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ABSTRACT

This paper examines the impact of the (British) National Curriculum on classroom practices and range of curriculum in small rural elementary schools with varying involvement in school clusters. Small schools (fewer than 100 students) cost more per student and have been under threat for several decades in England as a "rural deficiency theme" has been used to justify a steady reduction in their numbers. Small schools have sought to enhance educational provision and overcome charges of deficiency by forming collaborative groups called clusters. A survey of 90 three-teacher elementary schools in the East Midlands of England consisted of 2 questionnaires: headteachers were asked about the nature of the schools' cluster membership, while third-grade teachers were asked to evaluate their own confidence and competence to teach the National Curriculum. In addition, case studies of nine target schools included classroom observations of 7-year-old students and children's "picture diaries" of classroom activities. Results show that teachers in small rural schools rated themselves as more competent than elementary teachers in general, but the hypothesis that clustering would increase self-confidence was only partially supported. Compared to previous studies, the case studies showed slightly reduced emphasis on English, mathematics, and art to cover a broader curriculum, but English and math continued to occupy nearly 50 percent of the curriculum. Classroom organization had shifted slightly to more whole-class teaching but continued to emphasize individualized tasks, particularly in Level II schools (neither firmly committed to clustering nor proudly independent). Children showed high levels of on-task behavior but were most likely to be distracted in Level II schools. Contains 24 references. (Author/SV)

Rural Education Research Forum
National Rural Education Association
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Rural education : opportunities for excellence

Special interest: Educational cooperatives /partnerships

The implementation of the National Curriculum in clusters of English rural primary schools

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Abstract

The implementation of the National Curriculum in clusters of English rural primary schools

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The paper reports findings from a recent project on the implementation of the National Curriculum in clusters of small rural primary schools in the English Midlands. A small scale survey of schools' co-operative activities was used to modify an existing three-stage framework of cluster development to include four levels of cluster development with a 'pre-clustered' or 'independent' category. This framework was then used to examine teachers' self-reported competence and confidence to teach certain national curriculum areas. The results show that whilst teachers in small rural schools rated themselves as more competent than primary teachers in general, the hypothesis that clustering would increase self-confidence was only partially supported. The impact of the National Curriculum on classroom practice in nine case study schools was examined using evidence from classroom observations and children's diaries. Compared with data from previous studies it shows a slight reduction in emphasis on English, mathematics and art, to cover a broader curriculum although English and mathematics continue to occupy nearly 50 per cent of the observed curriculum, and to dominate children's records of their weekly curriculum . The observations and diaries show a slight shift in classroom organisation to include more whole class teaching but there remains a strong emphasis on the use of individualised tasks, particularly in Level II schools which were neither firmly committed to clustering nor proudly independent of other rural schools. Children's behaviour showed higher levels of on-task behaviour in small rural schools than in a contemporary study of larger primary schools, but within the rural sample, children were more likely to be distracted from their work in the level II schools.

The Implementation of the National Curriculum in clusters of English rural primary schools

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Introduction

The first part of this paper will describe the present situation for small rural schools in England and in particular the repeated, and unsubstantiated, suggestions of their educational inadequacy. It will also describe briefly the National Curriculum in England and Wales which was introduced in 1989. After this the research carried out by Leicester University on cluster development and the implementation of the national curriculum in small rural schools immediately prior to and since its introduction, will be described.

Setting the Scene : small rural primary schools under threat

This paper is concerned with small rural primary schools, defined here as schools which cover the age-range 5 to 11 years and have less than 100 pupils on roll. Although there are small urban schools in England, the majority are rural. Small primary schools make up 21 per cent of the 11,000 primary schools in England, and 13 per cent of all schools which cater for children in this age range (DFE, 1994). These schools have been under threat in England for several decades because, in most cases they cost considerably more per pupil than larger primary schools. A series of pretexts constituting a 'rural deficiency theme' (Bell, 1988) has been used to justify the year by year reduction in their numbers. The theme goes back to 1931, when the Hadow Committee questioned the ease with which 'a progressive course of instruction ' could be maintained in classes or groups of a 'composite character'. In 1961, the Ministry of Education questioned the adequacy of small schools' facilities for PE, dance, drama, and a school library. In 1967 the Plowden Committee noted the difficulties of dealing with wide age range classes and proposed that schools should have at least three classes, whilst the Gittins Report (1967), concerned with primary education in Wales noted the potential limitations in social stimulation for children in small peer groups.
In the 1980s, however, the ability of small schools to provide a broad and balanced curriculum became the main issue, as the 'Better Schools' (Department of Education and Science (DES), 1985) initiated the idea that primary schools should have at least one specialist teacher for each of the nine curriculum areas, thus making it ,
' inherently difficult for a very small school to be educationally satisfactory' (para 275).
Evidence from the Curriculum Provision in Small Primary Schools (PRISMS) (Galton and Patrick 1990) research, which was funded by the DES in 1983/5 and reported in 1986, showed however, that although, in common with larger primary schools, there appeared to be a lack of planning in the organisation of the curriculum ...

There was no evidence ... that PRISMS teachers in small schools neglected areas of the curriculum such as the humanities and science because of a shortage of specialist teaching. In deed evidence seems to suggest that they may have carried out more activity in these subject areas. ... ... Pupils did have opportunities to experience different curriculum areas in ways which conform to current thinking about 'best' primary practice. (Galton, 1990) p.73)

Despite these conclusions, and the allocation of an Education Support Grant (ESG) to enhance the curriculum provided in rural schools, between 1985-91, (DES circular 6.84), official publications perpetuated the rural deficiency theme with the implicit assumption that large urban primary schools were adequately fulfilling the new demands for specialist expertise. In 1990, the Audit Commission opened its section on small schools by referring to *'particular features of the small school problem'*, such as small schools being : *less likely to have the required range of subject expertise amongst their teaching staffs than larger schools .(par 71)* and *... smallness also limits a school's scope in the allocation of curricular responsibilities amongst the teachers (para 72)* .
In 1992 a discussion document commissioned by the Secretary of State for Education from Alexander, Rose and Woodhead (1992) called for an increase in single subject teaching' and did point out that the problem of shortage of subject expertise was now acute throughout primary education . The follow-up paper from OFSTED (1993) related this specifically to small schools however:
Heads of small schools felt threatened by this issue since they did not have enough flexibility of staffing to provide for semi-specialist teaching except through the exchange of classes for particular subjects. (OFSTED 1993, para 23)

Cluster formation

One way in which small schools have sought to enhance their educational provision and overcome these charges has been to form collaborative groups of schools often called clusters. Clustering schemes were pioneered 10 - 15 years ago in England in areas such as Northamptonshire and Nottinghamshire (Bell and Sigsworth 1987) but clustering has become more prevalent since the introduction of the National Curriculum and the 1988 Education Reform Act which resulted in the devolution of financial management to schools. The national evaluation of the Education Support Grant (ESG) to rural schools between 1985-1991 (Galton et al., 1991) showed that cluster formation had been a central strategy in almost all of the 14 pilot projects aiming to improve teachers' professional development, the availability of resources a to rural schools and for enlarging children's peer group sizes. Nevertheless, the Audit Commission (op. cit) , suggested that *'...clustering is at best an incomplete alternative.'* (para. 86) and sought to illustrate this point of view with a cluster of three schools and 11 teachers, which, whilst strong in the arts and humanities, with three

experts in each of English, art, RE, and music (a point which the Audit Commission chose to ignore), lacked specialists in mathematics and technology only. Mathematics, however, was an area of high confidence amongst primary teachers at that time, whilst the need for training in technology was common throughout the primary sector (Bennett et al., 1992) and government funded in-services courses in technology, mathematics and science were proliferating. Meanwhile, the positive reports of the effects of clustering by practitioners such as Deeks (1991) and Atkins and Rivers (1994) testify to the benefits for teachers, governors and children.

By 1994, 96% of the small schools belonging to the Exeter Small Schools Network were in some kind of cluster, although a high proportion of these were loosely linked groupings formed to pay for in-service training (e.g. Keast, 1994). Furthermore recent reports on the curriculum in small schools have been positive. Vulliamy and Webb (1994) reported that curriculum planning, and in particular whole school planning appeared to be more advanced in small rural schools, whilst the small schools headteachers who also typically have full responsibility for a class had greater credibility and confidence as curriculum leaders than did their larger school non-teaching counterparts (Webb, 1994) these findings match our own interview data and observations of curriculum planning in clusters of small rural schools. The focus of the present paper, however is the quantitative information available about the curriculum recorded in small rural schools.

The National Curriculum in England and Wales

Before describing the research, an outline of the National Curriculum in England and Wales may be helpful. The National Curriculum was phased into schools from September 1989, two years after the publication of the first national curriculum consultation document (DES 1987). Mathematics, science and English, defined as the core subjects were introduced in 1989 for five years olds (Year 1) and 12 year olds (Year 7). These subjects were followed in the next two years by the 'Foundation subjects of history, geography and technology, and then art, physical education (PE) and music. In addition five 'cross curricular themes' (health education, citizenship, environmental education, economic and industrial awareness and careers) were also created. Religious education (RE) is also required to be taught in schools, and children aged 11 and over are required to learn a modern foreign language. The age range 5 to 16 has been divided into four 'key stages' (i.e. children aged 5-7 years, 7-11 years, 11-14 years, and 14-16 years) of which the first two constitute primary education and the second two compulsory secondary education. Since its first introduction, there have been several revisions, particularly in the core areas, chiefly aimed at simplification. A new slimmed down edition, with a reduction in the legally required volume to be taught and in the formal assessment requirements was introduced in Autumn 1995, following a widespread and popular consultation with teachers (Dearing 1994). This consultation has also resulted in

a much needed five-year period of stability in which no major changes will be made to the curriculum.

Needless to say, over this period of turmoil in schools, all primary teachers have experienced extremely heavy workloads in attempting to assimilate, plan, implement, record and assess children's work within a frequently changing national curriculum (Pollard et al., 1994). For teachers in small primary schools these tasks has been proportionately greater, but those who have worked closely with teachers from other small primary schools in clusters have found ways to support each other in the implementation of the curriculum.

The INCSS project

The focus of this paper, however, is the Implementation of the National Curriculum in Small Schools (INCSS) project was designed to examine the SCENE framework and was funded by the UK Economic and Social Research Council (ESRC). The INCSS project has focused on small schools in three counties over a full one year period and the use of clusters of schools in the implementation of the national curriculum. The INCSS study is a continuation of research begun in 1983 with the Curriculum Provision in Small Primary Schools (PRISMS) project (Galton and Patrick, 1990). In 1989, the same team carried out the National Evaluation of the government's Education Support Grant (ESG) pilot schemes designed to *'improve the quality or range of the curriculum provided in rural schools'* in 14 English counties. One outcome of this project (the Rural SCENE project) was the SCENE framework of cluster development which had explanatory value in the evaluation of the ESG pilot schemes. The three phases of cluster development which were identified as *initiation*, *consolidation* and *reorientation* are shown in Figure 1.

Research concerning two basic questions will be described here:

1 What has the impact of the national curriculum been on classroom practice and the range of the curriculum in small rural schools?

2 Does cluster membership help small rural schools to implement the national curriculum?

Figure 1 Rural SCENE cluster development framework

Rural SCENE cluster development framework

Phase 1 INITIATION

Initially little or no contact between schools beyond :
- sports fixtures (competitive)
- shared costs of visits
- heads meet at area/pyramid meetings etc.

Schools need generalist support to :
Initiate within-school curriculum dialogue
Identify own school priorities
Establish support links between teachers in different schools
Governors informed

Build trust between schools

Phase II CONSOLIDATION

Teachers work together on common theme or topic

Use specialist support effectively
Identify shared INSET priorities
Get governors involved

Development of common policies and curriculum documents

Phase III REORIENTATION

Common policies
Cluster development plan
Pooled finances
Specialist advice and expertise bought in on consultant basis
Governors' joint committee

Stable cluster identity with individual school autonomy

Methods

The data used to answer these research questions is drawn from a survey of small rural schools in the East Midlands of England and from nine case studies which have involved classroom observation, interviews with staff and the collection of children's 'picture diaries' of their daily activities. Comparative evidence is provided by observational data reported in Galton and Patrick (1990) and Pollard et al. (1994).

i) The survey

The survey consisted of two questionnaires sent to the headteachers and to the teachers of the year 3 (7-8 year old) children in 90 three-teacher rural primary schools. A 59%

response rate was obtained from headteachers and 47 percent from the teachers. The lower rate from teachers is likely to be because of some of headteachers were also the Y3 teachers, and where this was the case, in recognition of the time need to complete questionnaires, heads were asked to complete the headteacher questionnaire in preference to the teacher version . The headteachers' questionnaire asked about the composition and nature of the school's cluster membership and class teachers' questionnaire asked about their self assessed confidence and competence to teach the curriculum to 10 to 11 year old children. The questionnaire to teachers was re-administered to school which had responded in Round 1 one year later (Round 2) to look for changes in teachers' ratings of their confidence and competence.

(ii) The Picture Diaries

The seven year old children in the nine case study target schools were shown how to keep 'picture diaries' (designed by Sue Cavendish) of their curriculum activities. The diaries were kept for one week in the middle of the three school terms in 1992-3 but this paper reports on the first and third rounds only. Older and younger children in the same classes kept picture diaries also at their teachers' discretion. The picture diaries will be described below. (Illustration : Figure 5)

(iii) Classroom observations

Classroom observations were made of six of the seven year old children in each class in the case study schools on three occasions. These were semi-structured observations in which the observer 'tracked' six children twice on three separate visits. The observers recorded specific pre-agreed aspects of children's and teachers' classroom activity and behaviour during five consecutive one-minute intervals. These written observations were subsequently put into codes directly comparable with our previous curriculum observations. The sample of six target children consisted of one boy and one girl chosen at random from those who had achieved overall levels of 3, 2 and 1 in the Standard Assessment Tasks (SATs) in English, mathematics, science and technology) the previous summer. In practice, however, the small class sizes meant that there were very few children to choose from in each category.

Results

1) The cluster framework

The responses to the headteachers' questionnaire about cluster membership and co-operative activities were used to establish four levels of cluster cohesion ranging from schools independent of others to those for whom school and cluster were highly interdependent.

Figure 2 The INCSS Four levels of cluster cohesion

These cluster levels are described in more detail with qualitative examples in Hargreaves (1995).

2 **Teachers' confidence and competence to teach the national curriculum.**

The results of the teacher questionnaire indicated that teachers in small schools rated themselves more highly in terms of confidence and competence to teach the national curriculum than the 500 primary teachers who had participated in a large scale national survey administered in the previous year. (Bennett et al., 1992).

Figure 3 Comparison of Bennett et al. (1992) and INCSS self-rated competence levels.

One explanation for this, and the one offered by teachers in interviews, was that teachers in small schools have to teach in all areas: unlike their large school counterparts, they cannot leave a curriculum area to another member of staff. One of our hypotheses however, was that the closer the level of co-operation between schools in a cluster, the more likely teachers would be to express higher self-ratings of their confidence. Figure 4 shows a pattern which, although non-significant, was consistent over the two administrations one year apart, namely that confidence levels combined across the whole curriculum rose from cluster levels one to three, but then dropped at level four.

Figure 4 Teachers' self-confidence ratings across the curriculum (two administrations, one year apart)

Table 1 INCSS' teachers self-confidence by subject area : 1992 and 1993

Table 1, however, shows the results for four curriculum areas which were of particular interest in this study. The results for Round 1 provide support for this hypothesis. In Round 2 however, there has been a shift such that teachers in cluster level III (Consolidation) are most confident in the target curriculum areas, whilst the Level IV teachers are less so.
An explanation for the dip at Level IV was sought in the case study data. First, it could be because those schools had reached the stage of reviewing and evaluating their original sets of cluster curriculum documents, and , having assimilated the content and implementation of the curriculum, they were considering more carefully issues such as differentiation and assessment. Whilst dealing with these more complex issues, their self-confidence might have been lowered. Alternatively, it may be that lower confidence teachers tend to form more closely knit clusters for mutual support. This conflicts however with the self-confident, purposeful and enterprising programmes set up by these highly developed clusters.

Self-ratings of competence and confidence may not reflect an accurate picture of classroom practice however and for this we turn to the data from the children's diaries and the classroom observations. The principal aim of the national curriculum has been to provide a broad and balanced curriculum for all children. The balance referred to here applies not only to curriculum content areas however, but also to:

generic activities (such as reading... using apparatus, ...collaborating with other children) which pupils encounter daily regardless of subject labels . The balance which is struck amongst such activities is arguably as important as the balance which is struck amongst subjects. (Alexander et al., 1992 para. 76).

The observations and diaries included not only curriculum areas but also resources, types of activity and organisational strategies.

3 The children's picture diaries

The picture diaries consisted of 66 icons in groups which represented curriculum areas, children's tasks, resources and equipment, and places to record other aspects of

Figure 5 Front of children's picture diary

the activity such as whether they had worked with other children and whether they had needed the teacher's help. The children simply circled as many of the 66 icons which were needed to describe their chosen activities.

Figure 6 The curriculum according to the picture diaries

The results of the children's diaries, however, showed a curriculum dominated by English (60%) and mathematics (49%) with low incidence of science (15%), technology (7%) and geography (13%) . Music (48%) and religious education (38%) were was surprisingly commonly recorded but this was probably because children recorded their daily assemblies.

In terms of types of task, listening to the teacher (84%) was the most commonly recorded activity, overall, but apart from interaction with the teacher (62%) and with other children (66%) , ' reading a story' was the most frequently recorded content specific task (60%). The children also recorded the resources and equipment they had used. Pencils and paper were, not surprisingly, recorded most often (93%, 81%). The recorded use of science apparatus however was rare (2%). The diaries were also analysed by the children's achievement levels. Higher achievers were more likely to record having used mathematics equipment than low achievers, whilst low achievers were more likely than high achievers to record that they did not need the teacher.

Figure 7 How children think the teacher helped them (by achievement levels)

4 The classroom observations

The classroom observations were collected to provide a third source of data about the implementation of mathematics, science, geography and music in the national curriculum for seven year old children. Compared with the diaries, however, there were too few observations in some curriculum areas for firm conclusions to be based upon them and here the observations should be related to the diary data. Nevertheless, the observations do contribute some evidence with which to examine the schools' curriculum implementation. Despite teachers' awareness of the target curriculum areas (namely science, mathematics, geography and music) and the approximate time-tabling of observation visits to coincide with these activities, the observation frequencies for Autumn and Spring, 1992-3 reveal that English, which was not a target area, was the most frequently observed area (27% observations), with mathematics second (19%). Science, designated a core curriculum area, accounted for only 9 percent of the observations.

Figure 8 Comparison of PRISMS and INCSS observed curriculum

Table 2 Comparison of proportions of observations including each curriculum area as major part of children's activity

Curriculum area	PRISMS 1984 % observations[1]	INCSS 1992 % observations[2]
English	37	27
mathematics	23	19*
science	9	9*
technology/IT	not included in curriculum	9
history	5	4
geography	2	10*
music	6	11*
art	15	5
PE	5	4

* teachers aware that these were preferred curriculum areas for observation

[1] based on 3000 observations taken at 5 second intervals of 9 pupils in 1380 lessons in 68 schools

[2] based on 150 observations taken over (5 x 1) minute periods of 6 pupils in 36 lessons in 9 schools

Both systems using same coding categories

Within these basic areas, basic skills such as arithmetic, reading and writing took up most of the time. There was little evidence of the investigative or context based activity encouraged in the curriculum documents.

The observations included records of children's seating and working arrangements. In previous studies of primary classrooms it has been common to find that although children were seated in small groups around their tables, they tended to work on individual tasks (Galton et al., 1980; 1991). One of the aims of the National Curriculum has been to increase the variety in teachers' organisational strategies and to increase the use of group work and whole class teaching (Alexander et al., 1992)

Figure 9 INCSS base (seating) and team (working) comparison

The present data reveal classroom organisation strategies still biased towards individualised tasks although the balance between individual tasks, group tasks and whole class activities is slightly improved. Co-operative group work, however, which has been encouraged as an organisational strategy (Alexander et al. 1992) appeared in only 10% of the observations and was rarely used even in science and technology. Furthermore the often found asymmetry between children's seating and working groups, such that they sit in groups but work individually most of the time was again confirmed.

Table 3 Use of different grouping strategies by cluster level

cluster level	individual % obs / level	pair & group % obs / level	whole class % obs / level	total number observations
independent	47.2 (25)	15.1 (8)	37.7 (20)	53
initiation	75.8 (25)	3.0 (1)	21.2 (7)	33
consolidation/ reorientation	58.7 (37)	23.8 (15)	17.5 (11)	63
totals	58.4 % obs	18.1% obs	25.5% obs	149

Examination of the grouping strategies by cluster level, however, revealed relatively greater emphasis on individualised work in cluster level I , with proportionately more class teaching in the 'independent', non-clustered schools. Among schools committed to clustering, the highest proportion of group work and lowest proportion of classwork was found . The hypothesis was that greater cluster cohesion would bring schools closer to achieving the aims of the national curriculum, but these results suggest that schools which were either proudly

independent or closely clustered showed some movement towards the recommended balance, whereas schools which were only loosely committed to a cluster had changed their organisational strategies least in recent years.

In terms of change over time, comparison of the overall INCSS grouping strategies with the PRISMS observations shows a reduction in individualised work and an increase in whole class instruction, although individual tasks remain the most common arrangement.

Figure 10 Comparison of grouping strategies ; PRISMS: PACE : INCSS

Overall, the classroom observations showed little change in the teaching and organisation of the curriculum since the introduction of the national curriculum. Analysis of the data by cluster levels generally supported the hypothesis that children in established clusters enjoyed a wider range of experiences and teaching strategies than those in loosely linked or newly created clusters, but it also suggested that children in schools independent of clusters enjoy a similar range. Schools which were newly or loosely joined to clusters showed the most restricted ranges of tasks, however.

Lastly we consider children's application to their work. As reported in previous studies (e.g. Hargreaves, 1990), children in the small rural schools showed very high levels of on-task behaviour. In the present study 81% of the observations (plus 5% if routine activities such as getting materials, sharpening pencils are included) showed children to be on-task. These are higher levels than those obtained in larger primary schools, where Pollard et al., (1994) for example reported that children were on task for 60% observations (plus 13% task management i.e. 'routine') . Levels of distraction were only 14% in the small rural schools and 22% in the Pollard et al . sample of larger schools, but children spent proportionately more time waiting for the teacher (10%) in the rural schools than in the larger schools (6%). When broken down by cluster levels however, a pattern which reinforced the benefits of either close clustering or 'proud independence' , as described above, emerged. Namely that children in schools in Clusater Level II, the initiation phase, were more likely to be off-task than those in independent or established cluster groups. Since individualised work tends to be associated with off-task behaviour (Galton et al., 1980) these findings are probably not independent.

Conclusions

The research described here has considered the self-rated competence and confidence levels of teachers in small rural primary schools. Whilst self- rated competence was shown to be generally higher than that of teachers in a national survey, the hypothesis that higher levels

of cluster cohesion would be associated with greater confidence was not confirmed although the data do not contradict the hypothesis.

The research was concerned with the implementation of the national curriculum in small English rural schools. The curriculum as recorded by the children in their picture diaries revealed a continued heavy emphasis on English and mathematics, and observations confirmed this. Whilst English and mathematics were still by far the most time consuming curricular activities according both to observations and children's diaries, however, there was a drop in the frequency of these activities. and art, which may be balanced curriculum by increases in the time spent on technology, geography and music.

The overall conclusion to be drawn from comparisons between the current observations and the observed curriculum of a decade earlier must be that the national curriculum has not had a pronounced effect on the balance of the curriculum or on classroom organisation in small rural schools. The greater changes, however, appear to be in small rural schools which are either proudly independent of other small schools or are highly committed cluster members. Schools which belonged to neither of these categories showed the least curriculum development.

References

Alexander, R., Rose, J. and Woodhead, C. (1992) Curriculum organisation and classroom practice in primary schools: a discussion paper. London: DES

Atkins, v. and Rivers, M. (1994) Clustering - what's in it for us? Management in Education 8(1) 16 - 21

Audit Commission, (1990). Rationalising primary school provision, London: HMSO

Bell, A. (1988) The federation; A support system for rural primary schools, Cambridge Journal of Education, 18 (2) 179 - 189

Bell, A. and Sigsworth, A. (1987). The small rural primary school. London: Falmer Press

Bennett. S.N., Wragg. E.C., Carré, C.G., and Carter, D.,S.,G., (1993) A longitudinal study of primary teachers' perceived competence in and concerns about national curriculum implementation, Research Papers in Education 7 (1) 53 - 78

Deeks, G. (1991) Managing change in a small schools consortium, Education Review 5(1) 24-30

Department for Education and Science (DES) (1985). Better Schools Cmnd 9469 London: HMSO

DES Welsh Office (1987). The National Curriculum 5 ~ 16: a consultation document, Cardiff: Welsh Office

Galton, M., Simon, B., and Croll, P. (1980) Inside the primary classroom London: Routledge and Kegan Paul

Galton, M., and Patrick., H . (Eds.) (1990). Curriculum Provision in the small primary school. London ; Routledge

Galton, M., Fogelman, K., Hargreaves, L. and Cavendish, S. (1991) The Rural Schools' Curriculum Enhancement National Evaluation (SCENE) project; Final Report , London : DES.

Galton, M. (1993) Managing the curriculum in small primary schools. Stoke: ASPE/Trentham books

Gittins report (1967) Primary Education in Wales, London: HMSO

Hadow Report (1931) Report on the Consultative Committee on the Primary School, London; HMSO

Hargreaves, L., Comber, C., and Galton, M., (in press) The National Curriculum: can small schools deliver? Confidence and competence levels of teachers in small primary schools, British Educational Research Journal 22 (2)

Hargreaves, L. (1990) 'The curriculum in small schools', in Galton, M. and Patrick, H. (Eds.) Curriculum provision in small primary schools, London: Routledge

Hargreaves, L., (1995). 'Collaboration: a condition of survival for small rural schools?' in Bridges, D. and Husbands, C. (Eds.) Consorting and collaborating in the education market place. London; Falmer Press

Keast, D. (1994) The cost and value of small schools, Paper presented at the British Educational Research Association (BERA), University of Oxford

OFSTED (1993) Curriculum organisation and classroom practice: a follow-up report. London: DES

Plowden report, (1967) Children and their Primary Schools Report of the Central Council for Education in England, London; HMSO

Pollard, A., Broadfoot, P., Croll, P., Osborn, M., and Abbott, D., (1994) Changing English primary schools? The impact of the Education Reform Act at Key Stage One. London: Cassell

Vulliamy, G. and Webb, R. (1995). The implementation of the National Curriculum in small primary schools, Educational Review , 47 (1), 25-41.

Webb, R.T. (1994). After the deluge: changing roles and responsibilities in the primary school , London: Association of Teachers and Lecturers

Table 1 Comparison years 1 and 2 confidence in target curric areas by cluster level

Mathematics mean	confidence round 1 3.6 ± 1.1	confidence round 2 3.6 ± 1.3
level I (n = 9) indep.non-cluster	3.4 ± 1.3	3.8 ± 0.5
level II (n = 8) initiation	3.3 ± 0.5	3.1 ± 1.5
level III (n = 10) consolidation	3.7 ± 1.3	4.4 ± 1.0
level IV (n = 11) reorientation	4.0 ± 0.9	3.5 ± 1.4

science mean	confidence round1 3.4 ± 1.1	confidence round2 3.4 ± 1.2
level I indep.non-cluster (n = 9)	3.4 ± 1.2	3.7 ± 1.2
level II initiation (n = 8)	3.3 ± 1.0	3.2 ± 1.5
level III consolidation (n = 10)	3.1 ± 1.4	4.0 ± 0.8
level IV reorientation (n = 11)	3.7 ± 0.9	3.1 ± 1.2

geography	confidence round1	confidence round2
level I indep.non-cluster (n = 9)	3.2 ± 0.6	3.7 ± 0.5
level II initiation (n = 8)	3.5 ± 0.9	3.3 ± 1.4
level III consolidation (n = 10)	4.0 ± 0.9	3.9 ± 1.1
level IV reorientation (n = 11)	4.0 ± 0.9	3.7 ± 1.4

music mean	confidence round1 2.6 ± 1.2	confidence round2 2.4 ± 1.2
level I indep.non-cluster (n = 9)	2.7 ± 1.0	2.2 ± 1.0
level II initiation (n = 8)	2.3 ± 1.0	2.3 ± 1.5
level III consolidation (n = 10)	2.6 ± 1.5	2.9 ± 1.3
level IV reorientation (n = 11)	2.9 ± 1.1	2.5 ± 1.2

Figure 2
INCSS project Cluster levels :

Cluster level I

Governors	• some involvement in own school activities
Heads	• regular meetings with heads of other schools
Teachers	• occasional joint INSET courses
Co-ord-ination	• little or no joint plans or documents
Activities	• fairly regular sports events

Cluster level II

Governors	• regular involvement in own school activities • occasional meetings with governors from other schools
Heads	• regular meetings with heads of other schools
Teachers	• occasional joint INSET meetings • occasional visits to other schools • have led an INSET session • occasional joint teachers' support meetings
Coord-ination	• cluster development plan in planning stage • shared policy in one or two curriculum areas • other shared policy statements in planning stage
Activities	• occasional joint children's workshops

Cluster level III

Governors	• regular involvement in own school activities • meetings with governors from other schools 2-5 times a year • involved in joint cluster activities
Heads	• regular meetings with heads of other schools
Teachers	• regular joint INSET meetings • visit other schools • lead INSET session • joint teachers' support meetings 2-5 times a year • work alongside teachers from other schools
Coord-ination	• cluster development plan in preparation • shared policy in 3 or 4 curriculum areas • other shared policy statements in preparation • shared financial arrangements
Activities	• fairly regular joint classroom-based activities

Cluster level IV

Governors	• regular involvement in own school activities • regular involvement in joint cluster activities • meetings with governors from other schools 6 - 12 times a year
Heads	• regular meetings with heads of other schools
Teachers	• joint INSET meetings 6- 12 times a year • regular visits to other schools • lead INSET session • work alongside teachers from other schools • joint teachers' support meetings 6 - 12 times a year • inter-school exchange of specialist curriculum areas
Coord-ination	• cluster development plan in use • shared policy on most curriculum areas • shared policy statements in use • shared financial arrangements
Activities	• very regular joint classroom-based activities

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Figure 3a.

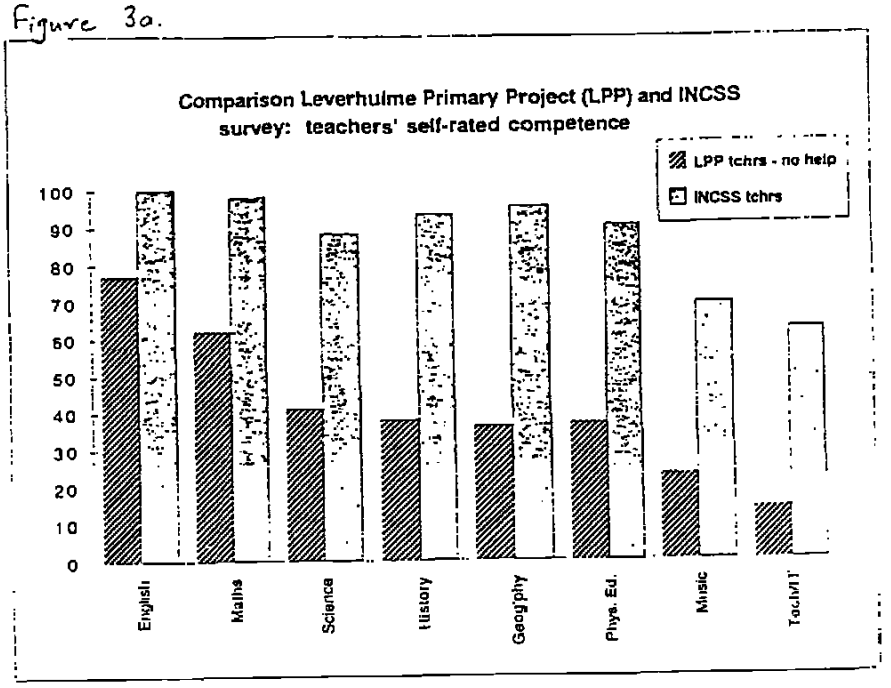


Figure 3b.

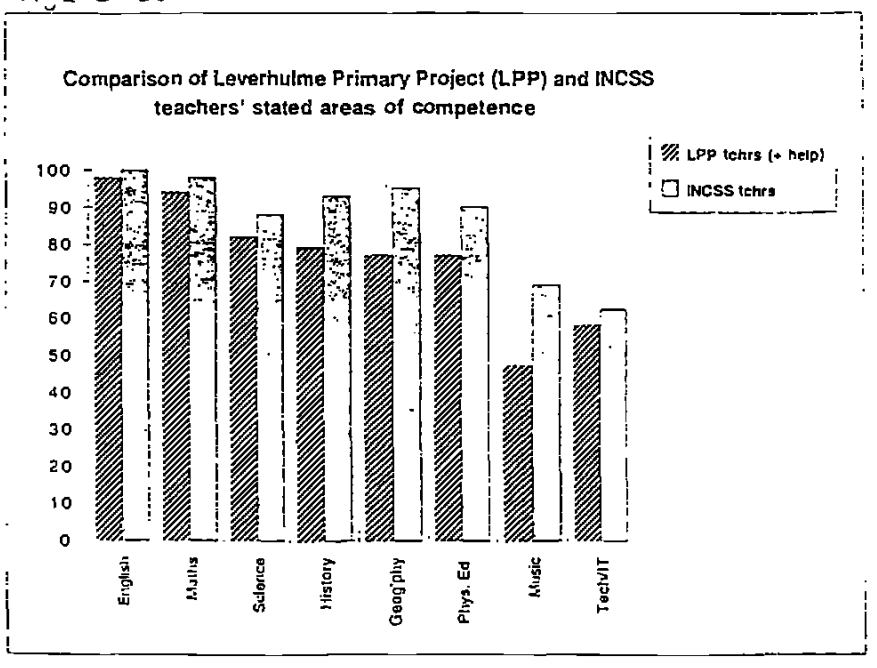


Figure 4 : Teachers' Self-confidence Across the Curriculum
by Cluster Level

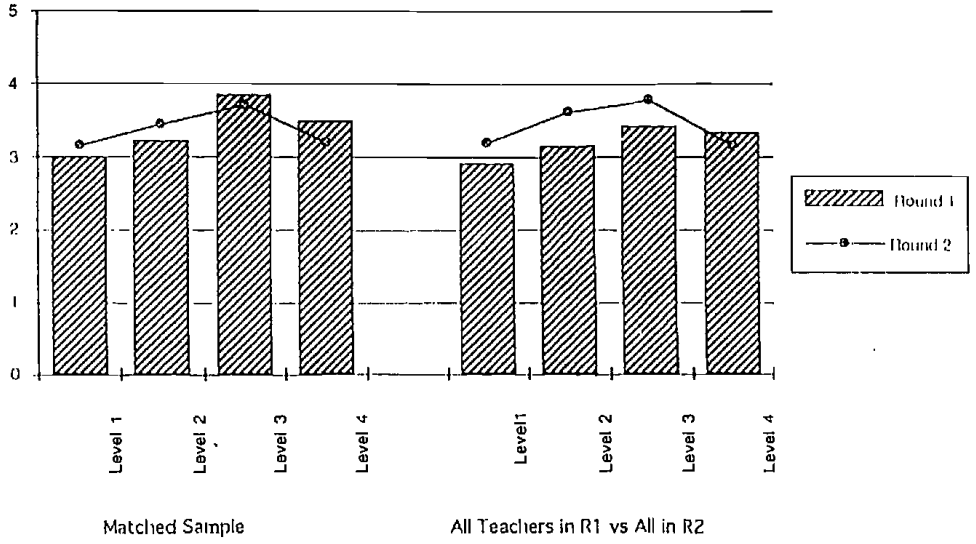


Fig 5

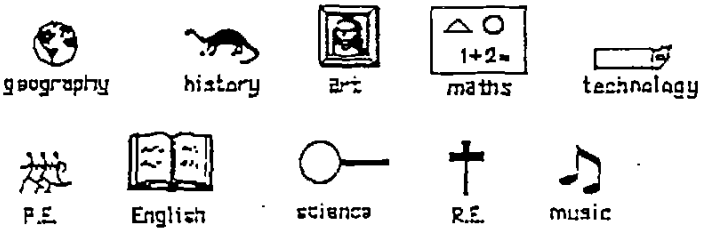
Figure 5: INCSS Picture Diary (page 1)

My name is .....

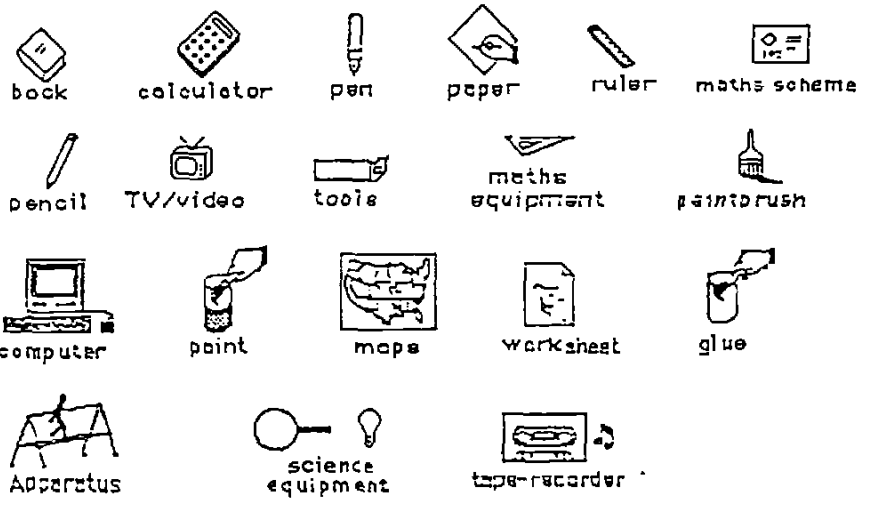
My school is .....

Today is .....

The activity was....



I used...

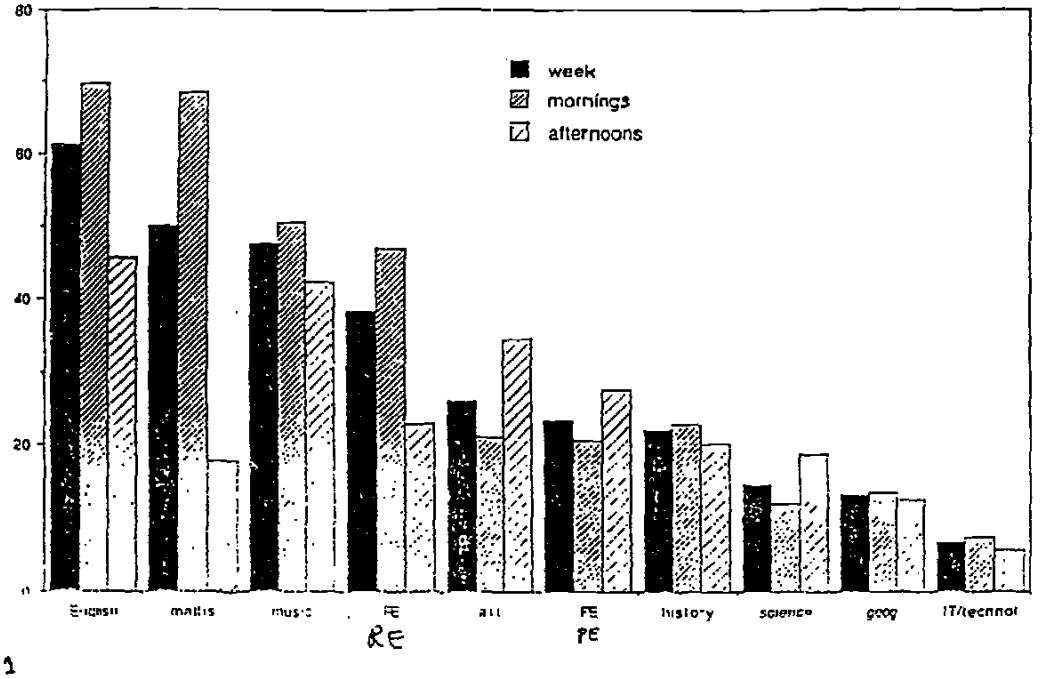


I worked.... alone  with one friend 

with lots of friends 

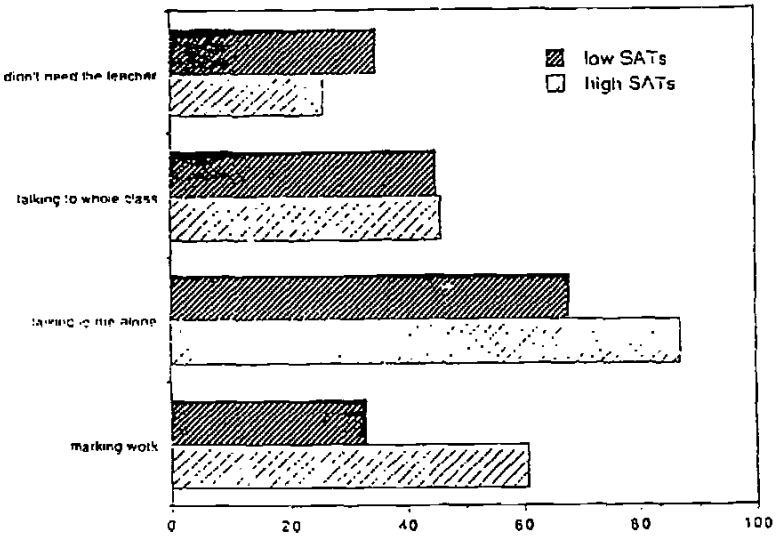
Did I like the activity Yes  No 

Figure 6: Broad & balanced ?
Children's perceptions of curricular activities in a typical week



Round 1
n = 534
diaries

Figure 7: Children's perceptions of how teachers helped them



Round 1
low ach. n = 91
hi. ach. n = 132

Figure 8

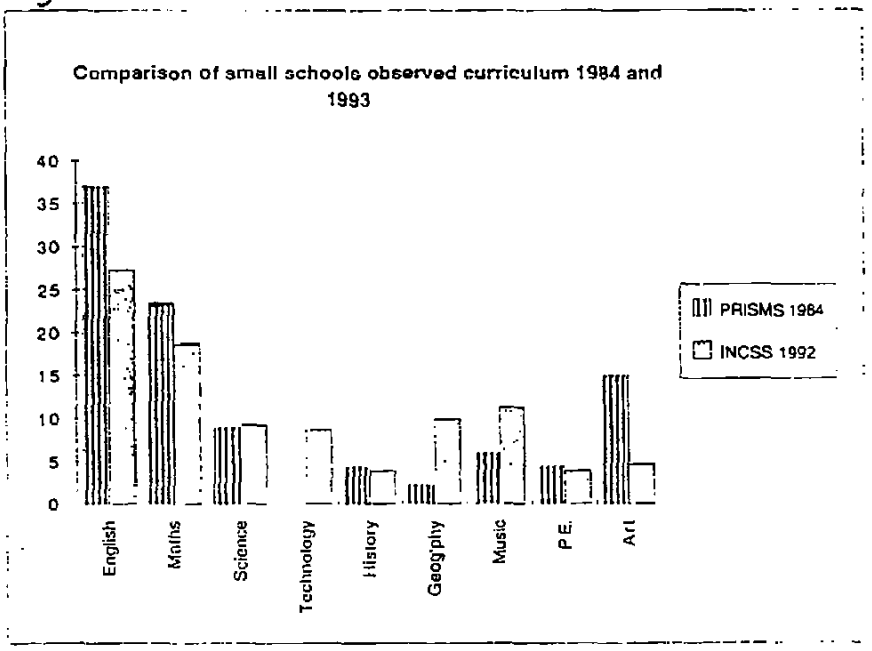


Figure 9

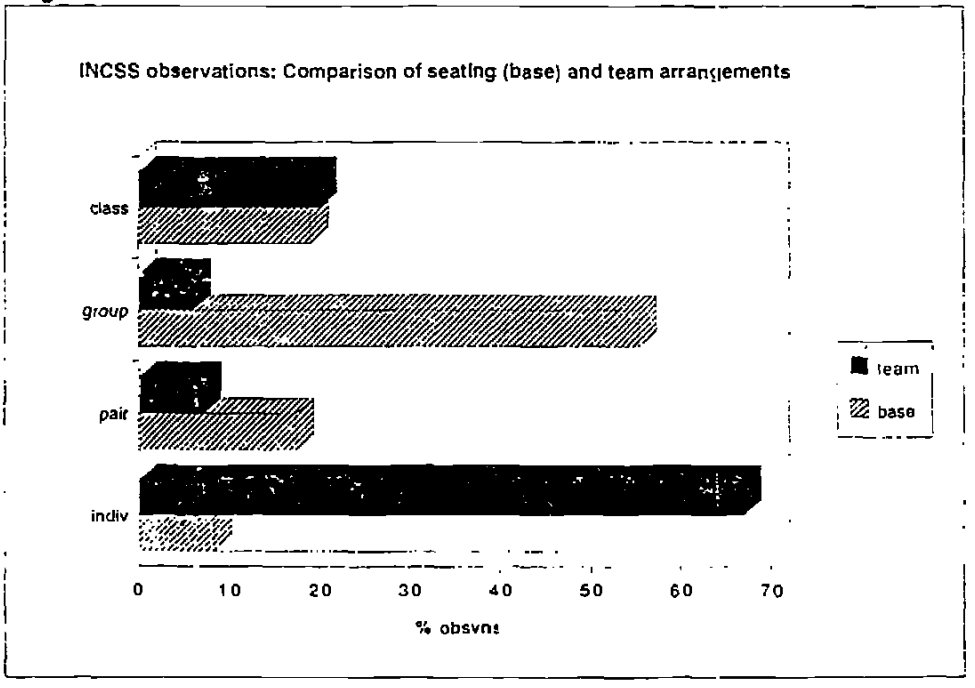


Figure 1D