

# Improving pupil group work in classrooms: The SPRinG project newsletter

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The research shows that group work is a powerful but underused strategy that teachers can use to:

- raise educational attainment;
- increase active engagement in learning; and
- improve classroom behaviour.

This large-scale project has developed and evaluated a new approach to group work in primary and secondary schools. It is part of the Teaching and Learning Research Programme and was funded by the Economic and Social Research Council. The findings of this five-year study are already helping to shape classroom practice not only in England and Scotland but in the Far East and the Caribbean.

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## Why was the research needed?

It is understandable that the Government should want to raise educational standards. Everyone who works in schools has the same goal. Many teachers believe, however, that the current combination of curriculum and assessment pressures can result in excessively passive classes. It is also argued that more should be done to develop the 'soft' life skills that enable learners to work as a team and make decisions together. This research shows that group work can help to address all three concerns.



## What have previous studies told us?

Earlier research has indicated the potential of group work to improve learning and behaviour. Unfortunately, research has also shown that this potential is not always being realised in UK schools. Pupils often sit in groups, but they only occasionally interact and work as groups. Children are rarely trained for group work, while teachers can lack effective strategies for setting up and managing such work. They can also be sceptical about its value and therefore tend to rely heavily on whole-class teaching and individual work.

## What was SPRinG's aim?

The main goal of the SPRinG (Social Pedagogic Research into Group work) project was to address this wide gap between the potential of group work and its limited use in schools. This 4½ year project had two aims: first to work with teachers to develop strategies which would enhance the quality of group and paired work, and second to evaluate whether these strategies would result in an improvement in pupils' attainment and learning,

behaviour and attitudes to school. The project evaluation involved 162 classes in primary and secondary schools and 4,259 pupils aged 5 to 14. The research on Key Stage 1 (5-7 years), took place at the University of Brighton, on KS2 (7-11), at the Institute of Education in London, and on KS3 (11 – 14), at the University of Cambridge. This newsletter concentrates on results and experiences at KS2 but the *SPRinG* research suggests that group work benefits children of all ages.

### **What did we find?**

**Key finding 1:** Far from impeding learning, group work has raised levels of achievement. *SPRinG* activities for KS2 pupils have been targeted at science and have led to significantly higher attainment and deeper conceptual understanding and inferential thinking. This difference is equivalent to an average pupil moving up into the top third of the class (see findings on page 5).

**Key finding 2:** Despite some teachers' worries that group work might be disruptive, pupil behaviour actually improved in the *SPRinG* classes (see findings on page 5).

**Key finding 3:** Group work has doubled pupils' levels of sustained, active engagement in learning and more than doubled the amount of high-level, thoughtful discussion between children (see findings on page 5).



### **Other findings**

- Teachers' professional skills and confidence have been enhanced and their teaching repertoire has been extended. There have also been unexpected benefits, for example, as pupils developed group-working skills, teachers found they were 'freed' from classroom control and were able to spend more time teaching.
- Group work seems to be most effective when adopted by the whole school, rather than the individual teacher.
- Teachers working in areas of deprivation or in difficult circumstances have found that group work can be used successfully and can aid classroom relationships and integration.

### **What makes *SPRinG* distinctive?**

The *SPRinG* approach applies group work across the curriculum and over the school year. We worked with teachers to develop a programme that could be successfully integrated into school life, and that recognised the concerns and difficulties they can have with group work. Each class was expected to undertake at least two one-hour *SPRinG* group-work sessions per week.

A strength of the programme is that it is based on a unique, systematic evaluation of pupil progress over a full school year, and comparison with a control group in terms of objective measures of attainment and classroom behaviour.

The *SPRinG* programme differs from other approaches to group work in that it has three key principles.

- First, it stresses the importance of supportive relationships. Group-work skills have to be developed: we cannot just put children into groups and expect them to work well together. Activities are designed to help pupils communicate effectively through listening, explaining and sharing ideas, but also to help them trust and respect each other, and plan, organise and evaluate their group work.

- Second, the programme provides guidance on how teachers can adapt grouping practices for different purposes and learning tasks. The key aim is to encourage pupil independence rather than to teach pupils directly.
- The third principle rests on the belief that for group work to be successful the classroom and groups need to be organised and managed. Teachers taking part in the SPRinG project have received guidance on classroom-seating arrangements, and characteristics of groups such as their size, composition and stability over time.

### **What strategies did SPRinG teachers adopt?**

The key principles, along with activities for developing pupils' group-work skills, are set out in a handbook for teachers, "Improving the Effectiveness of Pupil Groups in Classrooms". Teachers have contributed greatly to its development. Some of the key strategies that the handbook advocates are presented in the box entitled '*Key SPRinG practices*':

### **What can we conclude?**

Given time to develop pupils' group-working skills, teachers can transform the teaching and learning environment. Group work offers learning possibilities for pupils not provided by either teacher-led or individual work, and can help to improve attitudes to work and classroom behaviour. We hope that this project will lead to more systematic use of group work. It deserves to be given a much more central role in educational policy and school practice.

## **Key SPRinG practices**

### **1. Group size: small is usually best**

Group work is more effective at KS2 when it involves no more than four children. When introducing group work, pairs and threes should be used most. Once skills and confidence have developed, group size can be adjusted to reduce or increase the complexity of a task.

### **2. Proximity reduces noise**

A common concern about group work is that it creates a noisy classroom. One way to reduce noise is to arrange seating so that children in a group are closer together, for example, by seating them around a single table.

### **3. Encourage pupils to reflect on and adapt their skills**

SPRinG has helped groups develop a supportive ethos in which pupils work more autonomously. Achieving this takes time and effort. SPRinG recommends briefing and debriefing at the start and end of lessons which enables pupils to evaluate the skills they need to improve group work.

### **4. Teachers as a 'guide on the side'**

Teachers and teaching assistants can be overly supportive and directive (e.g. see box on 'Being a guide on the side'). Adults can best support learning during group work by acting as facilitators or 'guides on the side', e.g., by asking open ended questions, making general suggestions and encouraging pupils to get information more independently.

### Being a guide on the side: a short case study

Jan was trying to do more group work in her Year 5 class. However, she was frequently frustrated by pupils' passivity. They remained very dependent on her support and assistance.

Observers noticed that her interaction with groups was very directive and that she wanted the children to do the task so well that she often imposed her ideas on the group. When this was pointed out she tried changing her approach by encouraging pupils to find ways of getting the required information independently. She urged them to consult books, ask for other pupils' help and opinions, and take greater responsibility for their own ideas and decisions.

Initially, pupils were resistant to this new approach. They wanted to please their teacher and get the work 'right'. This was very stressful for Jan and she considered abandoning group work altogether, but after some time children adjusted to this new way of working. They became much more independent in their thinking and learning and began to enjoy group work much more.

## ***SPRinG is here!***

### **Jodie Corbett describes how SPRinG transformed her classroom practice**

The class lists were posted on the wall. Yes, my Year 4/5 children were *the* difficult class of the next school year. I approached September determined to succeed. By the end of the year I wanted to have transformed the class. But how?

The kids had poor social skills, low self-esteem and a very poor attitude towards work. The class had quite a high turnover of children and there was a high percentage of learners with special needs and English as an additional language. What was I to do with them?

A leaflet on SPRinG arrived in my pigeonhole and I turned up at the first session curious as to how group work could help me. What if it made things even worse? What if it involved lots of additional work? With trepidation I tried my first two activities. Both involved a lot of physical contact and, judging by previous experience, I was prepared for arguments, cuts and bruises. But no -- to my amazement I witnessed cooperation and enjoyment.

After the initial games and icebreakers the next phase of the programme involved forming stable groups. In order to encourage the children to work together I had to do some careful manoeuvring of furniture. In a very small classroom with a thin partition wall separating us from a nose-to-the-grindstone Year 5/6 this was no mean feat! It might have taken some time but we soon had it down to a quick (and finally quiet) art. We were ready.

For a few weeks I and my two colleagues – a teaching assistant and a learning support assistant -- observed the children working. We quickly identified the pupils who saw group work as a 'free ride' and those who would need support. We tried different combinations of children and following a few tweaks we had the groups firmly established.

Now came the difficult part. We watched and supported groups of children as they argued, shouted and sulked. We were very tempted to split them up, but the researchers said it was important that the children worked through these difficulties with adult support.

For a long time all we could 'see' was noise and disruption. But after a while we realised that the noise we could hear was actually productive noise. They weren't arguing or talking about last night's *EastEnders*, they were actively engaged with the work.

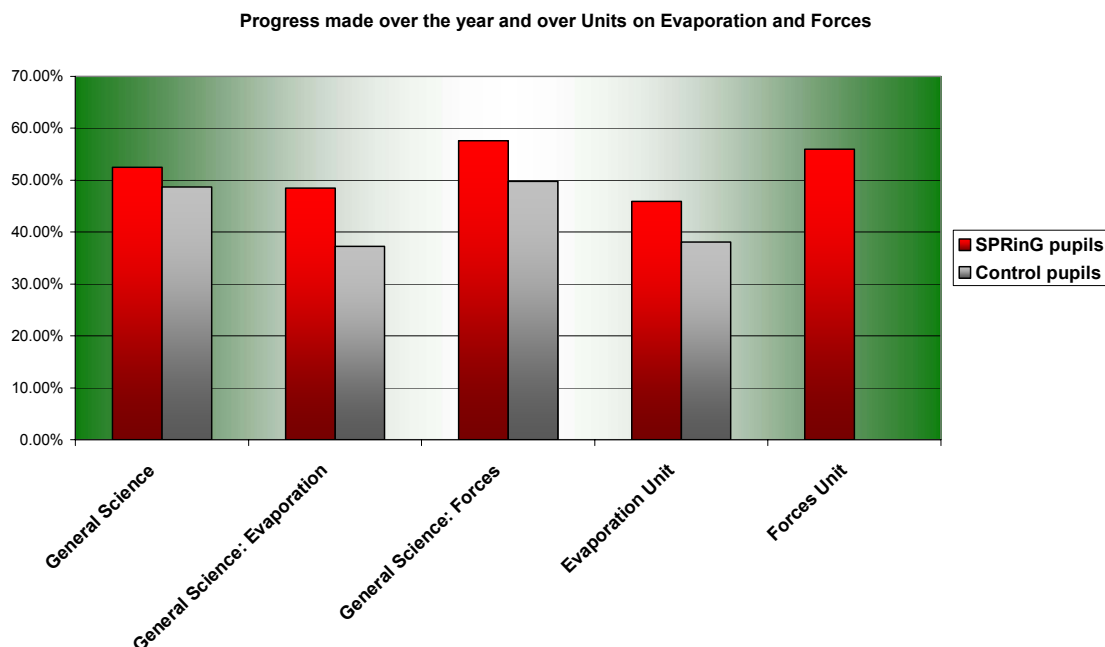
The activities suggested by the SPRinG handbook were very good. I found the sessions well laid-out and easy to resource and follow. This level of transparency is the key to success in the classroom as all good teachers already know. The science activities inspired me to look for more interesting activities elsewhere. I found myself using group work across the curriculum. We were learning and having fun at the same time.

As a class they can now work together for sustained periods and solve problems together. Their behaviour and attitude to learning are good. They are no longer the difficult class.

**Jodie Corbett** is a teacher in an inner London school.

## Attainment in Science

To get measures of attainment, children completed science tests at the start and then at the end of the year. These focused on the themes of 'physical processes' and 'materials and their properties'. During the spring and summer terms SPRinG children also worked on science units on evaporation and condensation, and forces. Before these lessons took place pupils were tested on the understanding of the topic and then were tested again no more than 2 weeks after the unit was complete. Control children were also tested but only before and after lessons on evaporation (not forces) conducted by the teacher in her/ his usual way. Sub sections of the general science test also had questions on evaporation, condensation and forces. This allowed us to see whether any improvements that had registered on the Unit tests were still present at the end of the year.



The results are shown in the graph above. Results show that:

- SPRinG pupils made greater progress over the year than control pupils on the general science test.
- SPRinG pupils made greater progress on the sub-sections of the general test on evaporation and forces than control pupils



- SPRinG pupils made greater progress than control pupils after the unit on evaporation/condensation in their understanding of evaporation and condensation

## Observations of children working in classrooms: results

One of the main forms of evaluating the success of the SPRinG programme involved us observing a sample of children in each class whilst they were working on everyday activities and also during group work. We also filmed some children working in pairs and in groups. Our main interest was to see if the levels of group work increased and also whether children became more actively involved and on task during interactions with peers. Some of the data are shown in the table and graph below.

### In class observations

Just over 200 SPRinG children were observed on at least two to three occasions over the year. We also observed over 170 children that were part of a control group.

We found that SPRinG children were more likely to be engaged in group work whereas control children were more likely to work alone. Levels of whole class work were similar.

SPRinG children were more likely to be on task when working with others. They were also more likely to be actively talking about and contributing to the task. SPRinG children's conversations were more likely to be sustained and to involve high level talk involving explanations, shared reasoning and thoughtful discussion.

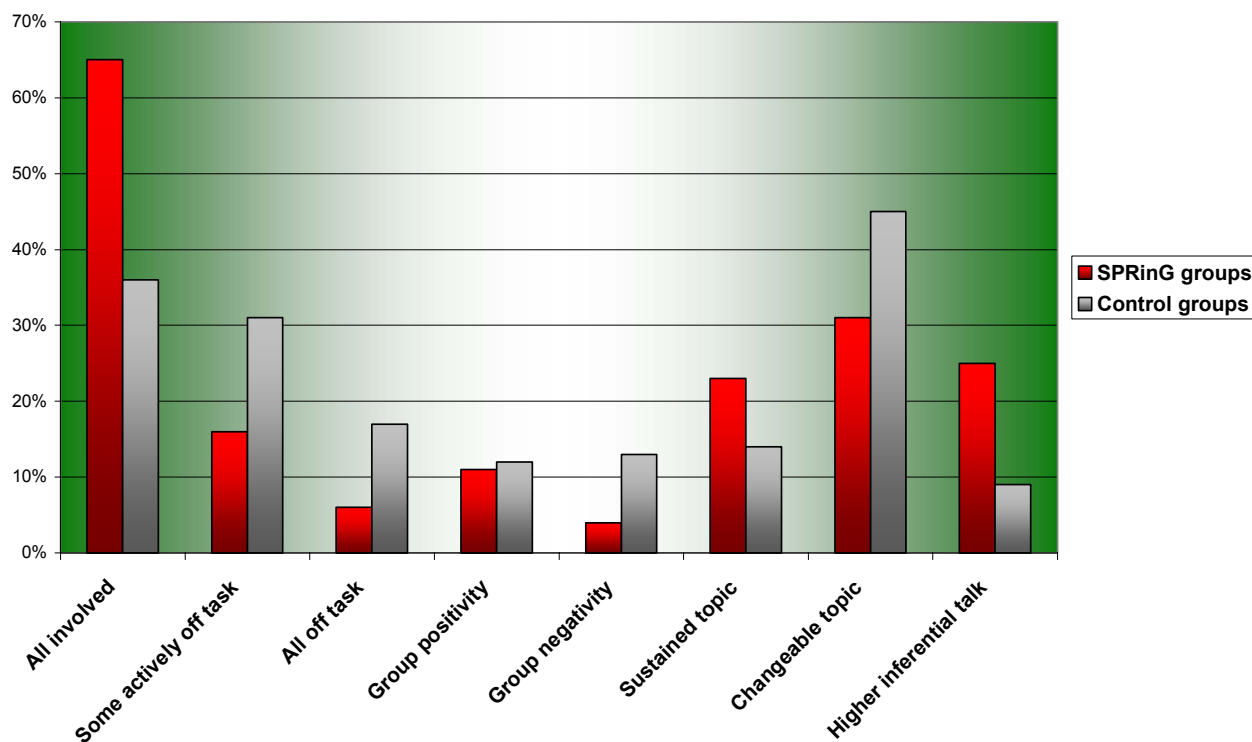
<b>% of observations</b>	<b>SPRinG children</b>	<b>Control children</b>
Engaged in paired or group work	34%	16%
Working alone	12%	34%
On task when working with others	76%	53%
Off task when working with others	16%	35%
Actively involved on task	78%	50%
Sustained conversations on task	43%	23%
High level talk on task	14%	3%

### Video observations

We found similar results in the video observations of groups (see graph on page 7). Over the course of a summer term we filmed pairs and groups of SPRinG and control pupils working on a SPRinG task where children had to decide which of 4 candidates should get a pay rise or should be made the class representative. The results were interesting and showed us that a key difference between SPRinG groups and groups of control children was that during the interactions all SPRinG children were more likely to be involved in the activity. The groups of comparison children on the other hand tended to leave the task to one or two of the group. The task still got done but only some group members participated and benefited.

Another finding was that SPRinG children were less likely to be negative and to block constructive interaction. They were also less likely to squabble. The groups of SPRinG

children were also more likely to sustain topics of discussion and importantly their talk was often of a high level involving shared inferential thinking.



### Attitudes to group work and school

We did not find too many effects of being involved in the SPRinG project on children's attitudes to group work and to school. At the start of the year most children liked group and the same was found at the end of the year. From some of the interviews that we carried out with children, the majority said that they were positive about group work but there were times when it could be frustrating.

Where we did find some changes however was in attitudes towards science. Over the course of the year children increased in their liking of science. Attitudes to science in the control dropped over the course of the year.

### The future of SPRinG

**Handbook** – Over the past year we have been coordinating with Routledge to get a version of the SPRinG handbook published that will cover the whole of the primary range and which will incorporate the ideas for practice as well as activities for training pupils in skills to support effective group work. We anticipate that this will be available spring 2007.

**In-service training** – Over the course of the next year we are planning a package of training events for teachers and schools to begin developing group work and social and communication skills training in their schools. These will be based at the Institute of Education, University of London. We anticipate that there will be different packages offered such that schools can take on the level of training that is most suitable for them. Please contact us if you would like further information.

**Working with others** – There is an in-service training package already available, organised by the University of Brighton, which developed out of the KS1 part of the research. More information is available at: [www.workingwithothers.org/](http://www.workingwithothers.org/)

## Other projects

We have a number of other projects running and brief details are provided below. Further information is available on these projects from the new SPRinG web site.

**PeRCEL** - The Peer Relations, Classroom Engagement and Learning project seeks to learn valuable lessons about children's learning and engagement in classrooms from better understanding their social relationships out of the classroom. Children vary in their popularity, the quality of their relationships with peers, and the extent to which they dominate others, are destructive and unhelpful. These differences are important because, they can mean the difference between a class that is easy to teach and productive and a class that is not. The research examines how children's relationships with peers affect their engagement in classroom learning, their attitudes and school attainment.



**Breaktime and school grounds project** - This is an independent national survey of break and lunch times in primary and secondary schools in the UK. The project is funded by the Nuffield Foundation. The research will follow up a national survey conducted by Peter Blatchford 10 years ago which identified marked changes in the school day, the reduction of lunch and the afternoon breaks, and the suggestion that pupil behaviour out of school had worsened. Since then further changes have taken place in schools and we hope to identify the extent of these changes. Results from this research will inform educational and social policy about breaktime and school. Web site: [www.breaktime.org.uk](http://www.breaktime.org.uk)



**Support Staff Research project** - This is the first large scale study of all categories of support staff. It is a five year study from January 2004-December 2008 that will obtain data on the deployment and characteristics of Support Staff, the impact of Support Staff on pupil outcomes and teacher workloads, and how impact is affected by school management and communication in the school. It will involve three large scale surveys that will analyse change over time, along with more detailed analysis of the deployment and impact of support staff, in a sub sample of schools. The project is funded by the DfES and the Welsh Assembly Government. Web site: [www.supportstaffresearch.org.uk](http://www.supportstaffresearch.org.uk)

**Further information** about SPRinG is available from: [www.spring-project.org.uk](http://www.spring-project.org.uk) or Professor Peter Blatchford Email: [p.blatchford@ioe.ac.uk](mailto:p.blatchford@ioe.ac.uk) Tel. +44 (0) 207 612 6268 Psychology and Human Development, Institute of Education, University of London, 20 Bedford Way, London WC1H 0AL

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**Teaching and Learning Research Programme website:** [www.tlrp.org](http://www.tlrp.org)