



## National Teacher Research Panel

engaging teacher expertise

This summary was commissioned by the National Teacher Research Panel for the Teacher Research Conference 2004, which explored and celebrated teacher engagement in and with research. All conference materials are available at [www.standards.dfes.gov.uk/ntrp](http://www.standards.dfes.gov.uk/ntrp)

# Students as Researchers: How does being a student researcher affect learning?

## Aims of the project

From 1996 the school had tried to establish a Students as Researchers (SaRs) initiative to enable students to investigate, analyse and present student perspectives on aspects of school life and learning.

This study records the attempts to evaluate the impact of participating in such research projects on the students' learning. The aim of the research was to evaluate the impact of participating in such research projects on the students themselves in terms of:

- their attitude to the SaRs initiative
- their social skills; and
- their academic skills

## Context

The SaRs initiative involved training, over a period of six years, 150 students in years 8 - 12 in an LEA 11-19 girls' comprehensive school, situated in North London with 1100 students and 75 members of staff. The project evaluating the impact on students' learning, undertaken as a BPRS enquiry by a Head of Year who had mentored two groups of student researchers, involved 90 students from Year 8 to Year 12.

## Summary of main findings

The majority of students saw the process of being selected and trained to carry out research as a positive experience and emphasised their delight at being chosen to carry out such a demanding task.

Many students also drew attention to the issues surrounding the selection of the student researchers and questioned whose voices were being listened to.

Most students welcomed the opportunity to contribute to the improvement of the learning environment of the school.

Certain features of research were perceived as being particularly beneficial to classroom learning:

- Working and learning as a team
- Acquiring and applying research skills to subject learning
- Enhancing self confidence in presentations
- Learning how to manage time effectively
- Sharing ideas and tasks

## Background

The impetus for the initiative stemmed from the then Deputy Head's attendance at a Student Voice Conference held at Cambridge University in 1996 at which Michael Fielding described how Sharnbrook Upper School in Bedfordshire had established a Students as Researchers programme. The video evidence of the impact on some of the students involved was particularly powerful and infectious, resulting in a desire to find ways of giving our own students such opportunities for development but also to give the school access to the views of its most important members. In 2002 we decided to try to find out what the impact of being involved in research had had on the learning of those students.

The school has been actively involved in research for over ten years, establishing links with Cambridge University and encouraging teachers to develop skills of critical enquiry. In June 1999 the school was one of six invited to become members of the School-University Partnership for Educational Research, set up by Professors David Hargreaves and Donald MacIntyre and in 2002 became part of one of the first Networked Learning Communities. The school's intention throughout had been to generate and embed a research ethos focused on improving teaching and learning. Between 2000 and 2003 there were twenty-eight successful BPRS applications, enabling teachers to carry out classroom enquiry, several of which included students within the research project.

The study took place in an LEA multi-ethnic 11-19 comprehensive school of 1050 girls in North London, involving groups of students as researchers in five successive year groups carrying out research projects they designed themselves. Training was provided by staff from the School of Education of Cambridge University; in-school support was supplied by the Teacher Research Co-ordinator, Heads of Year and subject staff associated with the particular projects selected by the students. In total 150 students across Years 8 - 12 were trained in using research methods, in cohorts of 15 - 30 per project.

## Processes and strategies

Between 1996 and 2003, groups of student researchers investigated the following issues:

Inside the classroom:

- Students' views of KS3 PHSE
- What do students think Citizenship consists of?
- How do Year 8 students define learning?
- Do pupils have good relationships with their teachers?

The Wider School Environment:

- Are students happy with the school environment?
- How healthy is the food available in school?

Student Welfare Issues:

- What extra-curricular activities are available to students? Would additional team-building activities help to resolve problems?
- Do students find the system of rewarding achievement satisfactory?
- What opportunities are there to express your views and be listened to?
- What does the school do to help us to develop as individuals?

## Training Student Researchers

Although each cohort of students followed an individually designed programme in terms of specific arrangements, the common ingredients which remained constant from 1996 onwards were:

- training in research provided by an academic expert on a three stage model:
  - introductory day to discuss and agree research questions;
  - second day on research ethics and methods, particularly in constructing questionnaires and conducting interviews; and
  - third day on analysis of data and presentation of findings.
- support and mentoring provided by teacher researchers throughout, facilitating research and ongoing discussion of process and any difficulties arising;
- group write-up of project and outcomes;
- group oral presentation of findings to school council, selection of staff and governors within school; and
- presentations to others, students and teachers, at conferences.

Students were expected to carry out the bulk of their research outside lesson time apart from the formal training sessions provided. As far as possible at least one of the training days took place at the Faculty of Education in Cambridge.

### **An example of a Students as Researchers Project:**

#### **What was the focus of the work?**

Investigating the PSHE provision in KS3 teachers and students identified as needing improvement

#### **Who was involved? How long did it take?**

Head of Year 10, Deputy Head and Head of PHSE selected 15 Year 10 students who attended a day's training in research methods at UCSE with Dr Mary James together with three teacher facilitators. They devised a questionnaire and the schedule for semi structured interviews with students and teachers. A month later they analysed their data and learnt more about report writing. Two weeks after that they presented their findings. The whole project took half a term.

#### **What did they do?**

Students issued questionnaires to a sample of Year 7, 8 and 9 students and to KS3 PHSE teachers. They conducted interviews with 21 students and six teachers. They also held 14 focus group discussions. After analysing their data they produced a 51 page report which they presented to a combined audience of teachers, including the Senior Management Team, university academics and governors.

#### **What were the outcomes?**

The research report was critical of the teaching materials on the course such as videos which seemed up-to-date to the teachers but outdated to the students. It also found that the teaching methods were information-heavy and over-prescriptive, leaving students little room to get involved. It highlighted the fact that students were aware that some teachers were embarrassed and ill-equipped to teach issues such as adolescent sexuality and drugs education. The researchers suggested improvements, some of which were instantly taken up – for example, some of the videos were exchanged for more up-to-date ones. Teachers now try to include more interactive activities, discussion and investigation.

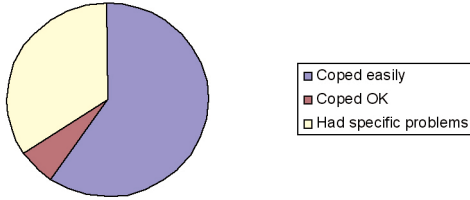
### **Evaluating the Impact on Students' learning**

In trying to assess the impact of this extensive programme, the students, whose involvement in research ranged from four years to one year, were asked to complete a questionnaire which led them through a series of questions reviewing their whole experience of research, culminating in a request to evaluate the impact on their learning. Quantitative answers were analysed and translated into pie charts and graphs while qualitative responses were categorised to form the questions for semi structured interviews. These were conducted with a small sample of students to expand on their written answers to provide examples to illustrate the factual data.

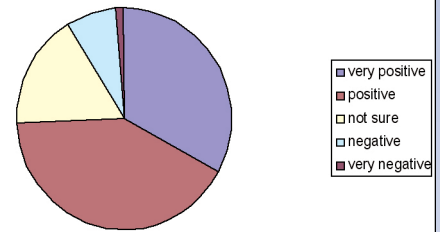
## Findings

The responses to the questionnaire revealed a largely positive overall judgement to being invited to participate in SaRs →

How manageable did students find carrying out their research projects?



STUDENTS' REACTIONS TO BECOMING A STUDENT RESEARCHER



← A majority of students rated their own ability to cope with the demands of carrying out the research as more than satisfactory

Some positive responses elicited by video interview included:

*Why is student research important?*

'Because it's a chance for students to improve their school rather than teachers and adults doing it for them.'

*How is student research different from the other activities in school?*

'It's about having a say in what we do, being involved in the school not just attending'.

*What is needed as preparation for student research?*

'Students need to be committed and hard working with their research work.'

*What have you learned about research?*

'There's a lot of work in it, but there are rewards at the end and you see where your hard work has gone.'

*What topics would you like to research?*

'How much money goes into school and how much money we get to see rather than it being hidden away.'

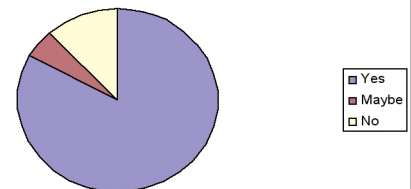
*What would you like to say to teachers about research?*

'It's really, really good, it makes you feel proud and a part of the school.'

However, a significant number drew attention to problems centring on getting information back via questionnaires so that they had sufficient data; and issues of when and where meetings could be held in an already crowded schedule. Despite these reservations the students recorded a very strong endorsement of the value of doing research in their views about whether such opportunities should be extended to more students.

Students were overwhelmingly in favour of giving more of their peers the opportunity to undertake research →

Should the opportunity to conduct research be extended to more students?

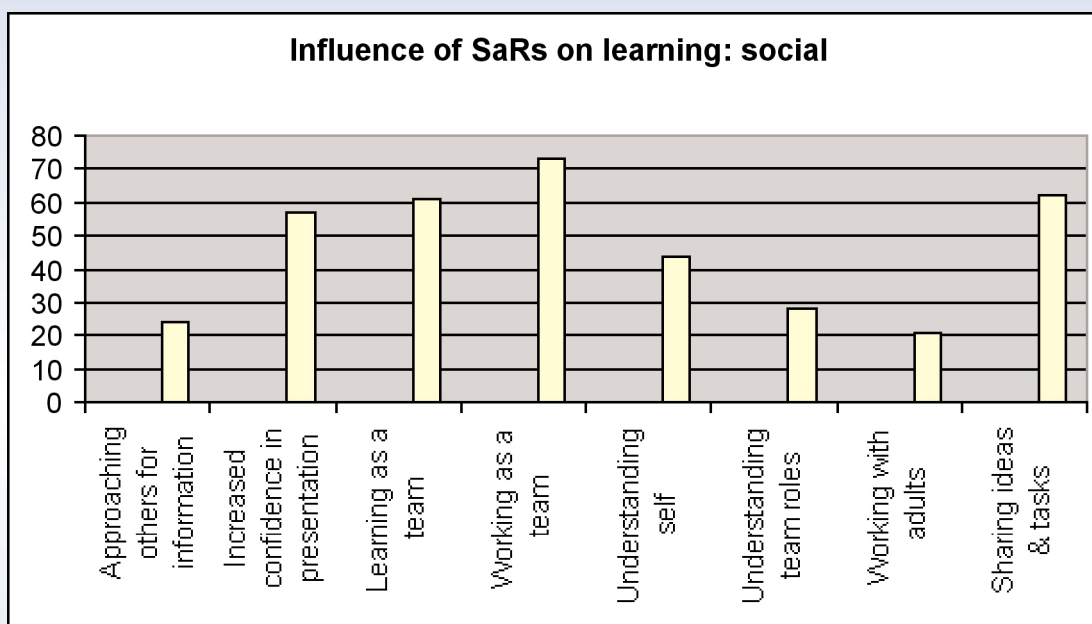
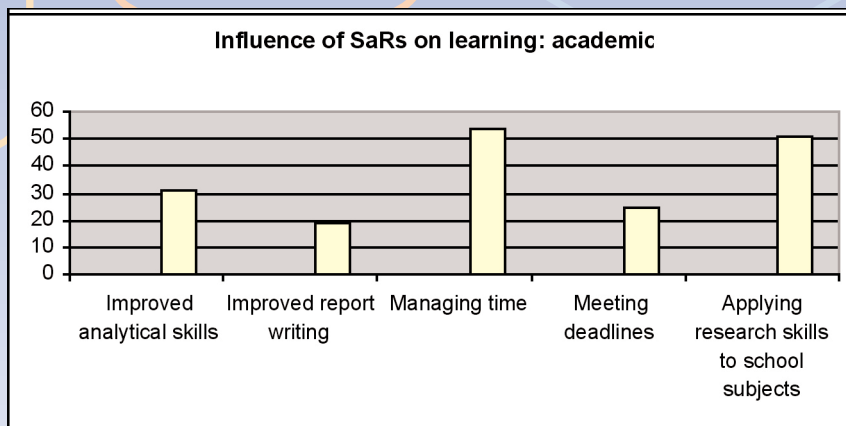


The minority of students who did not think that research opportunities should be offered to other students gave very different reasons including some doubts as to whether students would enjoy it or the added pressure that came from being a student researcher. Students also indicated that they thought researchers should be volunteers. This links directly with responses to the question about the selection process. A significant number of students, despite the adults' attempts to explain their rationale fully, remained unclear about why they had been asked to join the SaRs initiative and how they were then expected to include all of their peers as data sources. Some students felt awkward about being singled out to participate whilst others insisted that because doing research had benefited them so much, others should also be given access to these opportunities. Others were rather more pragmatic:

"It is a very good experience to put on your CV and it widens your research ability. It will really help us in the future."

### Benefits to students in terms of academic and social skills

The students were clear about the positive effects of the SaRs initiative on their learning with 90% recording an affirmative answer to the direct question. The powerful impact on the students' learning in both the academic and social domains is evident throughout the responses. Particular aspects can be quantified according to academic and social aspects of learning, indicating the greater power of SaRs in its impact on the social rather than the academic factors:



To sum up in the words of two of the students:

*“I think the experience has allowed me to learn valuable skills in team work and oral presentation. It has helped me to appreciate how much can be achieved with good student-teacher relationships. If research is conducted it allows everyone to benefit from the results.”*

*“Other people benefited from our research. It inspired other people to get involved with it. We were able to make a difference to the school.”*

## Conclusions

It is apparent that there are several issues that need to be addressed in order for the Students as Researchers initiative to maintain its momentum. From the teachers' and students' perspectives there are real issues about exactly whose voices are being listened to through their research. Does this mean simply explaining more clearly from the outset how the selection is made and the logistical difficulties of training more than thirty students per year group? Or should we take a more radical approach by adopting the volunteering approach valued by several of our current researchers? If it's not possible to train everyone, won't any process inevitably be exclusive?

After six years of pursuing this initiative it may be that the time is now right for moving to a qualitatively different way of involving more students in contributing to the creation of a learning environment. The roles of the School Council and the newly formed Networked Learning Steering Group are currently being re-examined. These three strands of Student Voice will need to be carefully co-ordinated to ensure the continuity and relevance of this type of activity if the students' contributions are to lead to radical change and improvement for students and teachers alike.

## Suggestions for further reading

Website of Consulting Pupils about Teaching and Learning:  
[www.consultingpupils.co.uk](http://www.consultingpupils.co.uk)

The Student Voice Special issue of Forum (43, 2, 2001) contains a number of interesting accounts by academics, teachers and students.

Fielding, M. & Bragg, S. (2003) Students as researchers: Making a difference. Pearson Publishing

Flutter, J. and Ruddock, J. (2004) Consulting Pupils: What's in it for schools? RoutledgeFalmer

James, M. & Worrall, N. (2000) Building a Reflective Community: development through collaboration between a higher education institution and one school over 10 years, Educational Action Research, Vol 8 (1), 2000

MacBeath, J. and Moos, L. (eds) (2004) Democratic Learning RoutledgeFalmer

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