

Topic

Readership: primary, secondary, special

Taking control: how teachers use research

Rebekah Wilson draws on the findings of a recent report published by the NFER which examined the use of research findings by teachers. The article highlights some of the barriers that can deter teachers from using research to inform their practice and some of the ways in which local education authorities can help teachers to overcome the barriers to using research.

Introduction to the study

Over the years, educational research has taken some serious stick from practitioners. Its findings have been widely viewed as cloudy, complex, contradictory and irrelevant to classroom practice. This reputation has deterred teachers from using research to inform their practice. As a professional researcher, I would like to see more teachers using research findings. So, when I was asked to join a project focusing on how local education authorities (LEAs) can help schools to use research, I welcomed the opportunity. Our findings were encouraging. We found that many teachers *are* using research, despite its negative image. We spoke to several teachers who had worked through the barriers that can prevent them from using research. This article explains how the eight LEAs in our study helped teachers to access, engage with, carry out and share research findings.

About the research

Our project was sponsored by the Local Government Association and focused on how LEAs are helping schools to use research evidence for school improvement. My colleagues and I set out to investigate the role of the LEA in facilitating research use, the strategies they used to encourage research use and the ways they were addressing the barriers to research use. Overall, we wanted to highlight some examples of good practice. Our project focused specifically on the use of research for school improvement, but we did not look at the use of performance data or school improvement more generally.

Data collection

To begin our project, we carried out a systematic review of relevant literature (1). Building on the insights and questions raised by our review, a short questionnaire was sent to all 175 heads of school improvement in England and Wales. We used the findings from the questionnaire to select the following LEAs for further study: Birmingham, Bristol, Hammersmith and Fulham, Lancashire, Merthyr Tydfil, Oldham, Rochdale and West Sussex. We found that each selected LEA had a different approach to encouraging the use of research. We carried out 47 interviews with LEA advisers, headteachers, teachers and university staff. Discussion groups were held with 27 headteachers in three different authorities, which enabled us to find out more about the barriers and facilitators to research use. Finally, a questionnaire, focusing on barriers and facilitators, was developed and sent to 160 primary and secondary headteachers in another eight LEAs.

Defining the terms

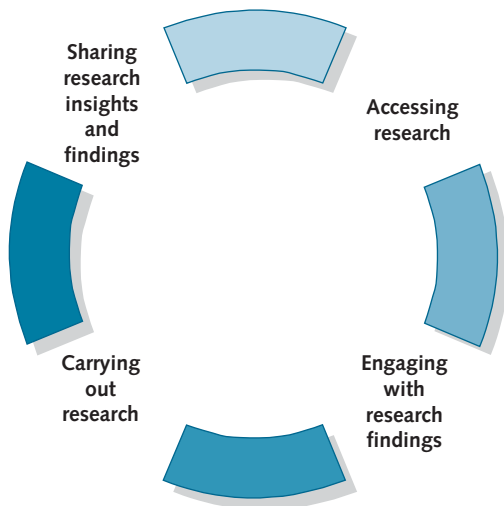
Since our project focused on the *use of research*, we found it helpful to clarify the term. First, we looked at the definitions of *research*. We noticed an emphasis on research being a systematic enquiry undertaken to gain knowledge and understanding. There was also an emphasis on sharing one's enquiries with an audience and opening them up to critique or objective assessment from an informed community. Secondly, we considered the word *use*. This word generally means putting into practice an

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intervention, theory or idea. Therefore, the *use of research* requires a systematic enquiry that is shared and put into practice. Some definitions of research utilisation within the field of education were concerned with '*further[ing] educational improvement*' through '*the advancement of trustworthy knowledge about education*' (2). Figure 1 illustrates one way of thinking about research use and shows the key activities involved.

Figure 1 What does research use involve?



Our thoughts on key research activities

- **Accessing research** – having an awareness or knowledge about research that has been carried out by others, especially published research findings and theories that emerge from research.
- **Engaging with research findings** – connecting with research on an intellectual level, enquiring about its methods and findings and asking questions about how it relates to your own context.
- **Carrying out research** – undertaking an original investigation in order to gain knowledge and understanding. This does not mean being a participant in research, but refers to the practical application of research – i.e. carrying out a research project yourself.
- **Sharing research** – sharing and disseminating your own research findings and insights gained through research involvement. This may extend to sharing other people's research, where someone has studied research findings and combined their messages in order to communicate them to others.

What can using research do for you?

Part of our research looked at the barriers to accessing, engaging with, carrying out and sharing research. We were interested to find out how the eight LEAs in our study were helping schools and teachers to reduce or remove these barriers. Before I discuss the barriers and suggestion for practice, I will highlight some of the benefits that research use can bring.

Why should teachers be interested in using research? What is in it for them and their schools?

Some answers to these questions can be found in the responses given by the teachers we spoke to. The responses given are summarised in Table 1.

Accessing research

The lack of access to research, on a physical and/or intellectual level, can be a problem for teachers. Teachers do not always have access to a large range of literature. Research can be published in numerous forms, and teachers are not always able to find research that is relevant to their needs. Teachers we spoke to said that the overwhelming volume of research material available made it difficult for them to access research. In terms of the intellectual level, teachers do not always have the confidence and skills to access research findings. Our study found that teachers often feel daunted by using research because they lack training. They had neither the skills nor the time to narrow their search to a particular item of interest.

Bearing in mind the barriers listed above, how did the teachers in our study become aware of research carried out by other people? One method was to use research summaries, newsletters and website links, ideally distributed by LEA advisers. A second method was to participate in training programmes. For example, West Sussex LEA developed an extensive MA training programme focusing entirely on school improvement issues. Teachers involved in the programme felt their awareness of the research had increased as a result of their participation. A third method was to attend conferences. For example, schools participating in Oldham's school improvement project are invited to an annual residential conference. Presentations are given by selected schools on their research involvement, thus providing other schools with an awareness of local

Table 1 According to teachers, what benefits does research use bring?

<ul style="list-style-type: none"> • Improved pupil performance • Increased capability to respond to pupil needs • Increased ability to solve teaching and learning problems • An opportunity to try out new teaching approaches 	<p><i>Using research has enthused my teaching.</i> (Secondary school teacher)</p>
<ul style="list-style-type: none"> • Improved self-confidence • Feeling of empowerment • Development of 'a voice' for teachers • Ability to justify one's own practice • Ownership of professional practice • Increased job satisfaction and motivation • Ability to reflect on existing practice • Development of a research vocabulary • Improved relationship with the LEA 	<p><i>Using research has made teachers think more about their teaching and teaching strategies.</i> (Primary school headteacher)</p> <p><i>It has made me more open. Very often we want to close the door. We are safe in our classroom, we are afraid of people coming in. Are they going to inspect us? Are they going to find faults? It has given me the confidence to say 'pop in and have a look'.</i> (Secondary school teacher)</p>

research. Teachers also hear about research from outside the local area through presentations by researchers with an international reputation.

Engaging with research findings

Suppose you are a teacher who has got hold of some research findings. You would like to connect with the research findings on an intellectual level but you have hit a barrier: impenetrable academic language. Our interviewees thought that a lot of research writing was offputting to teachers – it was seen as esoteric and full of academic jargon. Teachers also said they were not able to interpret complex statistical analyses. These teachers also said that research findings can lack a 'real-world' perspective, and some questioned whether or not research conducted elsewhere (inside and outside the UK) could have value and application to their own situation. The LEAs we visited played an important role in reducing the barriers to research engagement.

One method used by LEAs was to assist teachers with data interpretation. A second method was to help schools identify their own research priorities. This enabled teachers to draw out the research findings that were most relevant to them. (Headteachers in our discussion groups suggested that the type and locality of schools involved in

research projects should be clearly stated in any report, so that its potential relevance to other schools can be judged.) A third method was to integrate research-based information from outside the LEA with local knowledge. This brought in fresh ideas but also allowed teachers to focus on issues of local interest. Overall, it was important for LEAs to provide a supportive climate that viewed research engagement by teachers as an important part of their professional practice.

Carrying out research

The practical application of research (i.e. carrying out a project oneself) is a key research activity and was often the starting-point for teachers who wanted to make a difference in the classroom. However, carrying out an original investigation can be time-consuming. We spoke to teachers who said they would like to carry out their own enquiry but were prevented from doing so by the volume of their daily work. If teachers did investigate an area of interest, they usually did so in their own time. The time they spent on the investigation had to be weighed against the impact the knowledge would have on their pupils. Headteachers also identified political reasons that prevented them from carrying out research. They argued that initiatives are often pushed upon schools by central government, regardless of whether the initiative is supported by

'...LEAs played an important role in reducing barriers to research...'

research evidence. Therefore, this left little room for schools to implement ideas based either on their own research or the findings from published research. On top of this, interviewees reported a lack of official acknowledgement and/or encouragement of research use within the teaching profession. Headteachers in one of our discussion groups said more teachers would become involved in research if it were formally recognised by those who monitor and inspect schools.

The LEAs we selected played a key role in identifying, promoting and supporting school-based research. Advisers helped teachers to identify researchable issues and assisted them with their research plans (e.g. giving advice on research approaches and methods). Several LEAs sought out partnerships between themselves and other educational organisations (e.g. cross-school consortiums and universities). Some of these partnerships had enabled LEAs to identify funding streams for research projects. Teacher-led research was seen by our interviewees as particularly beneficial to teachers because it gave them ownership of the research process and the data that was produced. This ownership enabled schools to keep up momentum for their projects. As one adviser said, teacher-led research puts teachers 'firmly in the driving-seat'.

Although teacher-led research can be time-consuming, teachers value the data they produce. The fact that teachers generate data themselves means it has the greatest potential to impact on their teaching and their pupils' learning. They have not carried out research to satisfy an external demand, but to answer a question that is central to their experience. We found that school-based projects worked best when they had effective leadership and were carried out in an environment where teachers were able to try things out and question existing practice. In order to make a significant contribution to the development of an evidence-informed culture with a school, it was important for schools to develop a critical mass of teachers who were actively involved in research.

For example, schools in Merthyr Tydfil had appointed a team of in-school coordinators who were responsible for the day-to-day running and development of the research project. To achieve a critical mass, several members of the group rotated each time the school took on a new project theme.

Sharing research

Perhaps you are a teacher who has worked on a school-based research project. You have systematically gathered data, scrutinised the evidence, taken action and now you want to disseminate the research findings. However, you have run into a barrier: a lack of opportunity for discussion. This barrier was identified by some of our interviewees. They pointed out that staff meetings tend to concern administrative issues and/or government initiatives, which leaves little time for debates about professional practice. There was also a feeling that some teachers do not have the self-confidence needed to share their findings. Teachers may feel that others will find faults with their work, or that others simply won't be interested. In addition, teachers may not be aware of potential dissemination opportunities. It is, of course, critical that research be shared with an audience if other teachers and schools are to benefit.



To achieve a critical mass, several members of the group rotated

All our case-study LEAs viewed the dissemination of teacher-led research findings as important. Funding bodies often required that the findings from projects be shared with others and some schools built dissemination strategies into their action plans. In most cases, the findings of research were circulated to LEA staff. Some LEAs published project information on their websites and newsletters, and organised conference days in which findings could be shared with other schools. Teachers highlighted the importance of teacher-to-teacher dissemination, both within their own school and with other schools. Hearing other teachers speak about their research greatly enthused and encouraged other teachers. Several said they had been inspired to use research after hearing other teachers talk about their research

experiences. Teacher-to-teacher dissemination was more effective than researcher-to-teacher (i.e. top-down dissemination) because it was seen as more reliable and relevant. We spoke to some teachers who were so enthusiastic about the benefits of research that they viewed themselves as ‘ambassadors’ for school-based research. It was clear that, by sharing knowledge, teachers felt they were supporting the continuing professional development of themselves and their colleagues. Some examples of dissemination strategies used by schools can be found in Table 2.

Conclusion

This article has highlighted some of the findings from our study *Using Research for School Improvement: The LEA's Role* (3, 4). Our findings show that research use and enquiry is currently taking place in schools. Schools are using research findings to help them develop school improvement strategies and teachers are using research to question their assumptions and reflect on their own practice. The use of research is providing schools and teachers with new challenges, insights and levels of understanding, while also enhancing the quality of teaching and learning. Of equal importance, the study also raised issues for those people who produce research findings. Professional researchers have to take note of the

barriers and criticisms relating to the way in which academic research findings are presented. Disseminating research findings to schools is one thing, but making it accessible and engaging for teachers is another. Finally, it is important to note that the LEAs and schools in our study were under no obligation to become involved in research activity, but they were doing so as a natural extension of their school improvement role. The experience of those who have adopted this role testifies to the positive benefits for pupils, teachers, schools and LEAs themselves.

References

- 1 HEMSLEY-BROWN, J. and SHARP, C. (2003). ‘The use of research to improve professional practice: a systematic review of the literature’, *Oxford Review of Education*, 29, 4, 449–470.
- 2 BROWN, M., EDWARDS, A., EVANS, M., PRING, R., SCOTT, S., WESTCOTT, E. and BASSEY, M. (1999). ‘Draft BERA Code of Good Practice in educational research writing’, *Research Intelligence*, 68, 17–20.
- 3 WILSON, R., HEMSLEY-BROWN, J., EASTON, C. and SHARP, C. (2003a). *Using Research for School Improvement: The LEA's Role* (LGA Research Report 42). Slough: NFER.

Table 2 Examples of dissemination strategies used by schools

Dissemination strategy	Example
Closure day	All the secondary schools in one LEA have an annual closure day and same-subject teachers from different schools who get together
Internet	The Internet was a useful way for schools to disseminate information
Observation	Several teachers found it useful to observe the teaching methods of colleagues who had participated in research. Some schools had invited teachers from other schools to observe their new strategies
Video observation	One school had created a video showing a variety of teaching strategies adopted by teachers within the school
In-school folder	Many schools kept a bank of relevant research articles. Such folders contained information on teaching and learning techniques and project evaluations
Staff development room	One school had set up a specific room that provided research-related books, articles and videos
Discussion in staff meetings	Sharing and discussing research issues often took place in staff meetings
Word of mouth	MA students benefited from talking to previous students about their experiences of the programme

- 4 WILSON, R., HEMSLEY-BROWN, J., EASTON, C. and SHARP, C. (2003b). *Using Research for School Improvement: The LEA's Role* (Research Summary) [online]. Available: http://www.nfer.ac.uk/htmldocs/Outcome_IRP.doc [1 August, 2003]

Further reading

HANDSCOMB, G. and MACBEATH, J. (2003). *The Research Engaged School*. Chelmsford: Essex County Council, Forum for Learning and Research Enquiry.

RICKINSON, M., ASPINALL, C., CLARK, A., DAWSON, L., McLEOD, S., POULTON, P., ROGERS, J. and SARGENT, J. (2003). *Connecting Research and Practice: Education for Sustainable Development* [online]. Available: <http://www.nfer.ac.uk/EUR/>.

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Related websites

<http://www.gtce.org.uk/research/romhome.asp>
General Teaching Council for England – Research of the Month

<http://www.standards.dfes.gov.uk/research>
The Research Informed Practice Site

<http://www.nfer.ac.uk/itr/>
Investigating the research-engaged school

<http://www.did.stu.mmu.ac.uk/carn/>
CARN – The Collaborative Action Research Network aims to encourage and support action research projects (personal, local, national and international), accessible accounts of action research projects, and contributions to the theory and methodology of action research. It recognises that professional development requires critical inquiry into past, current and future practice and practitioners should be actively and creatively involved in defining and developing professional practice.

<http://www.triangle.co.uk/ear/index.htm>
Educational Action Research is an international journal that explores the unity between educational research and practice. The journal publishes accounts of a range of action research and related studies, in education and across the professions, with the aim of making their outcomes widely available and exemplifying the variety of possible styles of reporting. It aims to establish and maintain a review of the literature of action research. It also provides a forum for dialogue on the methodological and epistemological issues, enabling different approaches to be subjected to critical reflection and analysis. Site contains many full text articles.

<http://www.uea.ac.uk/care/websites.html>
This web page from The Centre for Applied Research in Education, University of East Anglia, has a wide range of links. These include action research, associations, publications and resources for research and funding.

<http://www.ericfacility.net/ericdigests/ed435712.html>
The ERIC Digest: How To Write a Scholarly Research Report (1999) discusses the common sections of a research report along with frequently made mistakes. Though the emphasis is on reports prepared for scholarly, peer-reviewed publication, these points are applicable to other forms of research reports.

<http://www.ericfacility.net/ericdigests/ed381530.html>
A useful link is ERIC as a Resource for the Teacher Researcher (1995), which outlines the characteristics of teacher-led research and its benefits. There is a discussion of selected resources for teacher researchers, which are available through the USA-based Educational Resources Information Center (ERIC).

http://www.alliance.brown.edu/dnd/ar_websites.shtml
This site, supported by an alliance of the New York Board of Education and Brown University, provides a number of links to action research websites including Australia and the UK.

http://carbon.cudenver.edu/~mryder/itc/act_res.html
This site provides a links and articles on action research, which lead to further resources for teachers wishing to embark on research projects.