
**Research Report
No 131**

The Impact of School Transitions and Transfers on Pupil Progress and Attainment

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EXECUTIVE SUMMARY

The DfEE commissioned this literature and effective practice review on the effects on pupils' progress of two related experiences: the move from one school to another (*transfer*) and the move from one year group to the next within a school (*transition*).

The main purposes of the review were to clarify whether the research evidence for dips in progress at these critical moments was conclusive and to identify any successful strategies for raising and maintaining standards across transition and transfer. The review was particularly concerned with pupils' progress at Key Stage 2 and with the 'dip' post Key Stage 2 where much of the existing research has been focused; however, it also took account of the smaller but growing body of evidence post Key Stage 1.

In addition to reviewing existing research (mostly from the UK and the United States) the team approached schools and LEAs; national agencies such as OFSTED and QCA also provided valuable information.

Overview

In the last two decades a great deal has been achieved. Transition as well as transfer is now on the agenda. Transfer is better organised from the point of view of teachers, pupils and parents. The induction process has become more user-friendly with the result that fewer pupils experience anxiety about the move to the new school and those that emerge tend to be short-lived. Much, however, remains to be done in seeking to overcome the more intractable problems to do with curriculum continuity and teaching and learning. Schools will need to redirect some of their present efforts towards achieving a better balance between social and academic concerns at transfer as well as at various transition points, and in the process, give greater attention to pupils' accounts of why they lose ground or lose interest at these critical moments. The focus of activity in the past has been on the 'exits and entrances years' but the review suggests that in future attention needs to be directed more evenly across the whole of the middle years of each phase of schooling as pupils move from one year to another.

The recommended interventions - which are spelled out in the body of the report - are designed to support schools in sustaining pupils' progress and motivation at critical points in their school careers and in rescuing pupils who are seriously at risk of falling behind or of 'dropping out' and failing.

Key points emerging from the study

In relation to transfer

- Most of the research and reported activities have focused on the personal and social effects of transfer on pupils. Only a small number of studies, including one or two by LEAs, have considered the impact of these changes on pupils' academic progress.

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- Despite research evidence that transfer is a less stressful experience for pupils than it was 20 years ago, many schools are still putting all their energy and money into efforts at smoothing the transfer process rather than ensuring that pupils' commitment to learning is sustained and their progress enhanced.
 - When the research findings are supplemented by the judgements of Ofsted inspectors, and even after allowance is made for the 'summer dip', it becomes clear that many pupils experience a 'hiatus' in progress after transfer. We estimate that up to two out of every five pupils fail to make expected progress during the year immediately following the change of schools.
 - Despite the introduction of the National Curriculum there are still problems at transfer with curriculum continuity. There is a marked increase in liaison between feeder and transfer schools but not all schools are giving attention to understanding differences in teaching approaches in the different phases and some secondary teachers still cling to the principle of the 'fresh start'.
 - For some schools the task of managing the transfer process effectively is made more difficult because parental choice no longer means there is a recognised catchment area; many secondary schools are dealing with large numbers of 'feeder' schools.
 - Amongst the schools who have adopted more innovative approaches to transfer, most are concentrating on extended induction programmes in which pupils are prepared for learning in their new school or new year group. Some of these programmes involve parents, some include counselling sessions for pupils deemed to be at risk, some involve 'tracking' procedures to check whether the more able pupils are being sufficiently stretched. The new technologies are being used to promote more efficient transfer of records, improve liaison between teachers and, in some cases, to enhance learning, as when specialist subject teachers from the secondary school provide lessons for primary pupils by means of video-conferencing.

In relation to transition

- Dips in performance are also evident - the 'middle years' phenomenon' -in Year 8 and in Years 3 and 4. Indeed, relatively little attention has been given to sustaining progress across each year between the national key stage tests.
 - Of the schools who are giving attention to transition, most are focusing on Year 8; strategies include giving Year 8 a stronger identity that will re-engage pupils who are already losing enthusiasm for learning and recognising pupils' sense of greater maturity by giving them more say in their learning or greater social responsibility in school.
 - The decline in progress is often accompanied by a loss of enjoyment of school and a fall in motivation.
 - Pupils in secondary schools frequently see the years between national key stage tests and public examinations as somehow less important and do not appreciate that working hard during these periods can have pay-offs later. They can become
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preoccupied with friendships and gain a reputation for ‘messing around’; pupils who want to change from being a ‘dosser’ to a ‘worker’ find it extremely difficult to shake off their old image. Consequently, they may decide to ‘give up’ rather than to ‘catch up’.

- Some groups of pupils are more at risk than others of losing ground at these critical moments in their school careers; in the process the seeds of social exclusion may be planted.

Recommendations

In relation to transfer

- Transfer-related activities such as improving the communication of key stage test results, holding summer schools for pupils at risk or setting up joint primary-secondary projects in the term before transfer are important but they will not in themselves overcome the problems of transfer. More radical approaches are needed which give attention to discontinuities in teaching approaches, which look at the gap between pupils' expectations of the next phase of schooling and the reality, and which help teachers develop strategies for helping pupils to manage their own learning. The survey of current practice carried out by the Centre for the Study of Comprehensive Schools (CSCS) for this review suggests that only a minority of schools have, so far, taken up this challenge.
- There is a need for research that would plug gaps in the existing knowledge base. The National Numeracy and Literacy strategies have a part to play in reducing problems of transfer, as do various other initiatives such as summer vacation ‘catch up’ programmes, homework and breakfast clubs. It will be important for policy makers to have some understanding of the relative impact of these different initiatives in conjunction with those which schools themselves put in place. The evaluation could usefully focus on the impact of the strategies on the progress of pupils identified in the review as most at risk.
- There is a need for better base line information against which the impact of the various initiatives currently being put in place by LEAs and schools could be evaluated. The ‘optional tests’ developed by the QCA are increasingly being used by primary schools as part of their target setting and would provide appropriate information for tracking pupils’ progress over time. However, there is currently no equivalent at the secondary stages.

In relation to transition

- Schools need to find out how pupils see each of the transition years and to present a picture of ‘the next year’ that makes pupils look forward to it with excitement - in terms of both opportunities to extend their learning and opportunities to be ‘more adult’ and responsible.
 - Schools also need to give attention to helping pupils who want to settle down manage the personal transition from being a ‘dosser’ to a ‘worker’.
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In relation to transfer and transition

- In relation to both the start of a new phase of schooling and the start of a new year, schools need to develop structures which allow pupils to ask about things they don't understand, particularly their concerns about classroom learning and the expectations of their new teachers.
- Schools need to consider the possibility of providing flexible teaching which takes account of differences in pupils' preferred learning styles (paying particular attention to gender differences); in this way fewer pupils may become disengaged.
- As yet, there has been no firm evaluation of the impact on pupils' motivation and performance of the more innovative practices whether at transfer or transition points; teachers are likely to need support in developing skills in evaluation.

As more schools seek ways of raising standards by reducing the negative impact of transfers and transitions on pupil progress, it will be important to provide a record of 'successful practices' which schools can use and build upon. This record would not only describe a practice which the school would recommend but also the degree to which it has been effective in a particular context (i.e. its fitness for purpose).

1. INTRODUCTION

This study was conducted on the common understanding within the team and between the team and the sponsors that we need young people who can sustain, through primary and secondary schooling:

- an enthusiasm for learning
- confidence in themselves as learners
- a sense of achievement and purpose.

It follows that it is important to look at and understand more about the impact on performance and on attitudes to learning of the routine breaks in learning that occur as pupils move from one year to another and from one school to another.

We use the word ‘transfer’ to refer to moves from one school to another and the word ‘transition’ to refer to the move from one year to another within a school. Much more attention has been given to cross-institutional transfer than to within-school transition experiences. However, teachers, policy makers and researchers are increasingly aware of the importance of giving greater priority to transitions if pupils are to sustain their commitment to learning at difficult moments in their school careers.

The conduct of the study

The team’s brief was to carry out a ‘literature and effective practice review’ to clarify whether current arrangements used by schools to ‘manage’ transfer and transition had a negative impact on pupils’ academic progress, and if so, whether some schools and LEAs had developed effective strategies for dealing with the problems. In carrying through this brief the team looked at the research literature on transfer and transition, as well as studies presently under way. It also invited accounts of practice from teachers and from local authorities. In terms of the research literature and current research, it paid attention to the following:

- * accounts of research into pupils’ progress and commitment to learning at points of institutional transfer (studies focused mainly on the transfer from primary to secondary school);
- * accounts of research into pupils’ progress and commitment to learning at points of within-school transition, particularly the moves from year 2 to year 3 and from year 7 to year 8.

In summary, the evidence of this review suggests schools need more support in:

- giving attention to transitions as well as to transfers;
- evaluating the impact of their present transition/transfer strategies;
- giving attention to pupils’ accounts of why they disengage or underperform at these critical moments;
- recognising when and how different groups of pupils become ‘at risk’; and

- achieving a better balance between academic and social concerns at various transition points.

Studies of transition and transfer

The growth of interest in studying transition

Interest in transition has been relatively recent; the pre-occupation with transfer has left pupils' experiences of transition virtually unexamined. A longitudinal study by Rudduck *et al* (1991-96) has highlighted the issues of loss of impetus towards the end of year 7 and in year 8; the findings have been widely endorsed by teachers and confirmed in smaller-scale studies in other schools (see Doddington *et al*, 1999; Rudduck *et al*, 1998). Concern has recently been extended to transitions in the primary school and a small study, supported by Ofsted, is now underway.

The changing focus of transfer studies

The process of transfer from one stage of schooling to another and from one school to the next is recognised as important and has been the subject of various studies over the past thirty years or so. During that period research has focused on quite different aspects of the process and looked at it from different perspectives.

One of the earliest studies to look at transfer and performance was Nisbet and Entwistle's in the 1960s. A large-scale study involving over 2000 children from 33 schools in Scotland, it pursued two questions: at what age children should transfer to secondary school, and what effect, if any, transfer has on students' progress. Students who had problems in adjusting in the new school seemed to be less successful in their schoolwork. The authors also found that certain students - academically less motivated students and those from working class backgrounds - were more likely than others to suffer adjustment problems (Nisbet and Entwistle, 1969).

Later transfer studies, building on work that emphasised the disorientation that some pupils experience when they moved to the new school, focused mainly on the personal, social and emotional aspects of transfer. Measor and Woods (1984), for example, looked at the development of pupils' self-identities. Beynon (1985) focused on friendships, teacher pupil relationships and on the prevalence and impact of 'labelling' systems. Others have taken a similar path (Murdoch, 1982; Power and Cotterell, 1981).

Galton *et al*, by contrast, have sustained an interest in the impact of transfer on academic progress. Between 1975 and 1980 these researchers, based at Leicester University, followed a cohort of pupils in 5-9 and 5-11 feeder schools and for a further year after transfer. Teachers and pupils were observed each term for three days using specially designed systematic observation schedules and pupils' attitudes and attainments were measured at the end of each school year. This study, known as ORACLE (Observation Research and Classroom Learning Evaluation), has been one of the most frequently-cited in primary education. Its results are contained in a five volume series of which two, *Moving from the Primary Classroom* (Galton and Willcocks, 1983) and *Inside the Secondary Classroom* (Delamont and Galton, 1986) deal specifically with questions of transfer.

Two decades later the original ORACLE research has been replicated. Using many of the same schools that took part in 1975, teachers and pupils were again observed and pupils' attainments and attitudes measured. As such the research provides a rare opportunity to compare and contrast classroom practice over a period when primary schools, in particular, have undergone considerable change. Because it is the only recent research study to attempt an evaluation of the impact of classroom practice on pupil progress over the period of transfer, we rely heavily on its findings along with those from a few LEAs who have maintained a programme of regular testing.

Compared to transfer, research evidence on problems of transition is even more limited. Here only one major longitudinal study, by Rudduck over a five year period beginning in 1991, is available. Over 80 pupils from three comprehensive schools were followed through from year 8 to the end of year 11 (see Rudduck *et al*, 1996). They were interviewed once a term. One set of questions focused on their images, expectations and experiences of each of the five years of secondary schooling (the transfer to secondary school and year 7 were explored retrospectively). The data highlighted a decline in commitment to learning towards the end of year 7 and in year 8 and the lack of identity of year 8 compared with other years.

Rudduck *et al*'s work takes us back to academic concerns. She argues that the social upheavals of the move to secondary school are so preoccupying that it is difficult for students, unless the school intervenes in a positive way, to focus on the 'seriousness of learning'. Teachers in secondary schools offer supportive induction programmes to help new pupils 'acclimatise' but learning is only one of many features in the new world of the 'big school': there are many compelling rivals for pupils' attention. If pupils are not helped during the early period of their new school to sustain their excitement about learning and develop individual routines for managing learning, both on and off the school site, then they may have difficulties with progress later.

In short, our review suggests that the induction programmes energetically developed by schools in the 1980s and 1990s may have concentrated on the social aspects of transfer at the cost of establishing commitments to, and sound foundations for, academic learning.

Before developing the above argument, however, we shall review the evidence which examines the effects of transfer and transition on pupils' attitudes and academic progress.

2. TRANSITIONS, TRANSFERS AND PUPIL PROGRESS

Transitions and transfers affect pupil progress. In this section we review the research evidence, explore many of the reasons why transitions and transfers may be affecting pupil progress, identify particular groups of pupils who may be especially ‘vulnerable’ and consider whether some subject areas of the curriculum present greater problems than others.

A: THE EVIDENCE

There is a strong body of professional opinion amongst teachers that transitions and transfers make a difference to pupils’ progress. Not surprisingly, therefore, many of them have consequently devoted a good deal of time and effort to what they see as potentially detrimental effects. Indeed, it is notable that during the course of our review we encountered no one who argued that how schools handled such issues didn’t make some difference. However, as we were subsequently to find, considerably less evidence of a more systematic kind turned out to be available.

Our review confined itself to three main questions about the research:

- how large are the effects of transfers and transitions on pupils’ progress and are some stages more crucial than others?
- do such effects endure and become cumulative or are they merely temporary ‘blips’ in pupils’ progress? and
- do some groups of pupils appear to be more ‘at risk’ than others?

Evidence from professional judgements

Evidence from OFSTED inspections appears to provide preliminary support for the professional view that transitions and transfers make some difference to rates of pupils’ progress. OFSTED inspectors are required to make separate judgements about the amounts of progress they believe pupils have made by the end of each year and also by the end of each key stage. Their most recent evidence suggests that there has been a particular ‘dip’ during year 3, at least in comparison with the years preceding and following it (OFSTED, 1999). Some care is needed, however, in interpreting how large this ‘dip’ is. If one compares it with the two immediately adjacent years (2 and 4) it seems fairly modest - just a matter of two or three percentage points (see Figure 1). On the other hand, if one compares it with some other years the effects seem more striking. For example, whereas inspectors rated pupil progress as ‘good’ or ‘very good’ in 47% of reception classes and 45% of year 6 lessons, they only rated 35% of year 3 lessons in this way. There were similar patterns during the previous year (OFSTED, 1998).

There are signs of a similar (albeit slightly less marked) ‘dip’ during the secondary school (see Figure 1). Across the national sample as a whole pupils were judged to have made ‘good’ or ‘very good’ progress in 42% of year 8 and 40% of year 9 lessons compared with 45% of year 7 lessons and 44% of year 11 lessons (OFSTED, 1999). Indeed, as at the primary stages, the ‘dip’ is singled out for comment. As the report remarks: ‘pupils

get off to a sound start in year 7 but progress slows in years 8 and 9 before picking up in Key Stage 4'. Again, there was a similar pattern in the previous year (OFSTED, 1998).

The most striking evidence of a drop in pupil performance emerges in Ofsted's data around the time of transfer from primary to secondary schooling with a steep rise between the end of Key Stage 2 (KS2) and the early stages of year 7 in the proportions of schools where pupil attainment was judged to be 'unsatisfactory' - a figure of 50% of all secondary schools is reported (OFSTED, 1998: 72, 78). However, it needs to be borne in mind that this steep rise may be partly a function of the fact that different groups of inspectors (primary-oriented and secondary-oriented) were making the judgements at the two time-points. Differences of perception between 'sending' and 'receiving' schools and teachers are, of course, of central importance in considering how to improve pupils' progress at this crucial juncture.

A similar problem has dogged practitioners' attempts, in one way or another, to assess progress around this transition point. Children's attainments on 'high-stakes' tests at the end of KS2 in the primary school are often compared with their performance a few months later on the relatively 'low-stakes' tests administered in year 7 by secondary schools; the consequences of pupils' performances have differed and the tests have not always been the same as those previously administered. Not altogether surprisingly, secondary teachers often report that their pupils have not sustained their earlier levels of performance or may even have dropped back - whilst frequently ignoring the different contexts within which the two assessments were made. In short, the evidence from professional judgement suggests that there is a problem around the transfer stage without making clear how large this may be.

Figure 1: 'Dips' in Pupil Progress in Lessons by Year

50

45

40

35

30

R

2

4

6

8

10

Primary

Secondary

Source: Ofsted, 1999

A number of LEAs we contacted have undertaken more systematic analyses of their data on pupil performance around the time of transfer from one school to the next. Their evidence certainly seems to confirm the view that pupils' performances either 'dip' or 'stand still'. One of the most extensive analyses to date has been undertaken by Suffolk LEA which has been testing pupils at regular intervals from the ages of 6+ to 12+ for a number of years. Consequently they have been well-placed to look at the progress and performance of individual pupils. The main conclusion from their study of transfer issues was as follows:

Data collected as part of the Suffolk School Improvement Project show consistently that there is a dip in progress in reading when pupils transfer from one phase of schooling to another. Pupils who are in 5-11 schools make more progress on average between the ages of 9 and 11 than do pupils who transfer to middle schools. Similarly pupils in middle schools make more progress in reading in Key Stage 3 (KS3) than do pupils who transfer at 11 into high schools. (Suffolk LEA, 1997: 3)

The impact of transitions on pupil progress

We have been unable to identify any study focused directly on the effects of transitions on pupils' performances during the primary years. However, a project recently completed for the QCA by researchers at the NFER does throw some indirect light on the issue by showing how much progress pupils had made since they were assessed at Key Stage 1 (KS1) (Minnis *et al*, 1998; summarised in QCA, 1998a). The outcome measures used in this research were pupils' performances in reading, spelling, written and mental maths on 'optional tests' designed to track pupils in years 3, 4 and 5. Just over 250 schools were involved which were broadly representative of all primary schools (although there was some under-representation of the lowest-achieving schools); three separate cohorts participated with around 10,000 pupils in each. Using the common baseline of KS1 assessments, separate estimates were made for each cohort of the progress pupils had made by the end of year 3, the end of year 4 and the end of year 5.

Table 1 focuses specifically on the amounts of progress pupils had made from Key Stage 1 by the end of year 4. It needs to be recognised, of course, that the progress pupils can make depends, in part, on the measuring yardsticks being employed to assess them giving scope for this to be demonstrated; so-called 'ceiling' effects or steps between levels which are too large can confuse the picture. Year 4 is the halfway point between the first two Key Stages and offers a midpoint in pupils' progress from KS1 to KS2 at which to assess progress. The evidence suggests that a significant minority of pupils (up to a third) were failing to make as much as a level's progress over the course of the two years; which figure one adopts here depends in part on what one expects pupils who only just scrape into the Level 2 band of performance at Key Stage 1 to achieve at a later date. Given their Key Stage 1 performance, expectations may need to be correspondingly more modest when their subsequent progress is assessed.

Perhaps the most striking finding to emerge from this study, however, was the extent to which the progress pupils made varied from school to school. Given the ways in which these data were reported it is difficult to be precise about the size of these effects but they certainly appear to have been substantial and comparable to those found in studies of primary school effectiveness. It would also have been interesting to know whether the schools where pupils made less progress by the end of year 3 were the same schools where they made less progress by the end of years 4 and 5 as well. Such evidence would provide support for the view that transition effects are cumulative.

Some indirect evidence for the variability of pupils' progress amongst these age-groups comes from an analysis of some 20 studies intended to establish the effects of initiatives with 'slow' readers (Brooks *et al*, 1998). The number of interventions which has been attempted in the post-KS1 phase has been sizeable. Although the greater majority have been implemented because pupils were 'falling behind' it is not entirely clear whether their primary concern was that the target pupils were 'low' attainers or those making 'slow'

progress. Whatever the case, many of the studies subsequently found that they could hasten the progress of the 'experimental' groups, at least for the duration of the intervention. Furthermore, seven of the studies also tested pupils at some later date. Encouragingly, the authors report that 'only one of these follow-up studies showed evidence of 'wash-out' - that is of children losing the gains they had made during the intervention'. Whilst it also draws attention to some important caveats about the overall quality of the research in the studies considered, the review does seem to underline the value of intervening at a fairly early stage in some pupils' careers post KS1 if they are to secure expected levels of progress towards KS2 targets.

Table 1: Pupil Progress from KS1 to end Y4 on QCA Optional Tests

KS1 level achieved	Progress from KS1 to end Y4	
	Less than 1 level's progress (%)	1 or more level's progress(%)
Reading		
1	36	64
2	29	71
3	48	52
Writing		
1	5	95
2	34	66
3	56	44
Written Maths		
1	31	69
2	34	66
3	48	52

Source: Minnis *et al*, 1998

Recent government initiatives have provided additional support for certain pupils in the run-up to the time when they transfer from one stage to the next through summer schools. The intention has been to help pupils 'catch up' in terms of their performance in literacy and numeracy. There could, of course, be multiple reasons why a pupil was lagging behind. In North America, however, there has been a particular interest in the effects of long summer vacations on pupils' transitions. In a meta-analysis of some 40 research studies Cooper *et al* (1996) demonstrate that the absence of instruction over the summer can make at least a month's difference to pupils' progress. The 9-14 age groups seem to be particularly likely to make such losses. They conclude that the acquisition of factual and procedural knowledge suffers most. 'The effect of (the) summer break is more detrimental for maths than for reading and most detrimental for maths computation and spelling' (*ibid*: 264).

Unfortunately, none of the studies Cooper *et al* reviewed took on board the question of whether these effects were cumulative - that is whether a pupil who was vulnerable to the 'summer effect' one year would be equally vulnerable in subsequent years. To explore this question a longitudinal study which followed up the same pupils over more than one year would be required. On the balance of probabilities, however, it seems likely that there are some cumulative effects on pupils' progress across their primary school careers; if this proved to be the case then the consequences for pupil progress would be considerable.

The impact of transfers on pupil progress

In our introduction we remarked that, apart from the work of the ORACLE team based at Leicester University (Galton and Willcocks 1983), few British studies have attempted directly to evaluate the impact

of transfers on pupils' progress. The ORACLE programme of research was carried out between 1975 and 1980. It consisted of a series of inter-related projects including one where pupils were observed in their final year at primary school and during their first year after transfer to either a middle or secondary school. Motivation, anxiety and attitude to school were measured on three occasions and academic progress assessed by testing pupils in the June before transfer and then twelve months later.

As with the previous studies cited earlier, anxiety levels rose prior to transfer but had declined by the November of the first term in the new school. One full year after transfer they had declined still further. However, although motivation and enjoyment increased during the first term in the new school, by the end of the year both levels had fallen below those sustained in the final term of primary school. These effects were accompanied by a *hiatus* in progress on standardised tests of language, mathematics and reading. Not only did the rate of progress decline overall (and this was not due to the ceiling effects of the test) but nearly 40% of the pupils made either losses or no gains in absolute terms. Losses were greatest in language and were significantly greater for boys than for girls. At the time, these effects were mostly attributed to lack of curriculum continuity and the incompatibility of teaching methods in the feeder and transfer schools (Delamont and Galton, 1986).

Since then only a small number of local authorities have followed up these findings in a systematic way. This is largely because during the past decade LEAs have been faced with major problems of restructuring - the result of the 1988 Education Reform Act and the introduction of the National Curriculum and its associated standard assessment and inspection framework. Where, however, progress at transfer has been monitored, as in the case of Suffolk LEA (cited earlier), the conclusions are in line with those of the ORACLE study. Dips in progress were identified in reading while progress in speaking and listening was judged to be uneven. The report concluded that in mathematics pupils in some schools were set back by as much as a year (Suffolk LEA, 1997). The author of the report argues that liaison should focus more closely on standards of work and the expectations of pupils so that all teachers share a 'common understanding of what constitutes high attainment in a subject at a given age'. In support of this view they provide an example in mathematics where pupils who had attained level 4 or 5 in the Key Stage 2 tests were being provided with work at level 3 after transfer.

Further evidence for the hiatus in academic progress at transfer is provided by a recent replication of the original ORACLE research study, albeit on a reduced scale (Galton, Hargreaves *et al*, 1999). Returning to the same schools and using updated versions of the same tests and observation instruments, some 300 pupils (148 boys and 152 girls) were followed as they transferred from years 4 and 6 into years 5 and 7 respectively.

Figure 2: *The Transfer Hiatus in Pupil Progress*

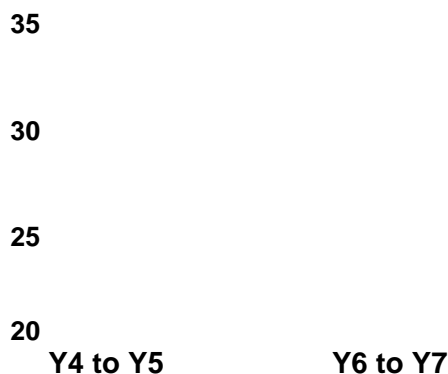
60

55

50

45

40



Notes: The percentages refer to the numbers of pupils in a transfer cohort who did less well on the same test one year after transfer.

Source: Based on a sample of 300 pupils (148 boys and 152 girls); see Hargreaves and Galton, 1999.

Figure 2 shows the percentage of pupils who did *not* make progress in absolute terms on each of the tests. Just over 45% of year 5 pupils failed to answer as many mathematics items one year after transfer as they had done in their final term in year 4 at the feeder school. For language and reading the corresponding figures were 58% and 46% respectively. In the case of the move from year 6 to year 7 the hiatus was less pronounced: 34% of the pupils in mathematics, 42% in English language and 38% in reading did less well after transfer. For most pupils these differences were small (of the order of 3 or 4 marks on a 33-item test). There were no significant gender differences. However, 12% of pupils at year 5 and 7% at year 7 made significant losses of somewhere between a quarter and a third of the possible marks. When all of these findings are taken together there is good evidence to suggest, therefore, that transfer under present conditions results in up to two out of every five pupils failing to make expected progress during the year immediately following the change of schools.

The impact of transfer on pupil attitudes

The ORACLE replication study also measured pupil anxiety, motivation and enjoyment of school. Unlike the measures of attainment, data were collected in the November of the first term in the new school, as well as in the summer terms preceding and following transfer. The results are presented in the form of *residual gains*. First the scores obtained during the final term in the feeder schools were used to predict each pupil's expected score on the second and third administration. The difference between each pupil's *actual* score and their *predicted* score was then calculated. A negative difference indicated that a pupil was more anxious, less motivated or did not find the new school as enjoyable while a positive difference indicated the reverse situation.

Table 2 shows the effects of transfer, again for both year 5 and year 7 pupils. In general the effects are more marked in the older age group. Year 5 pupils reported that they enjoyed their new middle school and their level of enjoyment increased over the course of the year. In contrast year 7 students found their first term at secondary school only marginally more enjoyable. By the end of the year, however, their enthusiasm had seriously declined.

Changes in pupils' anxiety (social adjustment) were less marked. In year 5 the typical pattern described in other studies such as Youngman (1978) in the UK and Wigfield *et al* (1991) in the United States prevailed. Small increases in anxiety levels occurred during the term immediately after transfer but this had declined

by the end of the year to below the levels in the feeder schools. In year 7, however, the situation was reversed, perhaps because towards the end of the first year in the transfer school pupils were being tested in order to place them into their appropriate year 8 sets or bands. Changes in motivation were identical in both year groups. Pupils were more motivated immediately after transfer but motivation then declined during the remainder of the year.

One other feature of these results deserves attention. On the assumption that underachieving pupils find school less attractive and are not motivated to work hard we might expect strong positive associations between pupils' academic performance, motivation and enjoyment of school. But in the ORACLE replication there was a small but significant negative correlation between progress and enjoyment of school indicating that some pupils, although doing well academically, were being 'turned off' school. When this finding is taken along with what we know about the phenomenon referred to as the *year 8 dip*, there are grounds for serious concern. These 'middle years' of schooling may be exerting a disproportionate and negative influence on pupils' achievements and their subsequent subject and career choices.

Table 2: *Effects of Transfer on Pupils' Attitudes and Motivations*

	Nov. 1996 (change since June 1996)	June 1997 (change since June 1996)
Year 6 to Year 7 transfer		
Enjoyment	+0.03	-1.81**
Social adjustment	-0.49	-0.56
Motivation	+0.20	-0.56
Year 4 to Year 5 transfer		
Enjoyment	+0.55	+0.96
Social adjustment	+0.30	-0.37
Motivation	+0.20	-0.52

Notes: The figures in the table are residual gain scores showing the extent to which pupils' attitudes and responses improved (positive) or deteriorated (negative). While the correlations between attainment and social adjustment and motivation are in the expected direction there was a small but significant negative correlation between school enjoyment and attainment one year after transfer suggesting a group of pupils who are making satisfactory academic progress but becoming 'turned off school'; this was a slightly stronger trend for boys.

Source: Hargreaves and Galton, 1999

Progress and disengagement: an overview

Transitions and transfers affect all pupils to some extent; their academic progress may falter and they may become (temporarily) disengaged. In the greater majority of cases, however, pupils get back on track. Our interpretation of the evidence we have been able to assemble suggests, however, that at each of the three phases we have considered a minority of pupils begin to become more seriously disaffected.

The emergence of disaffected groups can be discerned in the post-KS1 phase; this is most evident amongst those who performed 'below expectations' in the KS1 assessments. However, since this group is only a small proportion of all pupils in the age-cohort their presence is hardly noticed. During the period of transfer around KS2 substantial minorities of all but the highest-achieving groups seem to experience some difficulties; indeed, even in the highest-achieving group *some* pupils seem to be affected. The evidence we have reviewed suggests that, again, for many pupils these experiences are likely to be temporary. In the post-KS2 period, however, a more extended set of problems begins to emerge. In particular, a substantial minority of the lowest-achieving groups seem to become increasingly disengaged.

Unfortunately, one piece of this jigsaw is missing. We have been unable to establish whether there is a general tendency for pupils, who begin to become disengaged in the post-KS1 phase, to experience greater difficulties with the transfer from one school to the next around KS2 and, from there, become more prone to disaffection in the secondary school. There are good reasons to suppose that they might be but to link up pupils' experiences in this way would require a series of longitudinal studies which crossed phases and stages.

B: SOME EXPLANATIONS

Why do pupils lose ground at transfer?

Various reasons are proposed, by researchers and by teachers, to explain why pupils lose ground during the period following transfer to another school, notwithstanding the investment in the kinds of transfer activities summarised later.

Some pupils have more difficulty than others in adjusting to the new environment; this may be because they do not want to be parted from friends, because they are anxious about coping with the demands that the new school or phase will make of them, or because they are worried about rumours of bullying in the new setting. Many are also concerned about 'doing the right thing' in the more adult situation and understanding new rules and procedures (Youngman, 1978; Measor and Woods 1984; Delamont and Galton, 1986; Hargreaves and Galton, 1999). For all these reasons, pupils may become so pre-occupied with negotiating the social hurdles of the new situation that their progress may slow down.

After transfer, some pupils may also lose ground because they feel that they are going over work that they have already done; they can find this boring given their high expectations of the move to 'the big school'. Others, however, may feel comfortable in repeating work they know because they think they will do well in it: they may be unaware that a static competence is not enough and that they have to move forward and tackle *new* learning successfully (Galton and Willcocks, 1983; Rudduck, 1996; Hargreaves and Galton, 1999).

Adjusting to the novel - whether following a new procedure or using a new piece of equipment - usually means a temporary de-skilling and this is what seems to be happening at transfer. Some of the features of the new situation are anxiety-inducing because they have not been explained - for instance pupils are sometimes puzzled by the move from having one teacher for most subjects to having a different teacher for each subject (Rudduck, 1996). And they may be anxious because they are unsure what is expected of them in the new setting. In the Oracle replication (Hargreaves and Galton, 1999), for example, most teachers in the transfer schools began their lessons without any discussion with pupils about the work they had done in their previous school.

Pupils may also fall back because they need help with managing their learning across a wider range of differentiated subjects; they also have to manage time in relation to work that they are obliged to do after school and work that they want to do more of out of personal interest. Only by talking to pupils about what they find difficult in the new situation can schools adjust their induction and support programmes to match pupils' concerns.

Again, pupils may fall behind because they are afraid of losing face: this can occur, for instance, in situations where the new learning is difficult, or where there is concern about being put in, or moved to, a low set. A typical response for some pupils is to withdraw from the struggle and persuade themselves and others that success is about ability rather than effort (Chaplain, 1996). As Wigfield *et al.*, (1991), reviewing

US research, point out, ‘many young adolescents become more negative about schools and themselves’ in the period after transfer because they are moving into a more competitive environment and many, uncertain of their strengths relative to others, lose self-esteem and can disengage.

So far the explanations we have considered have focused largely on pupils but there are also factors in the situation which may affect progress that are beyond pupils’ control. For instance, transfer always occurs at the end of the academic year. Some research evidence suggests, as we have seen earlier, that the long summer break can cause a dip in performance for certain groups of pupils. And then there are the complicating effects of puberty which can divert attention from school work and result in a loss of progress. Overall, say Anderman and Maehr (1994), ‘the literature supports the view of decreased investment (by pupils) in academic activities and increased investment in non-academic activities during the middle grades’:

Issues of motivation have a degree of uniqueness and a special sense of urgency about them during the middle (years). The motivation of adolescents is a critical issue - it is, in fact, a problem that must be solved. (*ibid*, 287-8)

Another factor relates to the conditions of learning in schools. Anderman and Maehr suggest that explanations for the ‘disturbing downturn in motivation at this time’ (p288) lie largely in the mismatch between the environment of learning in the school (broadly conceived) and pupils’ ‘heightened awareness of emerging adulthood’. Their sense of increasing maturity, combined with their expectations of being ‘treated like an adult’, are not matched by opportunities for more responsibility and autonomy in the new setting.

In summary, the two American reviews of research (by Wigfield and Anderman and Maehr):

- highlight the significance of transfer for pupils’ motivation and sense of self-as-learner;
- offer evidence of a ‘downturn’ in motivation following the initial period of adjustment;
- emphasise the importance for pupils at this stage of their school career of social interactions and affiliations; and
- explain the ‘downturn’ in terms of loss of self-esteem in a larger and more overtly competitive environment and of the mismatch between pupils’ emerging sense of adulthood and the tendency for schools to regard the new intake as novices.

These reviews are in line with our own analyses of data from schools in our education system (Rudduck *et al*, 1996 and 1998).

Why do pupils lose ground at key transition points?

We concentrate here on those years (the transition from year 2 to years 3 and 4 and from year 7 to year 8 where there is some evidence (see earlier) that pupils lose ground.

Years 7 and 8

Teachers claim - and interviews with pupils support the claim - that pupils’ engagement with learning can weaken towards the end of year 7 and in year 8 and they may therefore make slower progress. Several reasons are put forward by teachers and by researchers to explain the dip in motivation and performance during this period; they focus on aspects of school organisation as well as the perceptions and experiences of pupils (see Rudduck *et al* 1998; Doddington *et al*, 1998 and 1999).

Some accounts focus on a possible loss of momentum once the novelty of the move to ‘the big school’ starts to wear off. Once pupils feel settled in their new school, if they are not excited and challenged by lessons, then relationships with peers can become the dominant interest and anti-work cultures can quickly develop which capture pupils who are bored and restless (Day, 1996). This can start towards the end of

year 7 (see Hargreaves, 1996 for a similar story in Canadian schools). Moreover, the year 8 pupils are very aware that they are no longer the youngest in the school and if their desire for more responsibility is not met then they may look for respect from peers and seek to assert their 'authority' in ways that are not supportive of learning (Rudduck *et al*, 1997).

This situation is not helped by the fact that year 8 has a low profile in most schools ('there's not much going on - nothing to work towards - you can take it easy'); it lacks a distinctive identity and is seen by pupils - and often by teachers - as less important than other years (Rudduck *et al*, 1998). The 'stuff that counts', say some pupils, begins in year 10: 'Might as well not come to school before then'. Part of the problem is that pupils may not understand the importance of continuity in learning and in ways of working - hence their readiness to dismiss what they do in year 8. They do not appreciate that working hard now can have pay-offs later. The low profile of year 8 may also reflect staffing decisions: some schools acknowledge that they put their best teachers with the 'exits' and 'entrances' years - year 7 and year 11 - and do not think what kind of teacher and teaching year 8 pupils need to lift the year from its image among pupils as only an 'in-between year' or an 'on-the-back-burner year' (Rudduck *et al*, 1998).

Another set of explanations focuses on procedures for 'catching up'. If pupils at the end of year 7 are experiencing a tension between getting on with their work and 'mucking about', and if they have fallen behind and have not made up the ground, they know that they will be starting the new academic year from a position of weakness rather than strength. At this point, they may find it easier to give up than to catch up. Not all schools have structures in place that enable pupils to seek help in good time - and, indeed, even if there are structures, pupils may be reluctant to seek help for fear of losing face with their mates. A related issue is that pupils who are struggling with learning, who find themselves in low sets and who do not know what to do move into a higher set, may choose to escape the dilemma by accepting the label and confirming themselves, in their words, as 'rubbish' (Harris *et al*, 1994).

Years 3 and 4

Only recently has the spotlight fallen on year 3 and, to a lesser extent, year 4. At the moment, as we saw earlier, there is little hard research evidence and we are reliant on speculative comments from teachers and headteachers about the nature of the dip in motivation and performance.

We have to remember that year 3, in some settings, is more like a school-to-school transfer than a within-school transition: pupils may move from a separate site infants school to a junior school; and even within a primary school the year 2/year 3 break may be so emphasised that pupils find themselves moving from one distinct phase, with a separate group of teachers and way of working, to another with a similarly distinct 'philosophy'. A small-scale study supported by OFSTED, and led by Chris Doddington, has recently started and is testing out possible explanations of the year 3 'dip'.

Teachers have suggested (see Doddington *et al*, 1999) that pupils may initially be more disoriented than they had realised by the move from an 'early years' environment to a new learning environment, with different teachers and different expectations - or even, as we saw above, to a new school. In particular, pupils may shift from one approach to literacy to another and they may initially lose ground as they adjust to the new ways of working.

Another set of possible explanations focuses on the image of year 3 (in much the same way that the image of year 8 has come under scrutiny). Schools may not always see year 3 as an important year and the 'best' classroom teachers may be given responsibility for the 'high stakes' years - the years in which National Curriculum tests are taken. Also, pupils may interpret various messages that they pick up in school as indicating that year 3 is not such an important year as other years. The situation may be complicated by what teachers describe as a 'surge of interest' at this stage in exploring new friendships and being part of a social group in school - such groups can quickly develop anti-work norms.

A different perspective on the situation was offered by teachers who thought that the 'dip' might be 'constructed' by the intensive work on the year 2 National Curriculum tests which inflate pupils' performance so that in year 3 they merely revert to their 'natural' level. The progress of pupils who only just scrape into the Level 2 band (now officially designated as Level 2C) is also relevant here.

A different transition issue

So far we have looked at transition in terms of pupils moving from year to year but there is another situation which needs attention: how pupils manage the change from being a 'dosser' (in their words) to being a 'worker'. Interviews with young people in secondary schools (see Rudduck *et al*, 1997) described how they continually 'messed about' and 'had a laugh' in class and how they wanted now to settle down to work. They explained how difficult it was to cast off the old image because both their mates and some of their teachers saw them as 'trouble-makers' or 'clowns' and also because they had no strategies for changing those views. The personal struggle involved in negotiating such a change - of perception as well as habit - should not be under-estimated.

Pupils who have established a reputation at primary school for mucking around and distracting others have a chance to reform their image and commitment to learning when they move to the new school; older pupils have no comparable opportunity. They realise that if they are made to change forms - or even change schools - then the pupils and teachers in the new setting know - as one pupil said - that 'only the baddies' are made to move in this way; their reputation will go before them (Rudduck *et al*, 1997).

C: 'VULNERABLE' GROUPS AND SUBJECTS

'Vulnerable' groups

Transitions and transfers have different effects on different pupils. The QCA follow-up of pupils into years 3, 4 and 5 showed that certain groups of pupils made less progress on the 'optional' tests than others (Minnis *et al*, 1998). Background factors by themselves do not, of course, explain pupils' progress or lack of it. Nonetheless, there are signs in this research that patterns of performance which are later well-established begin to become more obvious at this stage. This is a cumulative process - existing gaps begin to widen. In short, some of the seeds of social exclusion in the latter stages of the secondary school are potentially being planted.

The NFER study shows that amongst those who seemed vulnerable at this stage were a number of groups whose difficulties have been highlighted in other policy initiatives: boys, for example, in relation to progress in reading and spelling and girls in relation to written and mental maths. Pupils from certain social backgrounds were also less likely to make progress. Groups 'at risk' included those on free school meals, pupils with special educational needs, pupils who were less fluent in English and pupils from some ethnic groups (which ones depended on the particular subject being assessed).

The North American meta-analysis of summer vacation effects provides some additional support for these findings (Cooper *et al*, 1996: 264). As it reported, 'the summer break has roughly equal negative effects on the math skills of students from middle- and lower-income families but greater negative effects on the reading skills of lower-income students'. They also found that the effects were larger amongst the older age-groups. They speculate that part of the reason for these differential effects may be because of the different opportunities to practice various forms of academic material (with practice in reading more available than practice in maths) and to 'differences in the material's susceptibility to memory decay (with factual and procedural knowledge more easily forgotten than conceptual knowledge)'. As in the NFER study, background factors may also be contributing. 'These income differences (middle vs. low)', they suggest, 'may also be related to differences in opportunities to practice and learn' (*ibid*: 265).

'Vulnerable' subjects at Key Stage 3

In the previous sections we identified particular groups of pupils who may be at risk following transfer. Here we look at the way that certain subjects can begin to acquire a negative image amongst pupils after transfer. We choose English, mathematics and science as our prime examples because of the current national concern over standards of literacy and numeracy and because of the serious shortfall between the demand for well-qualified scientists and engineers and their availability (Smithers and Robinson, 1998). A special sub-committee of the Council for Science and Technology (CST, 1999) has accumulated evidence to suggest that in science this decline in interest begins as early as year 5 and has consequently suggested that the curriculum for pupils in the middle years of schooling should receive particular attention. Evidence from the ORACLE replication study, as well as that contained in the Suffolk LEA report (1997), based on classroom visits by the advisory team, suggests that similar problems may exist, albeit to a lesser degree, in other areas of the curriculum as well.

In English, the observations carried out during the ORACLE replication study confirm the findings of Marshall and Brindley (1998) and also those of the Suffolk LEA (1997) inspection team. Although the latter found that the National Curriculum had supported continuity they concluded that there were differences of emphasis, particularly in writing and speaking and listening, in the different phases. These differences arise because, as Marshall and Brindley (1998: 125) observe, 'secondary teachers put response to literature as their main concern; and writing and talk often arose from reading' while 'their primary colleagues focused more on literacy skills'. Thus in year 6 'the emphasis was more on comprehension than response'. In practice, this meant that poor readers found it very difficult to cope with this secondary approach in what were usually mixed ability classes and began to lose interest (Hargreaves and Galton 1999). While the National Literacy Strategy can be expected to reduce the reading problem over time, there will remain a need for teachers from each phase to continue attempts to resolve some of the discontinuities in pupils' experiences.

Mathematics presents a different set of problems. Here the evidence from the Suffolk LEA (1997) report and from Hargreaves and Galton's (1999) replication study supports the view that, despite the National Curriculum, most teachers in the transfer school prefer to 'start from scratch'. One consequence is that slower pupils may become confused at having to master the same topic while using a different method from that in the feeder school, while more able pupils become bored because the work is not matched to the level they have already achieved in year 6. Perhaps even more critical was the ORACLE replication finding that, although pupils were generally placed in ability groups for mathematics, the teaching approach was very similar with lessons differing mainly in the pace at which the pages of the chosen 'scheme' were worked through. Little attempt was made to relate the teaching to contexts that might have immediate relevance, despite the growing evidence that suggests pupils find it easier to solve mathematical problems when they are realistic and authentic (see, for example, Greer, 1993).

The negative association between pupils' enjoyment of school and their attainment in English and mathematics, reported in an earlier section, also applies to science where some pupils who do well in science examinations have said they do not enjoy

the subject (Shrigley, 1990). The dip in attitude appears to be at its sharpest immediately after entry to secondary school (Hadden and Johnston, 1983) despite the fact that one of the things primary pupils most look forward to is 'doing experiments in a laboratory' (Galton and Willcocks, 1983). Similar problems appear to exist in the United States (Spector and Gibson, 1991).

Echoing their findings in mathematics, the Suffolk inspection team noted that many of the tasks in the year after transfer required pupils to perform at lower attainment levels than had been achieved in the science tests at Key Stage 2. Usually the aims of the lessons were to introduce pupils to the use of laboratory equipment such as thermometers, measuring and filtering apparatus, and, of course, the bunsen burner. However, it was rare for teachers to situate the use of such skills within the wider context of an investigation. The ORACLE replication study came to a similar conclusion (Hargreaves and Galton, 1999). One lesson, for example, consisted of filtering dirty water which took all of five minutes, after which the apparatus was put away and for the next thirty-five minutes pupils copied the diagram and a description of their experiment from the blackboard. Delamont and Galton (1986) described an identical lesson - nearly twenty years earlier. Similar findings emerge from a study of design and technology projects in years 6 and 7 (Stables, 1995: 167); after transfer there was a sharp decline in the time pupils spent in discussing matched by a corresponding rise in the time spent listening to the teacher.

The effects of these rather restricted curriculum experiences upon pupils can be seen in data from the ORACLE replication study (Hargreaves and Galton, 1999). Every 25 seconds, whenever classroom behaviour was monitored, the observer noted whether the particular target pupil was fully engaged on the task set by the teacher. If a pupil was 'on task' for 75% of these observations s/he was said to be 'fully engaged'. Figure 3 shows the results for English, mathematics and science respectively, both before and after transfer.

For English the percentage of pupils 'fully engaged' fell only slightly from 64% to 61% after transfer. This can be partly explained by the fact that it was common during these 'literature' lessons to bring in a classroom assistant to support the pupils with reading difficulties. Given the proximity of this adult there was less opportunity to engage in off-task behaviour. In mathematics the decline was sharper (from 61% to 50%). In science, however, the proportion of 'hard workers' fell by almost half. Whereas the numbers fully engaged in primary school science lessons was on a par for those in English and mathematics at around 60%, after transfer the figure fell to a mere 34%; no less than two thirds of all pupils taking science were distracted for significant periods of the lesson.

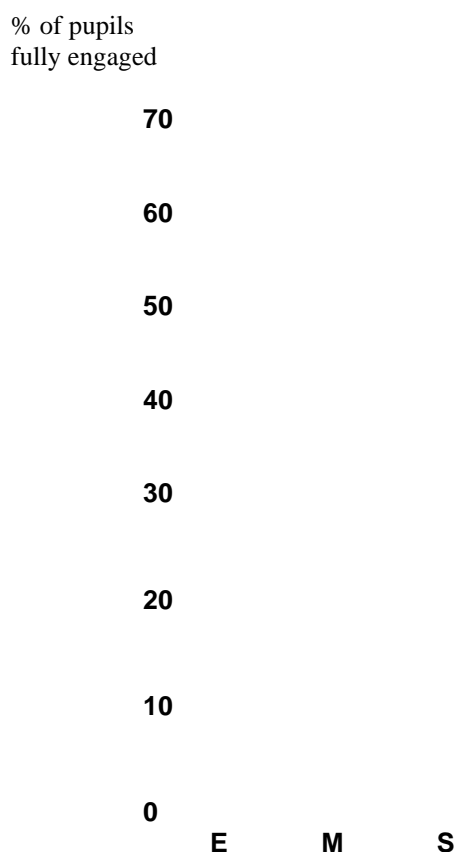
The pupils' reactions appeared to be similar to those reported by Spector and Gibson (1991: 470) in their study of senior high school science. American students described school as a place where 'you listen to teachers all day' and where the teacher says: 'Here study. There's a test on pages 114 to 139 tomorrow'.

The decline in work rate and the generally reported erosion of interest in subjects such as science and technology may, in part, stem from the high expectations pupils have of these subjects prior to transfer. These expectations are fuelled by events on induction day where science is often included as part of a typical day's curriculum. However, these science lessons on display are likely to consist of exciting demonstrations that create loud bangs accompanied by clouds of smoke and strange smells. This is very

different from the science pupils' experience in the following term where, typically, they might be required to draw a picture of a bunsen burner, colour in the flame cones and label the parts.

In seeking ways to improve pupils' attitudes to science the Council for Science and Technology argue that 'effective teaching is likely to be more influential on pupils' attitudes and interests than curriculum materials or novel instructional techniques designed to affect them'. The CST sub-committee's definition of effectiveness would require teachers to engage in 'very high levels of personal support', 'strong positive relationships' and to demonstrate 'an ability to allow for different cognitive styles and ways of engaging with the learning process among pupils' (CST 1999, Appendix B). A similar conclusion on the need for flexible and complementary teaching approaches is reached by Marshall and Brindley (1998, 132) in the case of English and by Stables (1995, 168) for design and technology. The latter argues that even if discontinuity in teaching approach is seen as a necessary part of a pupil's progression, it must be based on 'a fuller understanding by all teachers of each other's priorities and strategies'.

Figure 3: Subjects 'at risk' around the time of transfer



Source: Hargreaves and Galton, 1999

Notes: Pupils were described as 'fully engaged' if they were 'on task' for more than 75% of the lesson.

3. RESPONDING TO THE ISSUES

A: TRANSFER

Why schools still find transfer a problem

A number of explanations have been advanced to account for the slow progress that schools have made in coping with the unresolved problems of transfer, particularly in relation to curriculum continuity and the harmonisation of teaching approaches. Despite the marked improvements which have occurred during the past twenty years in levels of communication and liaison procedures between the transfer and feeder schools' problems persist. Although the intention of those who created the National Curriculum was to ensure continuity between the various key stages, few teachers feel that the links are satisfactory. In particular, the levels at KS2 are not thought to provide satisfactory indicators of what students might achieve at KS3 according to a recent NFER survey (see, for example, Schagen, 1999). Furthermore, discontinuities exist in the ways that teachers at different key stages approach their subject.

We have already looked at the situation in English at KS2 and KS3 where, according to Marshall and Brindley (1998), differing perspectives had implications for progression because, according to the researchers, 'secondary teachers did not recognise the information they were being given as relevant to their understanding of English and the kinds of task they were asking pupils to do' (*ibid*: 125). Such problems are reinforced by the notion of giving pupils 'a fresh start', which is commonly interpreted as 'starting from scratch'. In many of the studies reviewed teachers voiced concern lest the judgements of the feeder schools unfairly labelled certain pupils and gave rise to expectancy effects.

In addition, features of the current educational system and school organisation sometimes frustrate the best efforts of teachers to promote continuity through improved liaison (Nicholls and Gardner, 1999). For example, the increased freedom of parents to choose a school outside the traditional catchment area has meant that, in some cases, the arrangement whereby six or seven schools formed a close-knit pyramid feeding into one or two transfer schools has unravelled. Faced with the increased costs of visiting more schools, it is not surprising that efforts have been concentrated on ensuring that the move to the 'big school' causes as little stress as possible and that children with 'special problems' are catered for. In this situation the head of year's role is mainly a pastoral one and s/he may be concerned that any efforts to promote greater curriculum continuity on his or her part might be regarded as interference by heads of subject departments. Subject heads may have no contact with year 7 pupils and those who do may see a particular class for only two periods a week in some cases. There is little incentive, therefore, for subject teachers to draw up teaching programmes that take account of the information passed on by the feeder schools.

Even where attempts have been made to bring about improvements in curriculum continuity there is often little support, at local level, which would allow these initiatives to be properly evaluated. As discussed in an earlier section of this report, few LEAs have, as yet, established regular monitoring systems which would allow the progress of pupils to be followed across the various transition and transfer points. Even where feeder and transfer schools do carry out assessments of pupils' attainment and attitudes, the measures used are not always compatible and, given the expertise available, the level of analysis not sufficient to identify important outcomes.

Finally, the recent ORACLE replication study found that many features of transfer, identified in the original ORACLE research twenty years ago, were still much in evidence (Hargreaves and Galton, 1999). Secondary teachers still retain untested assumptions about what takes place in primary schools. These either underestimate the demands primary teachers make on pupils, as when art lessons are described as "all splash and fun", or make assumptions about the exposure of pupils to more sophisticated forms of learning. This view prevails despite the evidence to the contrary that much of the primary curriculum still consists of teachers talking *at* rather than talking *with* pupils (Galton *et al*, 1999). This not only results in some pupils becoming bored through lack of challenge (as in science and mathematics) but also means that where discontinuities do exist in methods of teaching and learning (as in English), teachers sometimes fail to appreciate the need to explain to students the reasons for the change in approach.

This tendency by teachers from all phases to hold certain stereotypical views about '*what goes on in the other school*' also has implications for identifying pupils 'at risk'. In making judgements teachers may operate at a level of generality that results in particular individuals or groups being either ignored or targeted (Catterall 1998). In Hargreaves and Galton (1999), for example, primary teachers identified pupils 'at risk' from among those who were 'isolates' and lacked friends whereas after transfer those

underachieving were typically identified as problem students. This leaves open the possibility that some pupils who made adequate progress after transfer but who were not enjoying school might slip through the net. Again, some students in Rudduck *et al*'s study (1997) were falling behind not because they lacked potential but because they were members of anti-work friendship groups; these students were less likely than others to receive help with catching up with their work. A key factor in Catterall's (1998) analysis of American pupils who recovered from early failure was the extent of institutional responsiveness to each particular student's perceived problems.

The above discussion suggests that unless the traditional structures of schooling are altered in ways that allow for a greater degree of individual responsiveness on the part of teachers, various proposals, discussed in the recent NFER report, such as modifying the presentation of key stage test results (including electronic transfer in a standard format), extending the number of liaison visits between schools, holding summer schools, or setting up joint projects in the final term before transfer are unlikely, by themselves, to eliminate the current 'hiatus' in pupil progress at transfer (Schagen, 1999). Our review of current practice confirms that schools have become remarkably successful at smoothing the path of transfer and making the move to the new school less stressful and, for many pupils and parents, even creating something to look forward to. But these efforts have, perhaps, led to the neglect of the problems inherent in the process of transfer, particularly the use of different teaching methods and demands made upon pupils by the varied approaches to learning that such methods require (Midgley *et al*, 1991). In particular, the development of extended induction programmes designed to help pupils cope with these discontinuities (what Lahelma and Gordon (1997) have described as '*learning to be a professional pupil*') have so far received little attention.

How schools are currently coping with transfer

These observations are certainly borne out by the survey of current practice carried out specially for this review¹. We have classified these responses under five main headings. The first of these we called **managerial**, since they were mainly designed to ease transition administratively. They included both meetings between heads and teachers, and visits to the feeder schools by year 7 heads, special educational needs co-ordinators and heads of various subject departments (mainly English and mathematics). Parents' meetings to impart information were also a regular feature. In the ORACLE replication study, however, we observed that much of this activity, although ostensibly designed to improve liaison, was also about 'selling' the transfer school to the feeder school and its parents as a way of maintaining or increasing numbers on roll (Hargreaves and Galton, 1999). In some cases the 'public relations' aspects of the exercise appear to have overwhelmed the educational ones.

Other activities have been designed to meet the **social and personal** needs of pupils and, in particular, to ease any stress or anxiety that might be caused by fears of moving to a bigger school. Induction days, when the pupils from all the feeder schools come together and spend a whole day in their new forms in the transfer school, have proved particularly successful. Children get to know pupils from other schools, find where to hang their coats, try out school dinners, meet some of their new teachers and experience taster lessons in subjects such as science and PE where facilities are generally much better than in the feeder schools. Other activities such as open evenings, special visits to use ICT, science and drama facilities, information booklets for parents and students are also used to make the new school as familiar as possible prior to the move. Hargreaves and Galton's (1999) findings presented in the previous section suggest that, compared to twenty years ago, many concerns identified in earlier studies (Dutch and McCall, 1974; Youngman, 1978; Jennings and Hargreaves, 1981) have been eliminated or substantially reduced as a result of such activities.

The introduction of the National Curriculum has also given rise to further attempts to promote greater **curriculum continuity** across the various key stages. Gorwood (1986) has previously identified many of the impediments to this aspect of continuity, highlighted by this review, in his survey of LEA advisers and officers. The most frequently used strategy for promoting closer curriculum liaison has been for transfer schools to send teachers to teach lessons in the feeder schools. More recently some schools have set up

1 We are grateful for the Centre for the Study of Comprehensive Schools (CSCS) who distributed a short questionnaire at its regional conferences during the autumn term. In all, 215 schools out of 350 responded.

joint activities or projects spanning the final term in the feeder school and the first term in the new school. Examples have included poetry projects (Squires, 1994) and joint mathematics investigations and experiments in science (SCAA, 1996; 1997; QCA, 1998b). Training days have been held for whole pyramids in which subject groups can share ideas and compare samples of pupils' work. Summer schools have also been organised to help pupils improve their language and mathematical skills prior to transfer or to enable pupils from isolated rural areas to get to know one another.

Much of the observation data collected in the recent ORACLE replication study suggests that, despite the introduction of the National Curriculum, little improvement in curriculum continuity has been achieved (Hargreaves and Galton, 1999). Support for this somewhat pessimistic view comes from Gorwood (1991), Weston *et al* (1992), Lee *et al* (1995) and Sutherland *et al* (1996).

Some schools, perhaps frustrated by lack of progress, have sought alternative solutions to these apparently enduring problems at transfer. This fourth approach concentrates on **pedagogy** and mainly involves developing joint programmes where pupils are taught certain skills, such as working collaboratively in groups, or raising and answering challenging questions. Often these approaches are embedded within an overall strategy aimed at improving problem-solving or thinking skills (McGuinness, 1999). Finally there is a fifth approach where schools have endeavoured to provide students with the means of **managing their learning**. This can involve, amongst other things, setting up extended induction programmes during the first term in the new school.

Whilst a range of approaches is potentially available to schools, our evidence suggests that the greater majority have so far focused their efforts more narrowly. As Table 3 shows, by far the greatest effort is concentrated upon managerial, personal and social approaches in ensuring that transfer proceeds smoothly. Every school responding to the CSCS survey held at least one parents' evening followed by an induction day, while some held two (one in the autumn and one in the summer term). By contrast, less than a quarter of schools engaged in curriculum initiatives and less than five schools in one hundred reported any activity to do with developing closer co-operation in matters of teaching or learning.

The CSCS survey only asked schools to respond if they had introduced any new procedures during the past few years to tackle problems of transfer. The fact that only 60% of the schools felt able to respond and, amongst those who did, most mentioned initiatives to do either with teacher liaison or induction, suggests that the figures in Table 3 may over-represent the efforts currently directed at improving curriculum or pedagogic continuity. This somewhat pessimistic view is supported by the results of a survey of headteachers from 32 Middle and 14 High schools carried out by Worcester LEA (1997). Whereas 80% of respondents said they passed on pastoral information only around half supplied statutory assessment results or other test data and only 20% made use of portfolios of work or pupils' records.

As in the CSCS survey liaison mainly dealt with administrative or pastoral matters. Fifty seven percent of senior management staff and 67% of pastoral staff were involved in liaison compared to only 35% of subject leaders. Where information was exchanged it was twice as likely to be about administrative or pastoral matters as it was to be a communication about the curriculum. When asked about the quality of these communications only 33% of respondents had confidence in the information that they *sent* to other schools. Even fewer (26%) expressed confidence in the information they *received*. Despite this most headteachers thought their difficulties could best be solved by improved management with more frequent meetings (66%) with clearer agendas (81%) and shared minutes (78%).

Table 3: What Schools are Doing About Transfer

1) Bureaucratic	Meetings of: Senior staff	50%
	Heads of Year	100%
	Subject Heads	30%
	Senco's	35%

	Exchanges of information	100%
	Parents' evenings	100%
2) Social and Personal	Induction days	100%
	Open evenings	50%
	Parent & pupil guides	70%
	Special ICT, drama & sports visits	10%
3) Curriculum	Teach lessons in feeder schools	20%
	Joint projects	10%
	Summer schools	5%
	Joint training days	2%
4) Pedagogic	Joint programme of teaching skills	
	Employing ex primary head to co-ordinate first term's work after transfer	2%
	Teacher exchanges	1%
		5%
5) Managing Learning	Extended induction programmes involving 'becoming a professional learner'	2%

Source: Survey of CSCS schools conducted by project team; replies were received from 215 schools.

It is our belief that Information and Communications Technology (ICT) has a role to play here. Many of the managerial tasks, including the collection, ordering and transfer of documentation can be accomplished through e-mail, as can contacts between teachers and pupils in feeder and transfer schools. E-mail messages have been described as 'written conversations': their informality renders them ideal for dealing with pupils' anxieties about the 'big school'.

ICT can also be used to improve curriculum continuity (Scrimshaw, 1997). We have examples of video conferencing being used by subject teachers in transfer schools to provide lessons for year 6 pupils. It saves time and requires less organisation to put these sessions on during lunch breaks than it does to make special visits to all the feeders or to have year 6 pupils come to the transfer school. Some face to face encounters will always remain essential but ICT can enhance their benefit. In the same way the development of Integrated Learning Systems (ILS) has helped teachers to identify and support pupils with weaknesses in English and mathematics (Underwood *et al*, 1994). In the context of transfer, we believe that ILS has the potential to benefit pupils at risk, thereby supporting the work carried out during summer school programmes. It will take a little time, however, for the costs of the necessary hardware and software to reduce to a level that can be afforded by even the smallest rural primary school.

Some examples of recent/innovative strategies

As the previous section has demonstrated, over the last twenty years schools have built up a repertoire of transfer strategies - many of them highlighting post-transfer induction events and pre-transfer acclimatisation visits. There continues to be a wide diversity of transfer practices but still one of the main concerns - involving some considerable investment of time and resources - is to build good relationships between a secondary school and its feeder schools in the interests of ensuring curriculum continuity for pupils, a better understanding of their achievement levels among teachers and a better system of information exchange. All these have the advantage to the school that they may also aid recruitment.

'Continuity' is the assumed virtue here. Whilst this may be good in terms of the curriculum there is also a case for knowing when 'discontinuity' is important - for instance to mark pupils' move to a new stage in their education.

In our approaches to schools and LEAs we were particularly keen to hear about strategies they believed were effective in dealing with problems associated with the curriculum, teaching and pupils' management of learning. The QCA's recent report, *Building Bridges* (QCA, 1997), has served as a stimulus here. The study was initially concerned to draw together some of the experiences of schools and LEAs which had

secured funding from the Standards Fund (formerly known as GEST) to improve the use of National Curriculum assessment data when pupils transferred from Key Stage 1 to Key Stage 2 and from Key Stage 2 to Key Stage 3. Its particular concerns were to: suggest ways in which schools might improve their analysis, dissemination and use of assessment data; establish common understandings of ‘standards’ between teachers of year 6 and year 7 pupils; and improve target-setting for cohorts and individual pupils as they move into year 7. Consequently the report draws attention to existing examples of good practice and suggests, without in any way being prescriptive, a variety of additional ways in which schools might develop their approaches.

Our own review gathered together further evidence of the various innovative approaches being adopted in the assessment area but considered other aspects of transfer activity at the same time. According to the many schools and LEAs that contacted us, the following approaches to transfer are in use at the moment (we confine ourselves here to activities at the year 6/7 transfer point which generated most responses).

Approaches involving both primary and secondary schools and focusing on year 6 and year 7 pupils

- * Projects started in year 6 and completed in year 7. In one school a retired primary headteacher was employed to lead the secondary team of teachers during project work. (A potential criticism is that pupils who transfer from different feeder schools where the project work has not been undertaken will lose out; another is that the pupils, when they have moved into year 7, don’t want to continue with work they started in primary school - they feel that they have left primary school behind.)
- * Secondary schools pupils visit primary schools and give talks to pupils in year 6. (A criticism is that year 6 pupils quite like to meet older students in small informal groups but their priority is to see their new teachers; some, however, are wary of teacher visits and think that teachers are ‘being nice’ on the visits and may really be much stricter in the secondary school.)
- * Year 6s have taster sessions of ‘new subjects’ or ‘new teaching/learning styles’, particularly those that they are anxious about (e.g. modern languages). Some of these are delivered through video-conferencing.
- * Master classes or summer schools in particular subjects for the whole year group or for pupils finding learning in a particular subject a struggle (e.g. maths, reading).
- * Newsletters for year 6 pupils written by pupils in year 7 - and personal accounts put on the web by new year 7 pupils for the next year 6 pupils to read.
- * Extended induction sessions of one to five day’s duration spent by year 6 pupils in the secondary school. (Where year 6s meet and work with pupils from years 7, 8, 9 and 10, teachers feel that the bullying of year 7 pupils by older pupils may be reduced.)

Approaches involving both primary and secondary schools and focusing on year 6 and year 7 teachers

- * Primary and secondary teachers meet to look at the 5-16 curriculum experience of their pupils, to consider the achievements of year 6 pupils, to work on assessment levels and to observe each other teaching.
- * A secondary ‘curriculum manager’ is linked with small feeder schools.
- * Investment in computer systems for the pyramid so that teachers have a common system for recording progress.
- * Visits by year 6 teachers to their former pupils in year 7; primary heads or year 6 teachers telephone after half a term to see if there are any ‘settling in’ problems with pupils who came from their school.
- * Secondary SEN teachers talk with primary heads about pupils who are very able or who find learning difficult.

Approaches in secondary schools that concentrate on year 7 pupils

- * Use of the idea of evidence to help pupils understand the relation between investment of effort, submitted work and their grade.
- * Sessions to develop the idea of ‘being prepared for learning’ and the link to achievement (the idea of pupils as ‘professional learners’).
- * Introduction of a Super Learning Day where year 7 pupils discuss different forms of learning, their different strengths and weaknesses as learners, and their preferred learning styles.
- * Tracking of the most able pupils (top 10%) in some subjects for the first half term or longer to ensure that they are being stretched.

Approaches focusing on parents

- * Year 7 parents’ evening three weeks after the start of the new year.
- * In-depth, once a week counselling session for year 7 parents (on the assumption that if their anxieties are diminished, their children may become more confident as well).

B: TRANSITIONS

How schools are responding to problems of transition

Years 7 and 8

Year 8 (or the end of year 7 and year 8) is becoming increasingly recognised by teachers as a time when pupils’ commitment to learning and their progress can diminish. However, this awareness is relatively recent and while some groups have been trying out strategies to counter the dip (see Rudduck *et al*, 1998) there is no formal evaluation of their effectiveness.

Schools that had evidence (from the Keele Attitude Survey, for instance) that all was not well with year 8 sometimes decided to ‘get behind the statistics’ by talking to pupils about learning and about being a pupil so that they could match their strategies to the actual needs of pupils in their school.

Some of the strategies reflect pupils’ concerns about *classroom learning* while others reflect pupils’ concerns about the *broader conditions of learning* in the school. Indeed, schools have found it useful to identify some spaces in the early part of the year when year 8s can ask questions about things they don’t understand, about the new expectations that teachers have of them in year 8 and about how the work of year 8 prepares them for the work of later years. In one school this was handled through a mentoring system. There is some evidence that establishing a system which makes it legitimate, in pupils’ eyes, to talk about learning and learning-related anxieties without feeling embarrassed is an important step for schools to take.

Another approach schools have tried is to find ways of making year 8 seem important and giving it a stronger identity. The emphasis may be on learning or it may be on social responsibility. In one school pupils could not take their place on the School Council until year 8; in another year 8 was the year of the ‘local history project’ which year 7 pupils had heard about and looked forward to; in yet another, year 8 pupils were formally consulted about their views of teaching and learning and this made them feel more mature and respected.

Teachers in other schools have concentrated not only on giving pupils more say - and more responsibility - in the life of the school but also on providing opportunities for them to develop and pursue their own ideas in lessons. There was also interest in ensuring that teaching is challenging and engaging (for both male and female pupils, who may have different preferred teaching and learning styles). Other schools have set up structures so that pupils who need help know how to get it without feeling embarrassed about seeking it.

Some schools, after reviewing their merit and rewards systems with pupils, decided to develop a new system that acknowledged effort at this stage and not just achievement.

Schools have also identified particular practices which seemed to need more explanation - and even justification. One is homework (and the related issue of learning to manage time). Schools believe that if pupils do not appreciate the purpose and significance of 'homework' at this stage then they may find it difficult to work independently later and to cope with the multiple demands of the examination years. Another concern has been to help year 8 pupils understand the criteria for assessment in different subjects so that they know how to improve their work and have a greater sense of control over their own progress.

None of these strategies is, however, being systematically tried out across schools and, as yet, there is no firm evaluation of their impact on motivation and performance.

Years 3 and 4

Awareness of a possible 'dip' in progress and attitudes to learning among year 3 pupils has grown quite recently but as yet we have no information about what schools are doing to sustain commitment and achievement through the transition from year 2 to year 3 and year 3 to year 4.

4: SUGGESTIONS FOR ACTION ON TRANSFERS AND TRANSITIONS

In those schools where more innovative approaches of the kind we have described are taking place our understanding is that, having devoted considerable time and effort to organising and sustaining these new initiatives, teachers had little energy left to evaluate their impact. Without evaluation, however, it is difficult for schools to know whether their efforts have been cost effective. In the past LEAs might have been expected to provide this service but the delegation of most of their budgets to schools has, in many cases, reduced their capacity to respond (Doyle and Herrington, 1998).

Even where LEAs can afford to divert the necessary resources, expertise in evaluation design and analysis may not be available. Nevertheless, if solutions to these long term problems of transfer and transition are to be found then more schools (and their LEAs) must be encouraged to extend the nature and scope of their activities, particularly in those areas where this review suggests there is likely to be maximum impact on students' attitudes, motivation and academic progress. One way of offering encouragement is to provide the necessary means of evaluating such initiatives, to offer expert advice and to support those involved in carrying out such evaluations.

Our review leads us, therefore, to make some specific proposals. These are intended to take account of what we judge to be critical weaknesses in earlier research and current practice whilst providing a co-ordinated framework for further action. Such a framework would, of course, need to take account of the variations which exist between schools including such factors as catchment area, size, age-range and student characteristics.

We envisage three main strands of activity:

- A **Diagnostic** strand whose main purpose would be to supply schools with strategies for evaluation while, at the same time, seeking to provide more detailed evidence concerning the dips in attitude and performance across the 7-14 age range. It would develop a portfolio of easily-administered attitude and academic performance measures for use in the post-KS1 and post-KS2 transitions as well as for transfer around KS2. Wherever possible, already developed and existing optional and statutory tests would be employed.
- A **Research** strand which would focus on four areas where teachers need more information in order to develop effective practices. *One study* would look at teaching strategies at the Key Stage 2/3 interface; the study would concentrate on ways of sustaining progress and excitement in, for example, learning in science. *A second study*, linking with existing work on issues of inclusion and exclusion in schools, would look at ways in which teachers can help young people who *want* to commit themselves to working hard after a sustained period when they have 'messed about'; these are pupils who want to do well but who find it difficult to undo the negative perceptions of peers and teachers. *A third study* would look in some depth at the impact (both positive and negative) of friendships on commitment to learning; it would identify strategies that teachers could use to discourage the growth of groups which support an 'it's not cool to learn' attitude. *A fourth study* would look at the use of ICT to facilitate exchange of information at transfer - in relation to the needs of both teachers and pupils. These studies would be mounted in partnership with schools which had a particular interest in one or more of the four topics.
- A **Development** strand which would provide resources for schools who were seeking to develop and evaluate innovative strategies. Our review suggests that several LEAs and schools are pursuing novel approaches aimed at tackling neglected aspects of transition and transfer. Carefully evaluated case studies would be collated to provide examples of 'good practice' for other schools to learn from.

5: CONCLUSIONS

We conclude, on the basis of a review of the literature and of reported experience in schools and LEAs, that at certain points in pupils' school careers there can be a decline in progress and in commitment to learning. These points include transfers from one school to another (with the move from primary to secondary school being particularly important) and transitions, within a school, from one year to another (with the moves from year 3 into 4 and year 7 to 8 being seen as particularly critical). The evidence, however, is not sufficient to establish the magnitude of these 'dips' in progress nor is it clear, in some cases, whether the effects are cumulative.

We would draw attention to the following points:

- At transfer, most attention has been given to ensuring that the move from one school to another works smoothly administratively and that pupils' social and personal concerns are dealt with. By and large, the evidence suggests that schools have been successful in achieving these objectives. The creation of a National Grid for Learning should, eventually, enable even the smallest rural schools to employ technology to manage many of the administrative tasks that currently take up so much time and resource. ICT also has the potential to cope with some of the personal and social needs of pupils as they move between forms and between schools. This should allow teachers space to work at the more intractable problems to do with teaching and learning which this review concludes are the main key to raising and maintaining standards.
- In matters of curriculum continuity problems remain. This appears to be particularly true of science during the transfer to secondary school where recent concerns that pupils' interests in studying science at school can become eroded in the middle years of schooling are supported by the evidence. Discontinuities also exist in teaching approaches across other subjects with the result that pupils are often unclear what is expected of them when attempting to achieve new learning outcomes and what guidance is available when they feel disorientated or find themselves falling behind.
- After transfer, and particularly in years 3 and 8, a 'dip' in progress can occur as routine replaces the novelty of the new school or if pupils become bored with work which they see as unchallenging and repetitive. Pupils can sometimes fail to make connections between working hard and later achievement and often feel that the transition from primary *pupil* to secondary *student* is not reflected in the ways that teachers regard and relate to them. Some pupils develop negative images of themselves as learners and seek refuge in friendships with the result that powerful anti-work peer groups can develop.
- Some groups of pupils appear to be at greater risk than others. At Key Stage 1, for example, SEN pupils, those from certain ethnic groups and boys in inner city areas are of particular concern. At Key Stage 2 there is a group of students, mainly able boys, whose attitudes decline after transfer to secondary school. Between years 8 and 10 there is a group of pupils (with boys again in the majority) who, having 'messed about' and fallen behind, are unable to halt their decline despite wishing to do so. They find it easier to give up than to catch up.
- A number of schools are aware of many of these problems and have been actively seeking innovative solutions, both in terms of transitions and transfers. However, these initiatives have rarely been evaluated in ways which would make it possible to generalise to other schools although there is frequently considerable interest in doing so.

The recommendations for further action outlined in this report are designed to support schools in the twin aims of sustaining progress at critical points in pupils' school careers and rescuing pupils who are seriously at risk of falling behind or failing. We believe that this is best accomplished by re-thinking some existing practices and the assumptions that underpin them, and developing new strategies that match the review's analysis of what is needed.

This proposed programme would:

- provide an array of tried and evaluated strategies, matched to specific experiences of transfer and transition, that schools could adapt for use in their own setting;

- involve interested schools in developing innovative post-transfer strategies that achieve a good balance between academic and social concerns and that underline the importance of helping pupils to take learning seriously in school and become professional in their approaches to learning;
- engage schools in the development of teaching and learning strategies in particular subject areas that will help pupils sustain their excitement in learning through experiences of transfer and transition and encourage those who, for whatever reason, are disengaged or disengaging to get back on board;
- support schools in giving attention to pupils' accounts of why they disengage or underperform at these critical moments; and
- collaborate with schools on researching four topics (detailed above) that seem to have a strong influence on pupils' progress and attitudes to learning and about which more needs to be known as well as working with teachers to translate the findings into strategies that other schools could use.

REFERENCES

- Anderman, E.M. and Maehr, M.L. (1994) Motivation and schooling in the middle grades, *Review of Educational Research*, 64, 2, 287-309.
- Beynon, J. (1985) *Initial Encounters in the Secondary School*, Lewes: Falmer Press.
- Brooks, G., Flanagan, N., Henkhuzens, Z. and Hutchison, D. (1998) *What Works for Slow Readers? The Effectiveness of Early Intervention Schemes*, Slough: NFER.
- Catterall, J. (1998) Risk and resilience in student transitions to high school, *American Journal of Education*, 106, 2, 302-333.
- Chaplain, R. (1996) Making a strategic withdrawal: disengagement and self-worth protection in male pupils, in Rudduck (eds.) *et al*, *School Improvement: What Can Pupils Tell Us?* London: David Fulton, 101-115.
- Cooper, H., Nye, B., Charlton, K., Lindsay, J. and Greathouse, S. (1996) The Effects of summer vacation on achievement tests scores: a narrative and meta-analytic review, *Review of Educational Research*, 66, 3, 227-268.
- CST (1999) *School Science: Fit for the Future?* A Preliminary Report of the Council for Science and Technology Education Sub-Group.
- Day, J. (1996) School friendship groups and their impact on learning, *Education 3-13*, 24, 1, 51-58.
- Delamont, S. and Galton, M. (1986) *Inside the Secondary Classroom*, London: Routledge and Kegan Paul.
- Doddington, C., Flutter, J. and Rudduck, J. (1998) Year 8 - a suitable case for treatment, *Improving Schools*, 1, 3, 39-42.
- Doddington, C., Flutter, J. and Rudduck, J. (1999) Exploring and explaining 'dips' in motivation and performance in primary and secondary schools, *Research in Education* (in press).
- Doyle, L., and Herrington, N. (1998) Bridging the Gap: A case study of curriculum continuity at Key Stage 2/Stage 3 transfer, *Management in Education*, 12, 6, 11-12.
- Dutch, R., and McCall, J. (1974) Transition to secondary – an experiment in a Scottish comprehensive school, *British Journal of Educational Psychology*, 44, 3, 282-289.
- Flutter, J., Rudduck, J., Addams, H., Johnson, M. and Maden, M. (1999) *Improving Learning: the Pupils' Agenda*, Cambridge: Homerton Research Unit.
- Galton, M. and Willcocks, J. (1983) (eds.) *Moving from the Primary School*, London: Routledge and Kegan Paul.
- Galton, M., Hargreaves, L., Comber, C., and Wall, D. (1999) *Inside the Primary Classroom: 20 Years On*, London: Routledge.
- Gorwood, B. (1986) *School Transfer and Curriculum Continuity*, London: Croom Helm.
- Gorwood, B. (1991) Primary-secondary transfer after the national curriculum, *School Organisation*, 11, 3.
- Greer, B. (1993) The mathematical modelling perspective on wor(l)d problems, *Journal of Mathematical Behaviour*, 12, 239-250.
- Hadden, R. A., and Johnstone, A. H. (1983) Secondary school pupils' attitudes to science: the years of erosion, *European Journal of Science Education*, 5, 309-318.
-

-
- Hargreaves, A. (1996) Revisiting voice, *Educational Researcher*, 25, 1, 12-19, Jan-Feb.
- Hargreaves, L. and Galton, M. (1999 in press) (eds.) *Moving from the Primary Classroom: 20 Years On*, London: Routledge.
- Harris, S. and Rudduck, J. (1993) Establishing the seriousness of learning in the early years of secondary schooling, *British Journal of Educational Psychology*, 63, 322-336.
- Harris, S., Nixon, J. and Rudduck, J. (1993) Schoolwork, homework and gender, *Gender and Education*, 5, 1, 3-15.
- Harris, S., Rudduck, J. and Wallace, G. (1994) 'School's great - apart from the lessons': students' early experiences of learning in secondary school, in M. Hughes (ed.) *Perceptions of Teaching and Learning*, Clevedon: Multilingual Matters, 35-52.
- Jennings, K., and Hargreaves, D. J. (1981) Children's attitudes to secondary school transfer, *Educational Studies*, 7, 1.
- Lahelma, E., and Gordon, T. (1997) First day in secondary school: learning to be a 'professional pupil', *Educational Research and Evaluation*, 3, 2, 119-139.
- Lee, B., Harris, S., and Dickson, P. (1995) *Continuity and Progression 5-16: Developments in School*, Slough: NFER.
- Marshall, B., and Brindley, S. (1998) Cross-phase or just a lack of communication: models of English at key stages 2 and 3 and their possible effects on pupil transfer, *Changing English*, 5, 2, 123-133.
- McGuinness, C. (1999) *From Thinking Skills to Thinking Classrooms*, Draft Report for the Department for Education and Employment.
- Measor, L. and Woods, P. (1984) *Changing Schools*, Milton Keynes: Open University Press.
- Midgley, C., Eccles, J., and Feldlaufer, H. (1991) Classroom environment and the transition to junior high school, in Fraser, B. and Walberg, H. (eds.) *Educational Environments*, Oxford: Pergamon Press.
- Minnis, M., Seymour, K. and Schagen, I. (1998) *National Results of Years 3, 4 and 5 Optional Tests*, Slough, NFER.
- Murdoch, A. (1982) *Forty-two Children and the Transfer to Secondary Education*, (PhD thesis) Norwich: University of East Anglia.
- Nicholls, G. and Gardner, J. (1999) *Pupils in Transition: Moving between Key Stages*, London: Routledge.
- Nisbet, J.D. and Entwistle, N.J. (1969) *The Transition to Secondary School*, London: London University Press.
- OFSTED (1998) *Standards and Quality in Schools 1996/97* (Annual Report of the Chief Inspector of Schools), London: HMSO.
- OFSTED (1999) *Standards and Quality in Schools 1997/98* (Annual Report of the Chief Inspector of Schools), London: HMSO.
- QCA (1997) *Building Bridges*, London: Qualifications and Curriculum Authority.
- QCA (1998a) *Making Use of Optional Tests*, London: Qualifications and Curriculum Authority.
- QCA (1998b) *Building Bridges in Mathematics*, London: Qualifications and Curriculum Authority.
-

-
- Power, C. and Cotterell, J. (1981) *Changes in Students in the Transition from Primary to Secondary School*, REDC Report No.27, Canberra: Australian Government Publishing Service.
- Rudduck, J. (1996) Going to the 'big school': the turbulence of transition, in Rudduck *et al* (eds.) *School Improvement: What Can Pupils Tell Us?*, London: David Fulton, 19-28.
- Rudduck, J. (1997) Freedom and control: the pupil perspective, lecture given at the School of Education, University of Cambridge, February.
- Rudduck, J., Chaplain, R. and Wallace, G. (eds.) (1996) *School Improvement: What Can Pupils Tell Us?* London: David Fulton.
- Rudduck, J., Day, J. and Wallace, G. (1997) The significance for school improvement of pupils' experiences of within-school transitions, *Curriculum*, 17, 3, 144-153.
- Rudduck, J., Wilson, E. and Flutter, J. (1998) *Sustaining Pupils' Commitment to Learning: The Challenge of Year 8*, Report for Lincolnshire LEA, Cambridge: Homerton Research Unit.
- SCAA (1996) *Promoting Continuity between KS2 and KS3*, Middlesex: School Curriculum and Assessment Authority.
- SCAA (1997) *Making Effective Use of Key Stage 2 Assessments*, Middlesex: School Curriculum and Assessment Authority.
- Schagen, S. (1999) *Thrown in at the Deep End* (an account of an NFER project on progression from primary to secondary school), *Times Educational Supplement*, 8 January.
- Scrimshaw, P. (1997) *Preparing for the Information Age: Synoptic Report of the Education Department's Superhighways Initiative*, Coventry: National Council for Educational Technology (NCET) for the DfEE.
- Shrigley, R. L. (1990) Attitude and behaviour are correlates, *Journal of Research in Science Teaching*, 27, 2, 97-113.
- Smithers, A., and Robinson, P. (1998) *Degrees of Choice*, London: Brunel University.
- Spector, B. S. and Gibson, C. W., (1991) A qualitative study of middle school students' perceptions of factors facilitating learning in science, *Journal of Research in Science Teaching*, 28, 6, 467-484.
- Squires, K. (1994) Moving on: the poetry of transition, *English in Education*, 28, 2, 31-35.
- Stables, K. (1995) Discontinuity in transition: pupils' experience of technology in year 6 and year 7', *International Journal of Technology and Design Education*, 5, 157-169.
- Suffolk LEA (1997) *A Report on An Investigation Into What Happens When Pupils Transfer Into Their Next School at the Ages of 9, 11 and 13*, Ipswich: Inspection and Advice Division, Suffolk Education Department.
- Sutherland, A., Johnston, L., and Gardner, J. (1996) *A Report for the Northern Ireland Council for Curriculum, Examinations and Assessment*, Belfast: Queen's University.
- Underwood, J., Cavendish, S., Dowling, S., Fogelman, K, and Lawson, A. (1994) *Integrated Learning Systems in UK Schools*, Final report, Coventry: National Council for Educational Technology (NCET).
- Waterhouse, S. (1992) *First Episodes: Pupil Careers in the Early Years of School*, Lewes: Falmer Press.
-

Weston, P., Barrett, E., and Jamison, J. (1992) *The Quest for Coherence: Managing the Whole Curriculum 5-11*, Slough: NFER.

Wigfield, A., Eccles, J., MacIver, D., Reuman, D. and Midgley, C. (1991) Transitions during early adolescence, *Developmental Psychology*, 27, 4, 552-565.

Worcester LEA (1997) *Key Stage 3 Survey: Headteachers' Responses*, Worcester: Quality Division, Inspection, Advice and Training Service.

Youngman, M., (1978) Six reactions to school transfer, *British Journal of Educational Psychology*, 48, 4, 280-289.

LIST OF SCHOOLS, LEAs and OTHER ORGANISATIONS CONTRIBUTING EVIDENCE

A considerable number of schools, LEAs and other organisations contributed evidence to our review. Several secondary schools specifically mentioned to us that they were replying on behalf of all the schools in their transfer pyramids although we have not mentioned all their names here.

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 Holbrook High School, Suffolk
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 King James's School, Kirklees
 Kingston upon Hull LEA
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