacher), selecting and using appropriate strategies, which leads to...
4. The need to continue to introduce visual literacy strategies to teachers during their training and professional development. Indeed, returning to the previously cited NACCCE report (DfEE 1999), the committee has demanded that teachers should be trained to use methods and materials which help develop young people's creative abilities and cultural understanding. The current trend of shorter foundation subject courses must be reversed. Common ground between approaches needs to be highlighted – anything other than that risks accusation of 'another thing' for teachers to consider. A *perception* amongst teachers that primary art and design and technology activities can contribute to a common goal needs to be fostered.

If that sounds like a call for a 'National Visual Literacy Strategy', then so be it.

References

- Arts in Schools Project Team (1990) *Arts 5-16* London: Oliver & Boyd
- Baxendall (1985) *Patterns of Intention* London: Yale University Press
- DATA (1996) *The D&T Primary Coordinators' File* Warwickshire: DATA
- DATA (1998) *Planning into Practice* Warwickshire: DATA
- DATA (1999) 'National Curriculum Review', *Datanews* 10, January 1999, 1-5
- DfEE (1995a) *Art in the National Curriculum* London: HMSO
- DfEE (1995b) *Design and Technology in the National Curriculum* London: HMSO
- Department of Education and Science (1991) *Art for Ages 5 to 14 Proposals of the Secretary of State for Education and Science and the Secretary of State for Wales* London: HMSO
- Gardner, H (1990) *Art Education and Human Development* Los Angeles: Getty Center for Education in the Arts
- Howe, A (1995) *An exploration into aspects of knowledge and understanding in art in the primary school* MA dissertation Bath Spa University College
- Morris, S (1989) *A Teacher's Guide To Using Portraits* English Heritage
- National Advisory Committee on Creative and Cultural Education (1999) *All Our Futures: Creativity, Culture and Education* DfEE
- Qualifications and Curriculum Authority (1998) *Maintaining breadth and balance at Key Stages 1 and 2* Middlesex: QCA Publications
- QCA (1999) *The review of the National Curriculum in England* Suffolk: QCA
- Raney, K (1999) 'Visual Literacy and the Art Curriculum', *Journal of Art and Design Education*, 18, 1, 41-47.
- Ritchie, R (1995) *Primary Design and Technology – A Process for Learning* London: David Fulton
- Schools Council (1982) *Art in the Built Environment* Essex: Longman
- Swift, J and Steers J (1998) 'A Manifesto for Art in Schools', *Journal of Art and Design Education*, 18, 1, 7-14.
- Taylor, R (1986) *Educating for Art* Essex: Longman
- Taylor, R (1992) *Visual Arts in Education* London: Falmer Press
- Thistlewood, D (Ed.) (1989) *Critical Studies in Art and Design Education* Essex: Longman