

DOCUMENT RESUME

ED 354 996

PS 021 066

AUTHOR Campbell, Jim
 TITLE The National Curriculum in Primary Schools: A Dream at Conception--A Nightmare at Delivery.
 PUB DATE 3 Sep 92
 NOTE 26p.; Paper presented at the Annual Conference of the British Association for the Advancement of Science (Southampton, England, United Kingdom, August 1992).
 PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)
 EDRS PRICE MF01/PC02 Plus Postage.
 DESCRIPTORS *Curriculum Evaluation; Elementary Education; *Elementary School Curriculum; *Faculty Workload; Foreign Countries; *National Norms; Standards; Teacher Attitudes; Time Management
 IDENTIFIERS British National Curriculum; *England; Primary Schools (United Kingdom); *Wales

ABSTRACT

This keynote lecture evaluates the national curriculum for primary education in England and Wales that has been in the process of being implemented since 1987. It critiques six assumptions that have been relied on in the implementation of the curriculum and offers, with caveats, six steps toward solution or amelioration. The national curriculum as conceived had five features to recommend it: (1) a clear sense of children's entitlement to education; (2) improved breadth and balance of subjects; (3) a preference for conceptual assessment over testing; (4) an updating of concepts taught in the sciences and technology and the use of computers; and (5) higher standards. In the implementation of the curriculum, however, six assumptions were made regarding the approval, commitment, expertise, and workload of teachers, and the staff resources and time available to schools. All assumptions other than the one regarding teacher commitment proved to be unfounded. Improvements in flexibility of roles, global budgeting for staff, time management, compromise in subject balance, and improvement of materials would ameliorate the problems of implementation. Three figures and over 60 references are included. (ME)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

3rd September 1992

- This document has been reproduced as received from the person or organization originating it
- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

ED354996

THE NATIONAL CURRICULUM IN PRIMARY SCHOOLS:

A DREAM AT CONCEPTION :

A NIGHTMARE AT DELIVERY

Text of a Keynote Lecture presented to the Education
Section of the annual conference of the British
Association for the Advancement of Science

Southampton University

August 1992

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

R. J. Campbell

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Jim Campbell

Professor of Education
Warwick University

PS 027066

THE NATIONAL CURRICULUM IN PRIMARY SCHOOLS:

A DREAM AT CONCEPTION : A NIGHTMARE AT DELIVERY

INTRODUCTION

My argument in this paper is a threefold one. First, I shall try to show that the national curriculum model, as it was conceived, and as it has emerged over the period since 1987, offered the dream of substantial and much-needed improvement to curriculum practice in primary schools in England and Wales generally. Second, I believe that six assumptions were made about the professional context within which primary teachers were working, and five of these were so mistaken as to render the full delivery of the national curriculum impossible for normal teachers. Thirdly, I shall examine some ways forward, although all of them are contentious politically or professionally, and most have resource implications.

Perhaps I should express two notes of caution by way of introduction. The first is obvious. The national curriculum is not yet fully in place in its statutory form in any school at either Key Stage 1 or Key Stage 2. At Key Stage 1, the last three subjects - Art, P.E. and Music - apply in statutory form from the coming year, 1992-93. At Key Stage 2, all nine (or ten in Wales) subjects will apply to all relevant years of pupils only in 1996 at the earliest, even if we ignore the timescale of further revisions. Therefore, any declarations of the failure of the national curriculum could be construed as writing its premature obituary, the pessimistic obverse of the assertions already made by government ministers and others, of its resounding and immediate success. So I would want to stress the tentativeness of the available research evidence, nearly all of which refers to Key Stage 1 only. Nevertheless, however tentative the evidence, we need to try to make sense of it quickly so as to feed it back into policy-making. In any case, the fundamental basic curriculum model of nine or ten subjects, plus R.E., is established and seems likely to survive any modification of detail.

The second introductory point is more difficult to make briefly. Under the imposed reforms of the 1988 Act there has been a tendency among educationists to invent a Golden Age of primary education in the past, whose destruction is being brought about by the reform process. On this

reading of the history of post-war primary education, children's spontaneity, creativity, and curiosity are being killed off in the name of curriculum reform. Yet evidence from HMI surveys (eg. DES 1978, 1982, 1985b) and academic research (eg. Alexander 1984, 1992; Bennett 1976; Galton and Simon 1980; Barker-Lunn 1982, 1984; Bealing 1972) about general curriculum practice and pedagogy in primary schools in the twenty-odd years before the Education Reform Act, revealed not so much a golden, as a leaden, age. The curriculum was narrow, emphasising literacy and numeracy through repetitive computation exercises; despite encouragement, work in Science was patchy and haphazard; standards in the Social Subjects were lower than might be expected; Pedagogy was often characterised by an undifferentiated focus on the pupils in the middle levels of attainment within a class, and expectations of the able children were undemanding. Continuity and progression in curriculum experience had remained elusive and assessment and record-keeping, other than in the basic skills of reading and number, were rarely systematic. Plowdenesque progressivism flowered largely in rhetoric, with progressive practice, however defined, being a minority taste amongst the teachers.

The levels of attainment of children in poverty remained chronically low, despite evidence from Mortimore et al (1988) and Tizard et al (1988) that within economically deprived areas in London some primary schools could raise the cognitive achievement of the pupils in ways that challenged to some extent the social determinism of previous class analyses of educational achievement.

I said it was difficult to make the point briefly, and one reason is that a two-minute survey of the evidence comes out sounding suspiciously like teacher bashing. But this would be almost entirely wrong. The real problem lay, as I have argued elsewhere (Campbell 1989), in the absence of anything approaching a public policy for the primary curriculum before 1988. The primary teachers, as much as anyone else, were the victims of this policy vacuum and not its creators.

Thus, the 1988 Act introduced a policy framework for the curriculum that had been previously lacking in primary education.

THE CHARACTER OF THE DREAM

There were five features of the proposed national curriculum that proved seductive to most of those working in primary education.

First, there was the concept of entitlement. Articulated most clearly in the House of Commons 3rd Report (House of Commons 1986), a national curriculum would provide a legal framework of common entitlement for children that would remove the inconsistencies of curricular provision, (see Richards 1982), which had arisen arbitrarily from class teacher autonomy. For the first time since 1944 pupils and parents would be able to know what the school should provide in curriculum terms. It was, of course, coupled with the establishment of a complaints procedure, to be used if the curricular provision was considered inadequate, and so helped introduce consumer interests into primary education. But it, nonetheless, promised greater equality of curricular experience for children.

Second, and linked to the concept of entitlement, was the promise of real breadth and balance. A statutory curriculum in which all foundation subjects, not just the core, would be allocated reasonable amounts of time and emphasis seemed to offer a once-and-for-all opportunity to destroy the narrow elementary curriculum whose persistence, noted by Alexander (1984), had remarkably survived the previous non-statutory discouragement of HMI and others (eg. DES 1985a). The 1988 Education Act required a "balanced and broadly based" curriculum, and the DES Circular 5/89 emphasised breadth and balance (p.17) requiring, from August 1989, that each of the core and foundation subjects should be allocated "reasonable" time for worthwhile study.

Third, included in the legal definition of the curriculum, was a set of assessment arrangements which would require a radical re-thinking not merely of assessment but also of teaching itself. The TGAT report (DES 1988) was sold to the profession by its emphasis on the formative purposes of assessment. Before 1988 most assessment in primary schools had employed narrowly focused tests of reading comprehension and number, predominantly at the end of the infant and junior stages, (see Gipps 1988, 1990). The TGAT report went as far as to separate out conceptually assessment from testing and proposed that the former should replace the latter.

On this model, continuous assessment would involve diagnosing individual pupils' needs through observing them learning, talking with them about their learning and using the observations for planning the next steps in learning. Its appeal to the value-system of the developmentalists was obvious and immediate (eg. Smith 1991).

Fourth, it was a modernising curriculum. It was not merely that Science was included in the core but that the kind of Science involved acknowledged advances in Physics,

Biology and Chemistry; Technology, including Information Technology, was in the foundation; Mathematics included the handling of data, and most other subjects called for applications using computers. English called for literature that was global. The broad and balanced criterion had been used not simply to attack the prevailing narrow focus on the basics but also to attempt to haul the primary curriculum towards a state of relevance to knowledge and information processing in the latter decade of the 20th Century.

Finally, there was the relationship of the curriculum to standards. Primary education in England and Wales had been characterised by relatively low standards, especially in relation to children judged to be able (DES 1978, DES 1990b, Alexander et al 1992). The common and possibly facile explanation for this state of affairs was that teacher expectations were too low, especially in inner cities and other areas of poverty. Following a series of important observational studies at Exeter University (Bennett et al 1984, Bennett and Dunne 1992, Bennett 1991, 1992), the demonstration of poor match between tasks set by teachers and pupil capacities (or, to be precise, sometimes poor pupil understanding of the task) lent force to the argument that the national curriculum would lead to raised standards in two ways. First, expectations of able children would be raised through the explicitly differentiated levels in which the attainment targets would be specified. Able children at the end of Key Stage 1 would be operating at Levels 3 or 4, and at the end of Key Stage 2 at Levels 5 or 6. Secondly, standards would be raised simply by virtue of teaching being planned, delivered and assessed, often for the first time, according to systematic programmes of study and set targets right across the nine subject areas. Standards would no longer be defined mainly by reference to English and Mathematics.

Thus the promotion of the national curriculum held out the promise of a transformation of curriculum practice in primary schools. Furthermore, its promise crossed ideological boundaries, with elements that were attractive to those in what Blyth (1965) called the preparatory, the elementary and the developmental traditions. To the preparatory tradition it offered a common entitlement to a broad and aggressively modern curriculum, consistent from five through to sixteen. From those in the progressive or developmental tradition, there could be welcome for a curriculum characterised by an integral developmentally focused assessment system, and by key demands in the core subjects, (ATs 1 in Science, Mathematics and English), concerned with processes. Previously neglected subjects such as History and Geography had to be given a suitable place, and new subjects and material such as Technology and Information Technology were also incorporated. Even those in the narrowest elementary tradition (eg. Lawlor

1988; Letwin 1988) could cast fond eyes on the end-of-Key Stage standard assessment tasks focused on the basics (though these now included Science) which thereby gave the basics highest priority. As a conception of the curriculum for contemporary primary schools at the end of the 20th Century it looked like a dream package.

CRITICAL PERSPECTIVES

There were, of course, substantive analytical critiques of the national curriculum model from curriculum theorists. I mention some half a dozen in passing. The appropriateness and worthwhileness of the nine subject frame as a model for schools allegedly committed to integrated approaches and to process models of learning were challenged by Kelly (1990). The validity of the cognitive hierarchy built into the levels of attainment in Mathematics was questioned by Schwarzenberger (1989). Moreover, the consideration about how the nine subjects might cohere in relation to each other was sketchy (see Thomas 1993). There were also concerns about serious apparent omissions, and the relegation of some important objectives to the status of cross-curricular themes (see Ross 1993). And there were anxieties (Pollard 1993) about the extent to which the emphasis on cognitive objectives might marginalise concerns for children's social and personal development. Finally there was the view expressed by Kelly (1993) that terms such as entitlement, breadth and balance etc embodied superficial rhetoric, inadequate for the analysis of substantive curriculum issues.

The criticisms advanced by curriculum theorists are important and could be used to improve basic model by making it connect more closely with the complexities of primary teaching. However, the criticism I am advancing here is not focused on the curriculum model itself but on what appear to be six assumptions about the professional contexts of primary schools; they are assumptions, so to speak, about the bed into which the national curriculum was to be delivered. My point is that even if you perfected the curriculum model, these assumptions would remain. The six assumptions are as follows:

1. Primary teachers would approve of, and commit themselves to, the national curriculum,
2. There would be adequate curricular expertise in the primary teaching force and, if not, that it could be provided through in-service training.

3. There would be available to every school adequate curricular expertise to deliver the national curriculum, mainly through its own staffing deployment.
4. Most class teachers in primary schools would have the curricular expertise and pedagogical skills to deliver and assess, with some limited support, a curriculum in nine subjects and R.E., appropriately differentiated according to the levels of the national curriculum statements of attainment.
5. Delivering the national curriculum would not increase or intensify teachers' term-time workloads beyond what was sustainable or reasonable.
6. There would be adequate time in the school day/week/term/year to meet the "reasonable time" expectation for all the foundation subjects and R.E.

These assumptions are not the stuff of curriculum theory - they are mundane considerations - but they are of great practical significance to those charged with delivering the curriculum. My reading of the early evidence is that only the first assumption has turned out to be correct - all the others are beginning to look mistaken.

DELIVERING THE NATIONAL CURRICULUM : THE EMERGING NIGHTMARE

The evidence about what it has been like to be delivering the national curriculum is, in 1992, patchy and suggestive rather than comprehensive and certain, not least because the published evidence relates to the introduction of the statutory orders for the core subjects only. We do not know what the picture will look like for the delivery of the full national curriculum and RE. There are surveys by HMI (DES 1989a, 1989b, 1990a, 1991a) and research reports on the early implementation stages (Campbell and Neill 1990, Silcock 1990, Campbell et al 1991, Coopers and Lybrand Deloitte 1991, Core Subjects Association 1991, NUT 1991, Osborn and Pollard 1991, Osborn and Broadfoot 1991, Taylor and Stanley 1991, Acker 1992, Muschamp et al 1992, NCC 1992).

TEACHER COMMITMENT TO THE NATIONAL CURRICULUM

It has become clear that teachers at Key Stage 1 in general approve of the national curriculum, and have been attempting to implement it. There is no evidence of serious subversion or of refusal to implement. On the contrary studies at Bristol and Warwick universities (Muschamp et al 1992, Osborn and Pollard 1991, Campbell et al 1991) show the teachers supporting the principle, and objecting primarily to the pace, of the reforms. Moreover, the studies reveal that the teachers saw their professional skills as having been improved by implementing the national curriculum, especially their skills in planning, in whole school collaboration, and even in assessing children's progress. The Bristol team reported (Osborn and Pollard 1991 p.4) that some teachers spoke of the "positive effect of having a structure and guidelines to work within" and that many felt that "the emphasis that the national curriculum placed on reviewing and reflecting on their practice, and on having to read more widely and to collaborate more closely with other teachers, was an enhancement of their professionalism." Likewise teachers in our study (Campbell et al 1991) spoke of the way they had been helped to become better teachers because of the need to plan and assess more systematically than hitherto. The findings from these research projects were supported generally in the survey reports by HMI (DES 1989a, 1989b 1990a) and by other surveys, eg. the Core Subjects Association survey (CSA 1991).

Moreover, in respect of Science in primary schools there had been substantial improvement over previous practice, with the science curriculum now being planned and delivered in a more sustained and systematic way. As an aside, the heretical thought occurs to me that the top-down imposition of a statutory requirement to teach Science, linked to centrally directed In-service training, has been more effective than the less authoritarian, non-statutory encouragement that characterised attempts to reform primary science in the 1970s/80s. This is an uncomfortable message for the democratic curriculum developer.

Thus the evidence about the first of the six assumptions is all in the same direction; infant teachers welcome and support the national curriculum, and far from being de-skilled by it have found the process of implementing it improving their repertoire of professional skills. It is perhaps recognition of this view that has turned the initial opposition of teacher unions into motions of support at their annual conferences.

However, the evidence in respect of the other five assumptions provides less good news for those who want to see the reforms work; it suggests that, for class-teachers, delivering the national curriculum has become, or will become, not a dream but a nightmare. It is simply not manageable even for experienced and able teachers. The reasons for believing this are different at Key Stage 1 and Key Stage 2, mainly because the empirical evidence refers to the former only. Therefore, rather than deal with the evidence on an assumption by assumption basis, I shall consider the emerging issues separately for each Key Stage.

Key Stage 1

At Key Stage 1 there appear to be four clusters of problem.

First, our research project at Warwick University (Campbell and Neill 1990, Campbell et al 1991) has provided evidence about two aspects of teachers' workloads. We call them the **extensiveness** and the **intensiveness** of primary teaching. Extensiveness refers to the number of hours worked per term-time week, whereas intensiveness refers to the pressure during the working day. Our research showed conscientious teachers committed to implementing the national curriculum but having to work what the teachers considered unreasonably long hours. These varied but the average was about 54 hours a week, with one in five working a sixty hour week or more. Only about a third of this time was taken up with teaching, since the majority of their time was spent on non-teaching activities, such as preparation, marking, meetings, In-service training and other professional development. Long hours were combined with intense pressure during the school day, with lack of time seen as the major obstacle to implementing the national curriculum. One teacher caught the perceptions of most others by her use of the metaphor of a 'Running Commentary':

"Well, what is frightening now is that we are being blinkered now into the national curriculum ... I am noticing it far more now that I never complete what I hope to achieve. There is always, like, a carry-forward so that you never get the feeling at the end of a session or day, 'Great, I've done this that I hoped we would do' ... there is this Running Commentary, really, in the background saying that, 'You haven't done this' or 'You haven't done that', which I find very annoying considering that you work so hard".

Campbell et al 1991
(Para.2.14)

Delivering the curriculum was seen as an enervating treadmill in which the teachers worked very hard but obtained little sense of achievement. Not all of the workload was attributable directly to the national curriculum, but the overload had carried over into their personal and domestic lives and most of the teachers were experiencing stress. Evidence from the PACE project at Bristol (Osborn and Pollard 1991, Osborn and Broadfoot 1991) and from the Core Subject Association (CSA 1991) came out with similar findings.

Second, and despite all this, the broad and balanced curriculum was not being delivered. Our evidence (Campbell et al 1991) (Fig.1) showed that the three core subjects were taking, on average, at least half the timetabled time and that, at the very most, about 15 minutes a day was left for each of the other foundation subjects and R.E. Most of these subjects at Key Stage 1 are practical, time-consuming activities, eg. Art, P.E., Music, Technology and 15 minutes per day (75 minutes a week) seems inadequate for worthwhile treatment. I should add that for technical reasons concerning how time was recorded, the figure of 15 minutes a day per subject is almost certainly an overstatement. The core was squeezing out the other parts of the basic curriculum. This view was supported by Muschamp et al (1992).

Third, at the same time and, paradoxically, teachers claimed to be spending less time hearing children read so as to cover the new subjects such as Technology, and manage assessment. This was also reported in Alexander et al (1992). Another class management strategy reported by our teachers was setting most pupils time consuming low level tasks to keep them occupied, to free up teachers to enable them to concentrate on assessing small groups of pupils or individuals. The irony here was that standards might be being lowered as part of teachers' attempts to meet what they saw as the assessment arrangements. This problem might have been exacerbated by the practice of multiple teaching, where teachers organised their classes so as to enable pupils to learn in integrated ways through topics covering several subjects, or for groups of pupils within a class to learn different subjects. We called this practice "curriculum complexity", and the Key Stage 1 teachers in our research had much more complexity in their curricular organisation than those at Key Stage 2, (Fig.2). The more complex the class organisation the more time-consuming planning, assessing and recording are likely to become.

Fourth, the formative purposes of assessment had been subverted by the pressure to provide accurate and fair end-of-Key Stage results for summative purposes, though

part of the problem was the inability of teachers to internalise the integration of teaching and assessment (Harlen and Qualter 1991). Teachers' confusion over the expectations for assessment and record-keeping, was allied to a fear that sooner or later someone, probably inspectors, would be coming to check up on them. We called this the "Key Stage Cops" syndrome. It had led to the teachers abandoning formative perspectives in fearful and frantic attempts to get summative results "right", whatever that meant. HMI (DES 1991b) found something similar when they reported teachers engaging in "fervent but unfocussed" assessment and recording. The publication of LEA 'league tables' towards the end of 1991 did little to allay the pressure on teachers to concentrate on the summative.

The picture emerging from our research was supported, or not contradicted, by other early studies (eg. DES 1991b, Taylor and Stanley 1991, Smithers and Zientek 1991, Coopers and Lybrand Deloitte 1991). It shows, despite the commitment of hard-pressed teachers, that the curriculum at Key Stage 1 in 1990-91 had few of the features of the dream package: it was not providing the entitlement to breadth and balance, assessment was not integrated diagnostically into teaching, and if it was being modernised through Science and Technology it might be at the expense of the rate of progress in pupils' achievement in reading.

It has been argued (Alexander et al 1992) that this analysis is both misdirected and premature. It is misdirected because counting the time available is less important than how available time is used. High quality learning experience in small amounts of time is better than low quality in adequate time. Moreover, this early research picture of excessive teacher workloads might be a 'blip' created by the novelty and uncertainty of the reform process. Teacher workloads would settle down after the initial turbulence, especially if the central government became able to offer less confusion in assessment policy. Although there is some truth in both points, neither would lead automatically to the view that the whole curriculum will at some time in the medium-term future become more manageable. The high quality time argument only makes sense within an overall framework of adequate time and it is this that is in question. The blip argument would be more convincing if:

- a) the arrangements for curriculum and assessment were not being subject to continual change;
- b) the whole broad and balanced curriculum was already in place in 1990/1991, the period to which the evidence refers. It was not, and since the following

two years would see further subjects in statutory form brought on stream, problems of manageability had yet to reach their peak.

- c) other reforms, such as LMS were not simultaneously being implemented

Key Stage 2

The argument about unmanageability at Key Stage 2 is based on task analysis rather than empirical evidence since little of the latter is yet available. There are three elements here : the nature of the task facing the teacher, the expertise in the system, and the support available. Thomas (1993) provides one analysis of the task facing the teacher. Part of the problem is that the Working Groups based their recommendations for statutory orders on the best practice in their subject. This is understandable but the consequence for class teachers was horrific. They had to develop best practice in all subjects not just one. They had to become the primary school equivalent of Einstein, Madame Curie and Linford Christie rolled into one. Even in a slimmed down version of the national curriculum, classteachers have over 400 statements of attainment to manipulate, detailed and confusingly presented programmes of study, poorly defined cross-curricular themes and Religious Education; in Years 5 and 6, the range of performance in a class is expected to be from probably Level 2 to Level 5 or 6, in each of the nine subjects of the national curriculum, (Fig.3). The intellectual tasks demanded of classteachers are realisable only by Renaissance men and women. In this perspective, the assertion (Alexander et al 1992) that "Teachers must possess the subject knowledge which the statutory orders require" (para.120) begins to sound like a plea of desperation.

Secondly, there are few Renaissance men and women in the primary teaching force. The Primary Staffing Survey (DES 1987) found fewer teachers qualified as main subject Mathematics teachers than there were schools and, even using the most generous definition of qualification, only 400 teachers in the system qualified in Technology. The study by Bennett and his colleagues (1992) showed serious problems of perceived competence and confidence to teach and assess many foundation subjects, especially Technology. Evidence about low standards in a number of the subjects such as History and Geography, (eg. DES 1978, DES 1989), and in activities set in Art lessons (eg. Alexander 1992) should not lead us to be sanguine about confidence and competence in the non-core subjects.

Thirdly, the infra-structure of support in the LEAs for In-service training that might have helped bridge some of the gap between the task demands and the competencies of the teachers is being eroded (see Keep 1992 for a fuller analysis). Schools may be being turned into small businesses, but one characteristic of small businesses is that they are not good at training their employees. Thus, classteachers at Key Stage 2, and especially in the latter two years of it, are facing statutory obligations that they cannot, even with high levels of commitment and effort, meet, because hardly any individual teacher has the range and depth of knowledge required. In Years 5 and 6, the classteacher's task of delivering the broad balanced and differentiated curriculum looks dramatically impossible.

DISCUSSION : SIX WAYS FORWARD

This nightmare for primary teachers has been recognised obliquely, at least for those working in Key Stage 2 (Alexander et al 1992). I acknowledge the point made by Alexander et al that no single solution will solve the problems of all schools, because of the diversity of schools in the system. Six possible ways forward seem worth exploring, though they are all controversial.

The first, in Alexander et al (1992), is that there should be greater flexibility in staff roles, with greater use of specialist, semi-specialist and co-ordinator roles, especially at the top end of Key Stage 2. This would make more use of existing curricular expertise within a staff group, by deploying teachers more frequently than at present, as specialists or semi-specialists teaching their subject to several classes. This is not a new idea; something similar was discussed in the Plowden Report in 1967, in the Primary Survey of 1978, and in the House of Commons Select Committee report in 1986. The problem with this idea is that subject co-ordinator roles were developed in some schools with great difficulty but limited success, given the lack of non-contact time, (see Campbell 1985, 1988). The extensive use of specialist or semi-specialist teaching, would be difficult to adopt for the typical primary school of seven teachers, except where teachers have more non-contact time. In any case, for the 1 in 5 small schools (with 90 or fewer pupils) in the system the options for exchanging specialisms are extremely circumscribed.

A second solution is to improve staffing levels in primary schools by the use of activity-led staffing models (Simpson 1988, 1989) so as to fit staffing in primary schools to the tasks now required of them. Where this has been modelled (Kelly 1991) it tended to equalise staffing

across the 5-16 age range. The problem here is that decisions about staffing have been devolved to schools, and the only way forward would be to develop a central policy to improve primary staffing through the funding formulae in the LMS schemes. These require approval from the Secretary of State so, in theory, it would deliver what is needed. However, its implementation, which would require central intervention in how teachers are deployed, perhaps along Section 11 lines, would run directly counter to the principle of devolved management and is unlikely to be attractive to DFE policy-makers or headteachers. In any case, it is unclear whether improved staffing levels in themselves can help with the problems of expertise in the primary teaching force as a whole, or with the task demands facing most classteachers, even after some specialist support has been provided.

The third solution is about the management of primary teachers' time. Our research showed that primary teachers typically spent between 5 and 6 hours a week on low level routine activities, for example registration, moving pupils around the school, supervising them, putting up displays, and attending school assemblies. All of these activities are very important from the point of view of socialising pupils, but not all of them need to be done by graduate teachers. More extensive use of non-teaching assistants might help free up teacher time in the school day to engage in planning, recording and marking, whether jointly or as individuals. There is something odd about teachers spending 5 hours a week on these kinds of activities and at the same time saying that their main problem in achieving instructional objectives is lack of time. The idea of dividing labour in this way will probably be unattractive in the collaborative cultures of primary schools, but the use of para-professionals to support professionals is common in other countries.

The fourth solution is to modify the demands of the national curriculum so as to make them realisable for the majority of classteachers. There are two approaches here; the radical and the ameliorative. The former position (eg. Oliver 1984, Wicksteed 1987) assumes that the broad and balanced curriculum is undeliverable and that a less broadly-conceived approach would be more realistic. Whatever its attractions to those in the elementary tradition, this radical option seems politically impossible. The Conservative government has committed itself to nine subjects and asserted that standards will rise across all of them. The ameliorative position is represented by Thomas (1993). The position here is that the teachers' task will become more reasonable if some major tidying-up of the existing curriculum were to be undertaken. Overlapping and inessential material could be excised, a standard format for all subjects be introduced, and a less-detailed specification of curriculum items put in place. The revision of the Mathematics and Science

orders for 1993 has led the way; other subjects could follow. This approach would help teachers, particularly with their use of documents for planning, but would still leave substantial problems of curricular expertise for most teachers.

The fifth solution would be to recognise that the "multiple subject" approach to curriculum organisation through integrated Topic work, or through group work based on different subjects going on simultaneously in classrooms, whatever its advantages in an ideal world, makes the task of delivering the national curriculum more difficult and time-consuming than is reasonable for most teachers. Planning of the curriculum might concentrate more often, or more typically, upon single subjects. There need be, as Alexander et al (1992) point out, no loss of learning methods that use enquiry, first hand-experience, and independent sources. Nor need the amount of group work be reduced. But the focus would be upon single subjects, or cognate subjects. The problem with this solution is that it ignores the fact that one reason why Topic approaches are so popular is that they enable teachers to cover several areas in a short time, to be economical with curriculum time. To separate them out will make the problem of content overload visible.

The sixth solution would be for schools to continue to rely upon the classteacher model but to introduce standard texts or schemes in all, or most, subjects, in which the intellectual content would be provided for teachers, together with examples of learning and assessment tasks in differentiated levels. The advantage here is that the teachers could have a reasonable degree of confidence that the intellectual demands were appropriate in those areas where their own intellectual background was shaky. There will be understandable opposition to such a move from two quarters. First, there are those who believe that "good practice" cannot be based on class texts in which learning tasks are fairly standard and progressively sequenced. Yet Mathematics schemes of work, and Reading schemes, are very close to such a format and are widely adopted.

The second source of opposition would be from those who fear state-prescribed texts and welcome its prohibition in the Education Reform Act 1988. Although these are common in other systems it could be argued that there is no reason for state approval in our system. Market forces are already operating and the emergence of new schemes and texts tailored to the current national curriculum requirements are emerging. Schools would have choice, assuming they have access to the kind of information needed to make it. This last point is problematic, especially at a time when specialist advice from LEA advisers and inspectors is being dismantled. State approval, rather like a British Standard, of any text or

scheme that meets national curriculum criteria, though not state prescription of one official text, might be necessary.

The major problem here is in the culture of many primary schools, where teachers have been made to feel guilty about widespread use of class texts because they do not appear to meet the developmentalists' conceptions of "good practice" where first-hand experience is at a premium.

The solutions are not mutually exclusive. In some combination they could go a long way toward protecting the dream of the entitlement curriculum, and simultaneously making it realisable without subjecting teachers to the continuation of unmanageable workloads and a growing sense of failure. However, all but numbers 4 or 5 have resource implications, and all are in this sense political. But it is worth reiterating the point, made explicit in the Cooper and Lybrand Deloitte (1991) study, that implementing the national curriculum in primary schools carries substantial cost implications, both in materials and in staffing levels. To assume that it does not is to live in a dream world.

REFERENCES

- Acker, S. (1992), "Teacher Relationships and Educational Reform in England and Wales", The Curriculum Journal, 2.3
- Alexander, R. (1984), Primary Teaching, London, Holt Rinehart and Winston
- Alexander, R. (1992), Policy and Practice in Primary Education, London, Routledge
- Alexander, R., Rose, J. and Woodhead, C. (1992), Curriculum, Organisation and Classroom Practice in Primary Schools : A Discussion Paper, DES., London, HMSO
- Barker-Lunn (1982), 'Junior Schools and their Organisational Policies', Educational Research, 24, 4.
- Barker-Lunn (1984), 'Junior Schoolteachers and their Methods and Practices', Educational Research, 26, 3.
- Bealing, D. (1972), 'The Organisation of Junior School Classrooms', Educational Research, 14, 3.
- Bennett, S.N. (1976), Teaching Styles and Pupil Progress, London, Open Books
- Bennett, S.N. Desforges, C., Cockburn, A. and Wilkinson, B. (1984), The Quality of Pupil Learning Experiences, New York, Lawrence Erlbaum
- Bennett, S.N. (1991), Group Work, London, Routledge
- Bennett, S.N. (1992), Managing Learning in the Primary Classrooms, ASPE Paper No.1, Stoke, Trentham Books
- Bennett, S.N. and Dunne, E. (1992), Managing Classroom Groups, New York, Simon and Shuster
- Bennett, S.N., Wragg, E.C., Carré, C.G. and Carter, D.S.G. (1992), 'A Longitudinal Study of Primary Teachers' Perceived Competence in, and concerns about, National Curriculum Implementation', Research Papers in Education, 7, 1/2, pp.53-78
- Blyth, W.A.L. (1965), English Primary Education, Vol.2., London, Routledge and Kegan Paul
- Central Advisory Council for Education (1967), Children at the Primary Schools, Vol.1., London, HMSO
- Campbell, R.J. (1985), Developing the Primary School Curriculum, London, Holt Rinehart and Winston

Campbell, R.J. (1988), Cashmore School, Block ED.352, Open University Press

Campbell, R.J. (1989), 'HMI and Aspects of Public Policy for the Primary Curriculum', in Hargreaves, A. and Reynolds, D. (1989), Education Policies : Critiques and Controversies, Lewes, Falmer Press

Campbell, R.J. (ed) (1993, in press) Breadth and Balance in the primary Curriculum, Lewes, Falmer Press.

Campbell, R.J. and Neill, S.R.StJ., (1990), 1330 Days, London, Assistant Masters and Mistresses Association

Campbell, R.J., Evans, L., Neill, S.R.StJ. and Packwood, S. (1991), Workloads, Achievement and Stress, London, Assistant Masters and Mistresses Association

Coopers and Lybrand Deloitte (1991), Costs of the National Curriculum in Primary Schools, London, National Union of Teachers

Core Subject Association (1991), Monitoring the Implementation of the National Curriculum, Sheffield, NATE

DES (1978), Primary Education in England : A Survey by HMI, London, HMSO

DES (1982), Education 5 - 9 : An Illustrative Survey, London, HMSO

DES (1985a), The Curriculum from 5 - 16 : Curriculum Matters 2, London, HMSO

DES (1985b), Education 8 - 12 in Middle and Combined Schools, London, HMSO

DES (1987), Primary Staffing Survey, London, HMSO

DES (1988), Task Group on Assessment and Testing : A Report, London, HMSO

DES (1989a, 1989b, 1990a), Series of reports called : The Implementation of the National Curriculum in Primary Schools, Summer 1989, Autumn 1989, Summer 1990)

DES (1989c), Circular 5/89, London, HMSO

DES (1990b), Standards in Education 1988-90 : Annual Report of HM Senior Chief Inspector of Schools, London, HMSO

DES (1991a), The Implementation of the Curricular Requirements of ERA : An Overview by HM Inspectorate of the First Year, London, HMSO

DES (1991b), Assessment, Recording and Reporting : A Report by HMI on the First Year, 1989-90, London, HMSO

Galton, M. and Simon, B. (1980), Inside the Primary Classroom, London, Routledge and Kegan Paul

Gipps, C. (1988), "The Debate over Standards and the Uses of Testing", British Journal of Educational Studies, XXXVI, 1, pp.21-37

Gipps, C. (1990), Assessment : A Teacher's Guide, London, Hodder and Stoughton

Harlen, W. and Qualter, A. (1991), "Issues in SAT Development and the Practice of Teacher Assessment", Cambridge Journal of Education, 21, 2, pp.141-153

House of Commons (1986), ESAC 3rd Report : Achievement in Primary Schools, Vol.1., London, HMSO

Keep, E. (1992), "The Need for a Revised Management System for the Teaching Profession", National Commission on Education - Briefing No.2

Kelly, A. (1991), "Toward Objective Funding : An Activity-led Model of Teacher Staffing in Primary and Secondary Schools", British Educational Research Association, Annual Conference, Nottingham

Kelly, V. (1990), The National Curriculum : A Critical Review, London, Paul Chapman

Kelly, V. (1993) "Never Mind the Quality, Feel the Breadth and Balance", in Campbell, R.J. (ed) (1993)

Lawlor, S. (1988), Correct Core : Simple Curricula for English, Mathematics and Science, London, Centre for Policy Studies

Letwin, O. (1988), Aims of Schooling : The Importance of Grounding, London, Centre for Policy Studies

Mortimore, P et al (1988) School Matters: The Junior Years, Wells, Open Books.

Muschamp, Y., Pollard, A. and Sharpe, R. (1992), "Curriculum Management in Primary Schools", Bristol Polytechnic

National Curriculum Council (1992), Regional Primary Seminars : Report to Delegates, York, NCC

National Union of Teachers (1991), "Miss, the Rabbit Ate the Floating Apple" : The Case Against SATs, London, NUT

Oliver, D. (1984), "Is Primary Education Possible?", Education 3-13, 12, 2.

- Osborn, M. and Pollard, A. (1991), "Anxiety and Paradox : Teachers' Initial Responses to Change under the National Curriculum", Working Paper 4, PACE Project, Bristol Polytechnic
- Osborn, M. and Broadfoot, P. (1991), "The Impact of Current Changes in English Primary Schools on Teacher Professionalism", AERA, Chicago 1991
- Pollard, A. (1993) "Balancing Priorities: Children and the Curriculum in the Nineties", in Campbell, R.J. (ed) 1993
- Pascall, C., (1989), (for the Early Years Lobby), National Curriculum and Early Years, Stoke, Trentham Books
- Richards, C. (1982), "Curriculum Consistency", in Richards, C. (Ed.), New Directions in Primary Education, Lewes, Falmer Press
- Ross, A. (1993) "The Subjects that Dare not speak their Name", in Campbell, R.J. (ed) (1993)
- Schwarzenberger, R. (1989), Attainment Targets in Mathematics, Stoke, Trentham Books
- Silcock, P. (1990), "Implementing the National Curriculum : Some Teachers' Dilemmas", Education 3-13, 18.3, pp.4-11
- Simpson, E. (1988), Review of Curriculum-led Staffing, Windsor, NFER
- Simpson, E. (1990), "The Stubborn Statistic", Education, 21, April
- Smith, R. (1990), "What Doesn't Anita Know?", Education 3-13, Vol.18, No.3, pp.11-13
- Smithers, A. and Zientek, P. (1991), Gender, Primary Schools and the National Curriculum, NAS/UWT, Birmingham
- Taylor, P. and Stanley, J. (1991), Early Days : Primary School Teachers and the National Curriculum, Birmingham, Primary Schools Research and Development Group
- Thomas, N. (1993) "Breadth, Balance and the National Curriculum", in Campbell, R.J. (ed) (1993)
- Tizard, B. et al, (1988) Young Children at School in the Inner City, N.Y. Lawrence Erlbaum.
- Wicksteed, D., (1987), "Curriculum Matters, enough to Reduce It", Education 3-13, 15, 2.

FIGURE 1

TIME SPENT ON EACH SUBJECT : 1991
(Based on Campbell et al (1991))

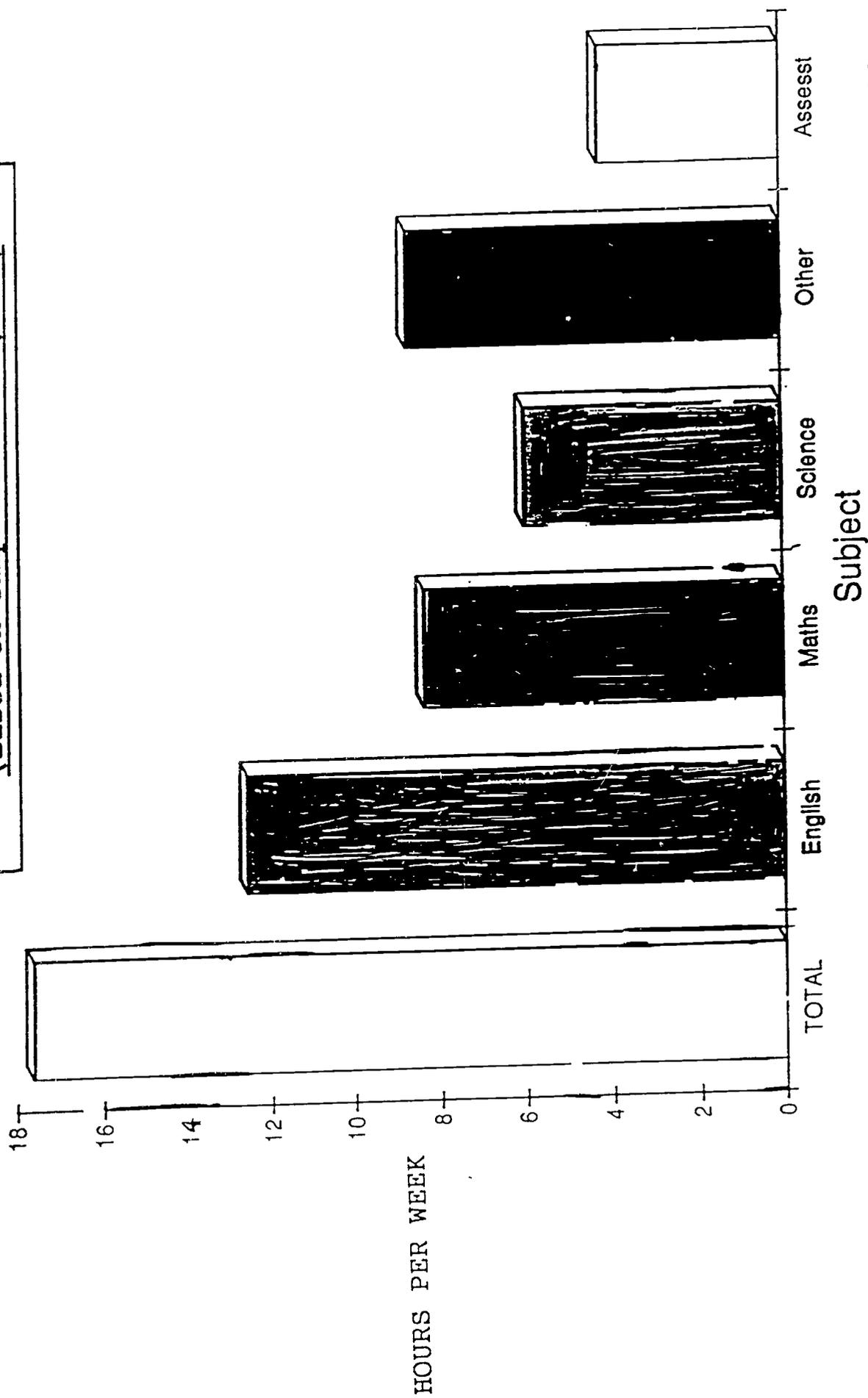


FIGURE 2

Teaching Time on Different Subjects for 4 Samples, (hours per week)

SUBJECT	HOURS PER WEEK				All
	Sample 1 (n = 95) KS.1	Sample 2 (n = 53) KS.1	Sample 3 (n = 34) KS.1 & 2	Sample 4 (M = 192) KS.1 & 2	
English	12.0	12.6	9.8	9.8	10.8
Mathematics	7.7	8.4	5.8	6.3	6.9
Science	4.8	6.0	4.9	3.4	4.3
Other subjects combined	8.8	8.8	8.8	9.6	9.2
Assessment while Teaching	4.1	4.3	0.9	2.7	3.1
Total Teaching Time	17.4	17.7	18.8	18.7	18.2
Sum of various subjects	37.4	40.1	30.2	31.8	34.3
Curriculum Complexity Ratio	2.2:1	2.3:1	1.6:1	1.7:1	1.9:1

FIGURE 3

NATIONAL CURRICULUM AT KEY STAGE 2 : (SEPT.1992)

	No.of A.Ts:	No. of Statements of Attainment	Level Range
English	5	74	2 - 5
Mathematics	5	83	2 - 6
Science	4	64	2 - 5
Technology	5	72	2 - 5
History	3	20	2 - 5
Geography	5	80	2 - 5
P.E.	2	6	End of KS Statement only:
Art	2	7	End of KS Statement only:
Music	2	8	End of KS Statement only:
Total	33	414	