



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

Creating a Research Culture in school

Is enthusiasm for systematic enquiry infectious in your school?

Are learners surrounded by student and adult models of eager curiosity?

Are questions valued as highly as right answers?

Do research findings make a difference in your classroom?

Are you used to identifying both strengths and areas for improvement?

Aims of the project

Our simple aim is to improve teaching and learning in our school. The purpose of this initiative at St George's School for Girls, Edinburgh was:

- to bring about a change of attitude in our school so that research is viewed as an essential part of professional practice (no more "closet" researchers!);
- to provide information about current research opportunities;
- to radiate enthusiasm and inspire staff to gather robust data as a foundation for decisions and action;
- to provide encouragement and appropriate support for both students and staff as researchers; and
- to celebrate completed studies and discuss implications for improved practice.

Context

All our staff, both academic (123) and support (121), and all students (1016) across the whole age range from 3-18 years were involved in this Millennium initiative. The process of change is now in its 4th year.

Outcomes to date

The appointment of a part time Research Fellow (critical friend) was seen as very helpful. Regular seminars are well attended and valued by teachers from St. George's and neighbouring schools. Studies and implications for practice are discussed. The project has led to a series of changes in our school including:

- a much broader view in school of what counts as research, a clearer understanding of the relationship between good practice and sound theoretical underpinning;
- teachers no longer feel the need to hide the fact that they are interested in or doing research (inappropriate guilt has been banished); and
- many teachers are now more involved in research. They are more confident and willing to share ideas and engage in critical debate.

The change to a research based culture has already impacted on teaching and learning in number of ways such as:

- student research as well as staff studies have become a focus of celebration;
- raising questions has become a regular feature of class learning;
- specific studies have had considerable impact on practice e.g. a peer-tutoring project led to better evaluation skills in primary age children;
- peer support approaches also have been developed in many other subjects; and
- the ICT programme has been improved (www.dolphinsystem.co.uk) .

This research culture pervades the whole school. Communication in the Boarding house has been reviewed. The new library includes features suggested in a wide survey.

Background

St George's School, Edinburgh is an independent school for girls, with just over 1000 students from the (mixed) Early Years Department through to a large Upper 6th form. Boarding provision is available from age 9. The school was founded in 1888, to provide a full education for girls and prides itself on offering a broad and balanced set of opportunities to suit each individual. It has an excellent academic record. The school aims to be open to change and improvement in every aspect. It actively forges links with schools in the maintained sector as well as with a wide range of national and international partners.

The project

In 2000, to coincide with the new Millennium, it was decided to raise the profile of evidence-based practice throughout the school and reinforce our commitment to taking an evaluative approach to learning, at all levels of school life. The Management team was keen to promote a systematic approach, where data are carefully gathered and critically examined. The aim was to encourage everyone, from our youngest learners onwards to build honest self-evaluation into everything they do and be able to offer reasons for their judgements. It is clear from school effectiveness/improvement studies that real change comes about only when a 'research attitude' permeates the whole school so this was a whole-school initiative.

'Research' was still regarded with a touch of suspicion by some due to:

- its association with academics who lacked a sense of classroom complexities;
- a nagging fear that extra time might be required to conduct research when teachers already faced many other pressing demands; and
- teachers were not confident in their own (rusty!) research skills.

Senior staff wanted to motivate teachers to engage in and with research because we believe that there would be 'spin-offs' for learners. We felt reading, research and reflection should be encouraged as an essential part of good teaching. We all hoped our staff would be sufficiently confident to take an active part in current educational debate, policy-making and action to bring about change, based on sound theoretical knowledge, commitment and the voice of experience.

Step 1 Getting started

The school took the unusual and bold step of appointing a part-time Research Fellow to kick-start the initiative and support the necessary change in attitude, understanding and skills. Her task was an extension of the 'critical friend' role, with the focus particularly on research and sharing insights. Having a designated member of staff meant that members of the school community were sure that their plans (or even vague thoughts) would be met with a listening ear, suggestions and constructive debate.

Step 2 Getting everyone on board

At a staff meeting the Research Fellow reminded everyone of the integral part research plays in our everyday work. Staff acknowledged that the most vital aspect of research support would lie in each other, as critical colleagues, although the Research Fellow would be there as a resource, support and communication link. The nature of research and some widely held misconceptions were explored. Examples of research currently operating within school were contrasted. These varied from researching roles in drama to monitoring Higher mathematics results. Some studies were heavily statistically based and others involved interviews with children or parents. What united them all was the stress on being systematic and controlled, with care and caution exercised in analysis and reflection.

Step 3 Summarising what was already being done

We made a log of all the projects currently being done in school (there were a lot more than most of us had recognised!) We included valuable studies undertaken by facilities, domestic, medical and boarding staff. A note was made of all the organisations already working with us as partners in this work, such as the universities and Scottish Council for Research in Education.

Step 4 Improving communication

Active systems of communication were seen as crucial in generating interest, networking within and beyond the school and disseminating findings.

This was achieved through:

- Research and Development noticeboards in each of our 3 staffrooms. Here we could display courses, research summaries, articles, websites, agencies offering grants, news cuttings of interest, conferences and awards. Staff with similar interests could get a feel for possibilities and be put in touch;
- inserting a page in the staff handbook to clarify expectations;
- producing a CPD leaflet, entitled 'Research at St George's';
- reinforcing our commitment to research on the school website; and
- including a set of research articles by staff members in our occasional in-house journal, 'Development Matters'.

A series of seminars was established, where teachers could meet others interested in school-focussed research, neighbouring staff, academic researchers in the universities and professional researchers from the Scottish Council for Research in Education. The differing perceptions were both helpful and illuminating. We evaluated each session carefully and modified the content and format as suggested.

Step 5 Building confidence

The chance to participate in guided whole-school research projects was offered to anyone interested. This began with the Junior school "Reporting to Parents" consultation exercise. Parents said they appreciated being consulted and felt valued. Staff who took part explained the process to colleagues and a new report was designed, informed by some of the findings.

Another research team completed an extensive study, "Perceptions of single sex education for girls," involving current and former students, parents and all staff. The findings inspired animated discussion amongst students in Personal and Social Development classes, informing steps for improvement. The Student Welfare team agreed an Action Plan which is currently being implemented. The research group has been invited to make a number of presentations in school and beyond and have written a summary version of the research, which was circulated in school and to all parents.

Other early research developments included research into the delivery of ICT skills using generalist and specialist teachers through peer tutoring. The researcher noted student progress in the different conditions and made recommendations on his findings. He built improvements into his programme so that other learners could benefit. Other teachers adopted the peer techniques in other areas of the curriculum.

We also offered practical workshops to support teachers' research skills such as 'Questionnaire design' and 'Conducting structured interviews'

Step 6 Sharing experiences

The seminar series became established, with growing numbers of regulars - and always some additional people interested in the particular topic of the day. Some participants simply wanted to keep in touch with findings and discuss implications for practice. Others wanted advice on the process of research itself. Debate was usually very lively and continued after the scheduled hour. An Art teacher, reporting on a class contact said, "I lifted that idea unashamedly from that presenter last session!" A strong and supportive professional network has emerged. Teachers have grown in confidence and have learnt from each other. Presenters felt valued as their work was discussed and pupils benefited from new challenges.. Feedback was very positive, with most teachers amazed at how enthusiastically their pupils responded. Comments included "Inspirational" and "Well worth coming across the city for. Thank you".

Step 7 Embedding structures

As numbers of projects grew, we produced a Research Proposal form to help researchers clarify exactly what they wanted to do and to ensure that the same students were not being over-targeted with research. We established a Research Committee of staff and students to offer some quality control and check proposals both from within school and also requests to use our students in external research. We compiled a list of Ethical Guidelines, a modified, school version of the British Psychological Society Ethical Guidelines, to help our planning. This was also used by staff when supporting students in planning their own investigations The clear structure for accessing research information and participating in projects has saved teacher time and encouraged cooperation.

Step 8 Valuing experiences

Student research had not previously been celebrated. We were used to sharing good music and drama but not the basic skills of enquiry! Yet we were aware that an enormous amount of good work went into projects at all stages of the school. We began by inviting 6th formers and their parents to an evening where examples of student investigations were critically explored. Presenters were asked to highlight 2 strengths and 2 areas for improvement and to point out an issue or area for debate from their study. Parents were fascinated. They could see the progression from 'early years curiosity' to the ability to tackle a piece of independent studying a disciplined way. They recognised that they too had had a part in nurturing these important skills of enquiry. On subsequent occasions, younger students were also included. Importantly teachers became aware of the need to comment on the process of investigation whilst actually working with learners. Children were encouraged to ask questions, to collect evidence and make sure their interpretation matched the facts.

A spirit of enquiry amongst students has led to the establishment of an Open Learning Centre. Teachers from a range of departments cooperate to offer extension units, materials and tutorial support. ICT facilities are available.

Conclusions

Raising the profile of research has been a gradual process of changed understanding. Of course this cannot be wholly attributable to the stress school has put on the value of research. There have been many concurrent factors, such as the growing emphasis on CPD and interest in achieving Chartered Teacher status. What does seem clear, however, is that with an open commitment to research, appropriate structures in place and clear support available, learners and teachers will value enquiry with renewed vigour and be eager to refine their own skills.

Suggestions for further reading

Campbell A (2002) "Becoming an evidence-based practitioner; a framework for teacher researchers" London. Routledge Falmer
MacBeath J (1999) "Schools must speak for themselves: the case for school self-evaluation" London Routledge

Case Study: Impact on an individual teacher

Starting Points

The research notice board in the staff room proved to be a useful source of information about seminars and meetings of interest to me. Having become interested in the possibility of engaging in research, the next step was to join a small action-research group, to explore communicating with parents. We were guided by the school's Research Fellow to evaluate the report format in school and look at ways of improving it. This group project gave me confidence and acted as a springboard to starting on my own individual project.

On the Journey

The general aim of my project was to explore the benefits and limitations, within the P4 curriculum, of the Expressive Arts being taught by a generalist, or specialist. Illustrative data was collected over the winter term, 2003, through interviews with specialists and generalists in the sample schools, and through focus discussions with selected children in the sample.

After reflection on the evidence, preliminary findings suggested that:

- class teachers lacked confidence in teaching certain areas of expressive arts without supported programmes;
- the specialist had the expertise, experience and confidence to achieve the most successful teaching outcome; and
- children's learning was improved and developed more fully and constructively under the specialist.

On reflection

The research journey has added another professional dimension to my teaching. It has been stimulating for me personally, but it has generated much interest amongst my colleagues. Along the way I have learned:

- it is important for a new researcher to have the opportunity to talk with someone 'in the know', in order to maintain a focus;
- the importance of time-management, as the natural busyness of teaching can be all-consuming;
- working alongside other members of staff is stimulating and very worthwhile as it brings together others' pertinent views; and
- that this valuable field of work can have a real impact on teaching and learning.

I am excited that I am a small cog in a large wheel that is driving forward new ideas and new opportunities!

Sue Hay, Teacher of P4

Author and contact details

Judy Arrowsmith and Sue Hay, St George's School for Girls, Garscube Terrace, Edinburgh EH12 6BG

Email: ja@st-georges.edin.sch.uk and SEH@st-georges.edin.sch.uk

School website: www.st-georges.edin.sch.uk

How to encourage a Research Culture in your school: a checklist to set you thinking.

Please read through the following questions and discuss the possible answers in your school.

We've offered you some of our ideas to compare with your own .

Question	What is done at St George's School, Edinburgh	What is/could be done at YOUR SCHOOL?
How do staff find out about current research opportunities?	<ul style="list-style-type: none"> • R&D. Noticeboards • Designated member of staff responsible for research • School-based Open Research Seminars - we run a series and invite neighbouring schools and educational establishments to contribute 	
How are staff made aware of the school's commitment to research?	<ul style="list-style-type: none"> • Constant mention of importance of research and critical evaluation • Appointment of designated member of staff to be a "critical friend" and information source • Leaflet, as part of CPD expectations, outlining support. • Formal/informal celebration of completed research (staff and Student) • Research entry in school website 	
What do staff do if they have an idea for research?	<ul style="list-style-type: none"> • Talk about it! • Fill in the Research Application form • When the idea is more formalised, check against the school's Ethical Guidelines • Submit to the Research Committee 	
What do staff do if, initially, they lack confidence ?	<ul style="list-style-type: none"> • Participate in a departmental or whole-school team first • Read and attend seminars to learn about others' research and to engage in critical discussion • Tell the designated staff member about their interest, so they can be put in touch 	
How would they set about "learning by doing research"?	<ul style="list-style-type: none"> • Watch for projects advertised in school which might be of interest - and join in! They can either be part of the whole team or with a specific bit. 	
How does the commitment to research affect the young learners in school?	<ul style="list-style-type: none"> • They are surrounded by models of life-long learners, who collect evidence systematically and evaluate it honestly. • They recognise learning as a process of active engagement. • They benefit from carefully planned professional practice. • They are encouraged to be systematic in their own evidence gathering and critical in their appraisal. 	